

**VALUES THAT SUPPORT AN ECOLOGICALLY SUSTAINABLE
URBAN LIFE**

by

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Values that Support an Ecologically Sustainable Urban Life

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ABSTRACT

What are the values that support sustainable urban lifestyles? This is the central question examined within the context of contributing to the larger question of how we can create sustainable urban communities and why this is important.

Values are defined as criteria used by members of a society to evaluate people, behavior, experiences and objects and to help with choosing among various possible goals. As such, values have a dual purpose. First, they are presented as ideals to be adhered to and respected; second, they are manifested in actions which express the value in a concrete or symbolic manner. Values are reflected in attitudes, beliefs, feelings and perceptions and as such form a critical component of any plan to create a sustainable urban community.

Questions about urban sustainability are ultimately questions about relationships within human communities and between human communities and the community of nature that highlight the link between values and actions and the importance of the long term systemic welfare of human and ecological communities. From this perspective, sustainability is defined as the ability to live within the earth's naturally restorative capacities in a manner that protects the long term health of human and ecological systems; sustainable development is development that does not compromise this ability and ideally enhances it.

The research is developed on the premise that sustainable urban lifestyles can be advanced by examining current societal values, with an eye to identifying and cultivating those that support sustainability. The research identifies the kinds of values that support ecologically sustainable urban lifestyles and compares these with dominant values that characterize modern life in Canadian urban centers. It concludes with discussion on how we might create a desire for sustainable urban living in the absence of values that support sustainable lifestyles.

DEDICATION

I would like to dedicate this research project to my best friend and partner Ian, whose interest and encouragement never faltered and whose support always inspired.

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1. INTRODUCTION

What are the values that support sustainable urban lifestyles? This is the central question to be examined within the context of contributing to the larger question of how we can create sustainable urban communities. This research is developed on the premise that sustainable urban lifestyles can be advanced by examining current societal values, with an eye to identifying and cultivating those that support sustainability. While reference is made to urban studies and the history of the city, the focus is on the degree to which dominant values are compatible with sustainability and the kinds of value shifts that may be essential for us to continue living in cities.

Values are defined as criteria used by members of a society to evaluate people, behavior, experiences and objects and to help with choosing among various possible goals. (Spencer, 1981, p. 67). Values can be endemic, found across cultures, or embedded within a particular culture. Values are typically widely believed within a given collectivity to be desirable for their own sake. Whether endemic or cultural, values have a dual purpose: first, they are presented as ideals to be adhered to and respected; second, they are manifested in actions which express the value in a concrete or symbolic manner. (Rocher, 1972, p.55).

Values are reflected in attitudes, beliefs, feelings, and perceptions and as such form a critical component of any plan to create a sustainable urban community. An attitude is primarily a cultural stance or a position one takes vis-à-vis the world. Attitudes tend to be more stable than perceptions as they are formed of a long succession of perceptions or experience. (Tuan, 1974, p.4). However, they tend to be less stable than values. Attitudes have a cognitive component based on beliefs, and an affective or evaluative component based on feelings. As such, attitudes can also be described as beliefs and feelings that may predispose us to respond in particular ways to people, behavior, experiences and objects. (Myers, 1986, p.537). Beliefs in particular have an impact on our reasoning

abilities as our tendency to cling to certain beliefs, even in the face of contrary evidence, is a major source of irrationality in our reasoning. Once beliefs are formed and justified, it can take more compelling evidence to change them than it did to create them. (Myers, 1986, pp.282 - 83). Perceptions are a response of the senses to external stimuli and purposeful activity in which certain phenomena are clearly registered while others recede in the shade or are blocked out. Much of what we perceive has value for us, for biological survival, and for providing certain satisfactions rooted in culture. (Tuan, 1974, p.4).

Values are reinforced through the array of social interactions we have and maintained through institutionalized norms of behavior that guide most of our everyday actions. While values and actions are linked, values are part of a *cultural* system and can be distinguished from actions that are part of a *social* system. These systems work in concert, i.e. the cultural system shapes the social system, but does not completely determine this system since there are often conflicts between what we want to do and what we have the opportunity to do, opportunity that is limited in large part by the existing social system. (Spencer, 1981, pp.74-75). The cultural system is comprised of values, ideas, beliefs, knowledge and customs, transmitted from generation to generation within a social group through the various forms of learning. (Spencer, 1981, p. 66). It may be more or less formalized. The social system consists of the structuring of elements of social action in a set of independent parts which form a functional unit. (Rocher, 1972, p. 107).

Through socialization, elements of both systems become an integral part of the structure of the personality. While integration occurs at varying degrees, it results in cultural and social systems that become moral obligations or rules of conscience, as well as standards of “normal” behavior, thought or feeling. (Rocher, 1972, p.110). Values as they relate to moral and ethical obligations such as a respect for life, a belief in reciprocity and ecocentrism, are an important aspect of sustainability discussed in subsequent chapters.

Cultural and social systems exert constraints on individual and collective ways of acting, thinking and feeling that reinforce dominant values and encourage actions and behaviors

oriented according to collective rules or norms. It is often in reference to this structure of rules or norms that our actions, thoughts and feelings become meaningful and coherent. We learn to satisfy most of our needs, impulses, feelings and desires by adhering to prefabricated norms that familiarity and the instruction we receive generally prevent us from recognizing as such.

As to why this subject warrants study, the answer lies in the pace of urbanization as it is occurring worldwide and the implications associated with this type of growth. Once viewed as primarily a local dilemma or a concern solely of the developing world, urbanization is now seen as having a distinctly international character. From a world that was estimated to be 15 percent urbanized in 1900, we have grown to where roughly half of the population lives in urban areas. In North America, this figure is estimated to be around eighty-five percent. (Geddes, 1997, p. xvii.). As we continue to become more urbanized, the impact on our lives is felt at many levels. (Geddes, 1997, Gerecke, 1991, Roseland, 1998). Rapid urban growth and the built environment that supports it have been linked to homelessness, decaying infrastructures and crime. (Geddes, 1997, p.xv). Where politics seems to gravitate towards international, national and regional affairs, cities are overlooked. The resulting lapse has been associated with what is sometime referred to as “the crisis of our cities” — the rise of homelessness, the creation of a large underclass, crime and a declining standard of living. (Gerecke, 1991 p.1). Exacerbating this situation are looming environmental issues associated with the increased concentration of populations and industry. This is perhaps most apparent in the cities of the industrialized world where human settlements have an enormous impact on the world’s changing ecosystems. (Roseland, 1998, p.15).

The remainder of this chapter defines the primary terms and examines the elements of urbanization. It concludes with a discussion about the relationship between growth and sustainability. Chapter two begins with a discussion about how values are formed and how values and attitudes affect behavior differently. The kinds of values that support ecologically sustainable urban lifestyles are examined along with some of the problems facing urban centers and the opportunity for values to be manipulated or changed.

Chapter three explores the dominant values that characterize modern life in urban centers and how these compliment/contradict values that support sustainability. Chapter four identifies the kinds of value shifts that might be necessary to address the contradictions identified.

1.1 Sustainability Defined

A workable definition of sustainability is central to this project. Unfortunately, no such definition has emerged. Rather piecemeal definitions that focus on sustainable *development* have become the mainstay. From the Bruntland Commission to the World Conservation Union to individuals such as William Rees at the University of British Columbia and British economist David Pearce, many efforts have been made to define sustainability.¹ For practical purposes these efforts have focused on sustainable development, since in the absence of growth and change associated with development, there would be less urgency and interest in the general concept of sustainability. And yet, despite the plethora of definitions and interpretations, rarely is the meaning of sustainable development tied to specific projects with methodology that allows for the needs and aesthetic desires of future generations to be forecast.

In the absence of this information, any definition of urban sustainability is reduced to a mere concept. Even the phrase “sustainable development” is itself a paradox as it attempts to pull together two opposing principles, ecological sustainability and economic development. The resulting tension has led to two interpretations of sustainable development, one *ecocentric* which puts global ecology first; one *anthropocentric* which puts human well-being first. What these interpretations share is an attempt to place economic growth within the natural limits of the biosphere modeling processes and

¹ The most widely used definition continues to be that of the Bruntland Commission: “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” However, this definition has been widely criticized as anthropocentric and lacking detail on what is meant by “needs”.

organizations after nature.² The most internationally accepted definition of sustainable development is people centered based on the work of the Bruntland Commission.³

Roseland and Wheeler have developed two of the more specific definitions of sustainable development. Roseland describes sustainable development as representing a conscious shift from development that incorporates environmental protection to environmental protection that reflects economic and social change that improves human well being while reducing the *need* to protect the environment. As long as sustainable development is conceived merely as environmental protection it will be understood as an added cost to be traded against. From this perspective, sustainability comes to mean less as well as more, and sustainable development comes to mean doing development differently or finding ways to stop much of what we are already doing. If this can be accomplished the trade offs become less critical and the freed resources can be used for socially and ecologically sustainable activities. (Roseland, 1998, pp.4, 211-212). Wheeler refers to alternative approaches to traditional patterns of physical, social and economic development that avoid problems such as natural resource depletion, ecosystem destruction, over population, growing inequality and the degradation of human living conditions. (LeGates, 2000, p.435).

Since nothing physical can grow indefinitely, attempts to further define sustainability raise important questions around population growth and urban development, i.e., are these inevitable and if so, does urban sustainability become a nebulous and impossible goal? While cities everywhere seem to be growing with no end in sight, there are indications that this pattern is changing. Depopulation, rather than population explosion, is a trend well established in the West where women long ago stopped producing the 2.1

² An ecological view of development looks at all living things (cells, individuals, communities, nations) human and non-human, as existing simultaneously in two forms — as autonomous entities with self-organizing capabilities, and within a larger independent network that makes up the whole.

³ Much of the discussion about settlements as ecosystems focuses on physical systems. The anthropocentric Bruntland definition of sustainable development is potentially compatible with an ecosystem approach to urban development focused on human habitat and human need. Ideally, the two aspects are combined in an approach that has the express purpose of improving the quality of life as well as the quality of the natural ecosystem. Based on this interpretation, sustainable development is about maintaining and enhancing the quality of human life — social, economic and environmental — while living within the carrying capacity of supporting ecosystems and the resource base.

children apiece needed to maintain population stability. A similar trend, albeit on a smaller scale, is being observed in other parts of the developed and developing world. According to the latest data from the United Nations Population Division, the birthrate in countries such as China, Thailand and Russia has fallen very near, if not below, the replacement rate of 2.1 children per woman. China's rate of 1.8 is attributed to draconian family-planning policies; Thailand at 2.0 is thought to reflect enlightened family planning; Russia at 1.1 is viewed as the result of a well educated population combined with a deteriorating economy. Other countries, such as India, Indonesia and Bangladesh are fast approaching population stability. Only in the sub-Saharan Africa and the Islamic Middle East are birthrates still high, and even here they are beginning to slow. Countries such as Russia, Japan and Germany with some of the fastest declining population rates have started examining immigration policies as a means of addressing a situation that could become problematic. (Ibbitson, 2002, p. F1, F4-5).

Depopulation trends that continue can mean good news on the long term global scale. The possibility has prompted debate among some demographers about when worldwide population will plateau and when we might actually see global population decline. On a regional scale however, in areas where population continues to increase, there is an immediate challenge to sustainability.

Questions about urban sustainability are ultimately questions about relationships within human communities and between human communities and the community of nature that highlight the link between values and actions and the importance of the long term systemic welfare of human and ecological communities. From this perspective, sustainability can be defined as the ability to live within the earth's naturally restorative capacities in a manner that protects the long term health of human and ecological systems; sustainable development is development that does not compromise this ability and ideally enhances it. In that sustainability contributes to health, values that support sustainable communities are values that sustain healthy communities. This is not to say that sustainability is a steady state since this would be emotionally and intellectually unfulfilling and therefore unhealthy. Rather, sustainable communities continually adjust

to meet the changing social and economic needs of their residents while preserving the environment's ability to support them. (Roseland, 1998, p.14).

In theory at least, the process of defining what is meant by the long term systemic health of human and ecological systems can be agreed upon through participatory practices in which all relevant stakeholders are represented, and progress can be measured through various performance indicators. (Wheeler in LeGates, 2000, p.438). Further contribution to this process derives from discussions on sustainability from which a new paradigm for city-regions has emerged with the goal of balancing the three elements of environment, economy and equity. (Geddes, 1997, Gerecke, 1991, Haughton and Hunter, 1994, Roseland, 1998, Satterthwaite, 1999). In that large cities tend to be more open and involve greater resource consumption per capita, smaller cities that resemble city-regions tend to be more self-reliant in a way that is akin to natural ecosystems and that provide some insight into what a sustainable city might look like. (Haughton and Hunter, 1994, p. 16). Where historical and current attempts to balance environment and economy have frequently resulted in conflict, decades of struggle appear to have led to some agreement around the need to balance these two elements. What is lacking is agreement on the means of achieving equilibrium, i.e., what should be the growth and form of an *ecological* city-region, and the means to include a third element, social equity, into the balance, i.e., what should be the growth and form of a *fair, just, democratic* city-region. (Geddes, 1997, pp. xix, 11). The greater the balance of emphasis among these elements, the greater the move toward sustainability and healthy human and ecological systems.

Following this logic, the value of the various definitions lies not in how they differ but in the emphasis each gives to one or more of three aspects:

- meeting human needs;
- sustaining or keeping intact natural capital (including both natural resources and ecosystems) at the local, regional and global level;
- ensuring that human activities and values can be sustained. (Satterthwaite, 1999, p. 10).

Issues of equity, of who a city is for and whose interests should be served, affect how we respond to environmental concerns. As an element of sustainability, equity has two aspects. First, there is inter-generational equity or the impact of today's activities on the ability of future generations to meet their needs and aspirations. Second, there is intra-generational equity or the ability of current generations to meet their needs and aspirations. Both aspects are important and both present challenges. In that intra-generational equity has a more immediate impact on what happens today, it affects what happens in future. Intra-generational equity is about the tension between rich and poor and the uneven control exercised over the distribution of resources, taking into account basic needs and common aspirations. While broad participation in environmental strategies and policies helps to achieve intra-generational equity as it applies to sustainability, such participation is limited when there is uneven control over the distribution of resources.

The tension between rich and poor can be roughly delineated between north and south respectively. Comparing cities in these regions, it seems that the "problems" of our cities are those of affluence as well as poverty, i.e., the basic problem with northern cities is that they are unsustainable whereas the basic problem with southern cities is that they are underdeveloped. Most northern city dwellers are adequately housed and fed, but they meet these needs by consuming at rates the planet cannot afford and polluting at rates the planet cannot tolerate. In contrast, many southern city dwellers cannot meet their basic needs for food, clean water, clean air, fuel, transport and an environment free of disease-causing agents. (Roseland, 1998, p.15). The tension becomes one of improving lifestyles versus meeting basic needs, or establishing a balance in our cities with more equitable growth which in some instances may mean no growth. (Gerecke, 1991, p.70).

Even within cities in the developed northern world, tensions between rich and poor permeate. As these cities become increasingly important as centers of control for a wide range of financial transactions and headquarters for clusters of financial and related businesses, the city function seems to be reversing to one where cities concentrate the capital wealth but house most of the poor. One of the most significant factors shaping the

configuration of cities and entire regions is the resolve of “haves” to separate themselves from the “have nots”. Examining cities and trying to envision what a particular city can be, who and what it must accommodate and how, and what its role is nationally and globally leads us back to some of the most fundamental questions around how we choose to live and what we value. (Geddes, 1997, pp. 4-5).

The inclusion of equity as a third element of sustainability relates to a broader issue shared to varying degrees by the Bruntland Commission and others, namely, that a narrow concern with the environment alone is an impediment to resolving global environmental problems since so many of these problems are rooted in social malaise and poorly functioning economic systems. Environmental problems when pursued to their roots often reveal an inescapable truth — that the fundamental cause of the problems lies in how we interact with nature *and* in how we interact with each other. Solving these problems means solving the problems of poverty, racial injustice and war. (Haughton and Hunter, 1994, p.22). Affluent countries and cities can afford to clean up their immediate environments and it is likely for this reason that the countries that are the cleanest and have the most protected land are those that are the richest, such as Canada. (Saunders, 2002, F3). Further, some types of pollution such as air emissions associated with energy use are more closely correlated with income rather than consumption. As income rises beyond a certain point, the amount of air pollutants dramatically decreases despite an increase in energy consumption. In many western cities, local air pollution has diminished significantly while energy use has continued to rise. This achievement is associated with technological advances and political action and encourages a re-emphasis on sustainable development that allows the developing world the relative luxury of worrying about the environment. Sustainability, in the absence of sustainable development, can end up prioritizing the unknown needs of future generations over the basic needs and common aspirations of current generations which is a backward way of solving environmental problems. (Lomborg, 2002, A12).

A definition of city or urban center is also essential to this discussion since the numbers that support the claims of increased urbanization depend largely upon what actually

constitutes an urban center and what the boundaries of that physical entity are assumed to be. Not, surprisingly, many definitions have emerged. (Jacobs, 2000, Stelter, 1990, Haughton and Hunter, 1994, Mumford, 1961).⁴ While cities have generally been defined as large, permanent densely populated centers of commerce, industry and culture, comprised of socially heterogeneous inhabitants, estimating the population of a city depends on where the boundaries are placed and what is included within these boundaries. Similar to other communities, cities are made up of primary groups like families and neighborhoods. Unlike other types of communities, these primary groups have purposive associations in a city, i.e., they support themselves through alliances with organizations that have permanent structures within a relatively limited area. More recently, the idea of having a core city and its surrounding suburbs and towns that constitute a single metropolitan region has been gaining acceptance as a clearer definition of city or urban center. Accompanying this shift has been a growing understanding of how much is shared in the way of infrastructure, the consequences of environmental dilemmas, opportunities for employment and overall economic status, and the risks associated with further social fragmentation.

Early research on cities has occurred within an urban historical context that emphasized population concentration with little comparative analysis beyond national boundaries. More recent research has included other critical perspectives. Among these has been a growing recognition that the urban dimension is only one dimension of a total society inextricably linked to the totality of a particular culture, including ideas about the political economy, the nature of society and how the settlement process should work.

⁴ *Jacobs* describes a settlement as a city once it has experienced an abrupt burst of unusually rapid growth during which it begins to produce all the goods and services that were commonly produced locally in little cities of its time and place, but which the settlement earlier imported. *Stelter* notes that towns and cities are definable entities, urban places that are distinct from what is not urban. Towns, in particular share some common characteristics wherever they are located in time and place, including a concentration of population, a division of labor and a collective self-consciousness or a desire to be distinguished from other concentrations of population. *Haughton and Hunter* view a city as a regular and recognizable agglomeration of buildings and thoroughfares where people live, work and engage in many of their social and cultural activities, usually requiring at least 10,000 residents. The overall urban environment is defined as having natural, built and social components. The natural environment includes air, water, land, climate, flora and fauna. The built environment encompasses buildings, infrastructure and urban open spaces. The social component includes less tangible aspects of urban areas such as aesthetic and amenity quality,

Values are embedded in this culture along with beliefs and meanings that are widely held and that affect the way in which we have collectively organized our institutions and relations, past and present. As such, towns and cities become subsystems of larger political, economic and social systems that can be examined from the perspective of these larger systems. Second, there has been a developing interest in how the power structure of society is related to the formation of cities and how it affects the nature of society. This factor in particular contributes to the discussion on sustainable urban communities. Third, comparative questions are starting to be asked about urban development in countries like Canada and other regions of recent European settlement such as the United States and Australia. (Stelter and Artibise, 1984, pp. 2-3).

While attempts to account for the location of cities and the economic implications of their growth are of interest, this project focuses on the moral and social consequences of this growth. It entails a review of the literature on values and sustainable urban living with a view to identifying gaps in this literature. The review is guided by the following questions:

- what are the values that support ecologically sustainable urban lifestyles;
- what are the dominant values that characterize modern life in Canadian urban centers;
- how do dominant values relate to values that support ecologically sustainable urban lifestyles;
- how do we create a desire for sustainable urban living in the absence of values that support sustainable lifestyles?

While reference is made to early American cities and cities of early, modern Europe⁵, the focus is on Canadian cities and therefore has a contemporary slant.

architecture, heritage and the values, behaviors, laws and traditions of the resident community. *Mumford* focused on early cities and observed that cities of this era did not grow beyond walking or hearing distance.
⁵ The term cities, of early, modern Europe, as used here and commonly referred to in the literature, includes the fifteenth to the eighteenth centuries.

1.2 Elements of Urbanization

Urban growth, urbanism and urbanization are said to have transformed society, yet the relationship between these concepts is not always clear. For purposes of this discussion, urban growth is measured by magnitude, density of population, economic resources and developed land base. Urbanism is defined as the spread of an urban way of life or the complex of traits that make up the characteristic mode of life in cities. Urbanization is defined as any process that extends the local area of interaction and creates a common underlying pattern of conduct and a common set of physical structures for the different groups that constitute a city. Based on this definition, urbanization or the spread of an “urban way of life” can occur beyond the boundaries of the city.

Traditional definitions of urbanization have overlapped with definitions of urban growth, by focusing somewhat narrowly on the demographic, emphasizing population concentration in urban settlements or an increase in the proportion of this population. Based on this definition, cities can grow without any urbanization provided the rural population grows at an equal or greater rate. This aspect of urbanization has been expanded to include the physical environment created by the process, or the built city. It is referred to as demographic/ecological urbanization. Equally important is structural urbanization, which refers to the redistribution of populations and functions among cities and towns in a developing urban system. A third aspect, behavioral urbanization, refers to the effects urbanization has on the behavior of people and society as a whole. (Stelter, 1990, p.2). These three aspects can be viewed on a temporal continuum that begins with the origins of cities in the ancient world and ends with the present day study of cities. The first aspect helps explain what urbanization is, the second, how it works, and the third, what the process of urbanization has done to people and activities in cities. While this project focuses primarily on the second and third aspect of urbanization, each aspect deserves some discussion.

Demographic/Ecological Urbanization

Population concentration as a key element of urbanization is closely associated in time and place with a second element — industrialization. This link between population and industrialization helps explain the unprecedented growth of towns in the nineteenth and twentieth centuries that coincided with industrial expansion and the corresponding decline associated with industrial downturn.

Industrialization led to the inclusion of a third element — the city building process. This element encompassed the form and structure of cities that resulted from large scale economic, political and social forces and the thousands of individual, community, institutional and corporate decisions.

A fourth and final element, particular to the western world in the twentieth century, was the dissociation of urbanization from industrialization or the deconcentration of population. Post World War I, about the same time that the Census Bureau of Canada described a majority of the country's population as urban, the peripheries of cities began to grow faster than the central cores. The term used to describe this deconcentration of cities — suburbanization — is now a term all too familiar in discussions about modern city building activities.

While frequently associated with post industrial urban growth, the expansion of cities beyond their central cores is actually a process that is as old as cities themselves. What have changed are the perceptions and associations that accompany this process. In centers like Montreal, the outward thrust of the city that preceded industrialization reflected in large part the desire of the more affluent classes to move away from the congested, noisy, even dangerous older city to more desirable locations. Frederick Law Olmsted, a noted landscape architect of the time, maintained that landscape had an effect on the unconscious process. To this end, he designed in pursuit of an aesthetic ideal that emphasized the separation of a rural space of contemplation from the noisy city. His ideas on urban beautification extended to the outskirts of cities where he was a familiar

proponent of suburban development as the exclusive enclave. Two of his most notable urban designs are Mount Royal in Montreal and New York's Central Park. Within the suburban realm, he supported concepts such as the continuity of suburban front lawns as a means of expressing amplitude and democratic community solidarity. While his urban legacy remains, his ideas around suburban development have seen considerable change, i.e., lawns may have contributed to the overall community aesthetic at one time, but the practice was, and continues to be, one of subjugating nature to the rule of civilization. No where in nature does a lawn naturally exist. Thus, a tradition that was once viewed as a democratic artifact is today seen as a practice that imposes a sameness on the physical environment, irrespective of geographic difference and ecological place.

Arguments in support of suburban development frequently reference a consistent form across cities and even continents that offers familiar access and minimal adjustment to the newcomer, thus minimizing anxiety associated with job mobility and the uprooting of family from place to place. However, in contrast to the "exclusive enclave" that Olmsted promoted, suburbanization today has a very different meaning for many. Suburban "blight" as it is often referred, makes it feasible for middle income earners to own sprawling properties with large dwellings of similar design located near commercial strips, and to maintain a lifestyle heavily dependent on the automobile. Whereas early suburbanization at least contributed to a new metropolitan form that included extensive, shared green spaces and tranquil communities, more recent suburbanization has had the effect of instructing us how *not* to build cities.

Structural Urbanization

Structural urbanization stresses the evolution of urban systems and changes in the structure of these systems. Structural urbanization incorporates elements of demographic/ecological urbanization but goes beyond these by examining concentrations of activities and organizations and patterns in the way urban places are related to each other in hierarchic systems. This involves examining the complex interplay between power and decision making, as well as the temporal and spatial dimensions of this power.

Structural urbanization builds on demographic/ecological urbanization by examining modern urban systems beyond urban population concentrations and looking at the redistribution of population among cities in the system. A good example is Western Europe, where the redistribution of population that took place in the context of developing nation states and controlling new empires, had far greater impact on its modern urban systems than mere increases in population concentrations.

Behavioral Urbanization

Behavioral urbanization examines how the process of urbanization affects individual behaviors, modes of thought and the activities of urbanites and the effect this has on society as a whole. It is perhaps the most pertinent aspect of urbanization in relation to sustainable urban communities.

Behavioral urbanization concerns the reference points of where individuals work versus where they reside and how this has changed over time. Typically, as the environment changes, major changes in these reference points occur. Such changes have been observed across cultures during the transition from a mid-19th century commercial phase of urban development, to an industrialized late 19th century phase, where work and residence became separated, productive tasks became specialized and work was reorganized hierarchically. This transformation of urban context was observed to gradually affect identity, roles, values and expectations, social networks, class consciousness, and so on through an almost endless list of human experience. (Hershberg, 1978, p.31). If, as some social scientists predict, the future organization of work and residence will be akin to preindustrial cities with an intimate mix rather than separation of places for home and work, more than ever, we will need places to meet, to exchange information, to hear others and be heard. (Stelter, 1990, p.3-10).

1.3 Growth and Sustainability

While nothing physical can grow indefinitely, in the absence of growth and the change it brings there would be less urgency and interest in the general concept of sustainability. Urban growth, urbanism and urbanization represent responses to population growth that impact sustainability. Sustainability in turn is about social change that includes environmental change and the move toward a steady state.

Environmental Change

Sustainability, when combined with sustainable develop, encompasses environmental protection, extends the opportunity for environmental protection to a wider population, and goes beyond environmental protection to include environmental change. While not exclusively an urban movement, environmental change has been spearheaded by the environmental movement and is made up predominantly of city dwellers in various western regions. This urban composition combined with a focus on transforming human relations with nature on a global scale has seen urban areas over the last decade become the focal point for an increasing number of environmentalists seeking to transform their cities into “green” cities. The local and global transformation that environmental groups are trying to create is based on a set of values that supports minimizing human impact on the environment. The campaigns stemming from these values have had a two-pronged impact on capitalist urban form.

First, these groups challenge the extension of capitalist dominated spatial forms observed in market structured economies and attempt to (re)create ecological spaces that promote ecological relations between people and between people and the natural environment. Most often these spaces are “natural” habitats threatened by urban development or resource extraction industries.

Political and economic analysis of the complex and entrenched relationships between the marketplace, government and people’s everyday lives reveals a fundamental shift in the economic character of western urbanism and its impact on the social and physical

landscapes of cities. The corporate global economy has created a postindustrial city whose economy is anchored in its intellectual capital but whose demography is increasingly characterized by a split between privilege and disadvantage. Urbanization that spreads under these conditions entails the reproduction of social relations and physical structures that support market economies. These typically are revealed in the ownership of land and control of the built environment and certain types of spaces that allow capital accumulation to occur, e.g., shopping malls and other retail spaces. This kind of city takes on a particular form that is seldom sustainable. From this perspective market forces and market space can come into direct conflict with ecological forces and ecological space. Shopping malls, expressways, bank towers and suburban developments may be good for business but they do not deliver the same benefits to environmental protection and social relations. They are a product of and a means to reproduce market economies but often at the expense of the ecological space necessary for the reproduction of the natural environment and for human survival.

Within cities, the (re)creation of ecological spaces includes such things as reclaiming watersheds and developing a built environment that minimizes waste, pollution and energy consumption. Ecological spaces are thus consciously constructed to prevent or obstruct capital accumulation by cutting off access to resources and land that can be commodified or by reducing the need for commodity consumption.

Second, environmentalists challenge the capitalist production process in anti-pollution campaigns that argue for banning or at least heavily regulating products and production processes that cause environmental damage. The application of environmental logic to accumulation logic can supersede or often negate profitability and have a direct impact on accumulation strategies. Anti-pollution campaigns challenge specific instances of accumulation as well as the general logic of accumulation. In spatial terms, successful anti-pollution campaigns can result in reduced capitalist space by removing the need for production, and by encouraging the creation of production spaces that follow an ecological as opposed to an accumulation logic. (Caulfield, 1996 p. 312-313).

A Steady State

Regarding a steady state, Charles Taylor has discussed the limits to growth and the move toward a steady state that entails ongoing adaptation in response to the changing needs of communities that preserve the environment's ability to support these needs. He identifies limits to the traditional aspects of growth that include

- a population limit beyond which the supply of basic necessities, especially food, cannot be assured for larger numbers
- a resource limit, where the supply of non-renewable resources is so reduced as to make increasing consumption impossible and eventually force us to do without altogether
- a pollution limit, whereby the ecologically harmful side effects of increased production become a danger to life.

He also alludes to another limit that, while not supported to the same extent as the previous three, is nonetheless important and relevant to sustainable urban communities. This is a population-concentration limit, which he suggests may already have been reached in some large centers, preceding the limits mentioned above. The importance of this fourth limit is the associations that have been made with individual and social breakdown expressed in "anomic" violence, increasing mutual mistrust and hospitality, and more chaotic attempts to escape society by privatization. (Rotstein, 1976, p.47).

At the same time that Taylor discusses the limits to traditional growth he acknowledges the importance we assign to growth and its role as a dominant value. Rather than dismiss the concept of growth as necessarily negative in relation to sustainability, he suggests types of growth that help protect the long term health of human and ecological systems. These so-called qualitative changes are often understood as growth because the end result is considered more valuable even though the production involved no greater use of material resources. Examples would include promoting a new design in homes where smaller, more affordable single family residences became desirable. The actual design

could be based on a scaled down version of popular, traditional designs incorporating energy efficient systems where fewer materials would be required for construction and less energy would be required for maintenance.

A steady, sustainable state could thus allow for three kinds of growth; qualitative growth, all growths in quantity associated with design that entailed more economical resource use, and short runs of quantitative growth using renewable or abundantly available non-renewable resources that could continue until they hit a limit in their use or their pollution effects. What would be impossible would be continued exponential quantitative growth. (Rotstein, 1976, p.50).

In higher aspirations, we do not so much achieve as we *strive* since only in mechanical enterprises can we expect an early or complete fruition of effort that can be called success. By striving, we acknowledge from the onset that the thing we need must grow from within since no striving for an idea has ever been injected wholly from without. (Leopold, 1949, p.195). As Aldo Leopold described conservation as a state of harmony between people and land that was a higher aspiration, sustainability can be described as *the move toward* rather than existing in a steady state. Just as Leopold maintained that we could not *achieve* harmony with land any more than we could achieve absolute justice or liberty for people, sustainability becomes an ongoing process of adjustment to meet the changing social and economic needs of human populations while preserving the environment's ability to support them. The problem thus becomes one of determining how to bring about a striving for a higher aspiration.

The way our communities and specifically our cities develop will largely determine our success or failure in overcoming environmental challenges and moving toward sustainability. Cities may contain many of the seeds of the problem but they also contain untapped opportunities to solve environmental challenges. This project will attempt to identify the kinds of value shifts that can help respond to these challenges.

2. THE FORMATION OF VALUES

Which comes first — a value structure that supports sustainability or sustainable lifestyles that encourage a shift in values? Values arise from the process of social life and become embedded within culture, along with beliefs and meanings that are widely held. They are reinforced through the array of social interactions we have and become the basis upon which attitudes are formed which affect actions and behaviors. At the same time, behaviors and their consequences can influence an evaluation of attitudes that can result in a fundamental shift in values. Based on this perspective, value formation is a circuitous process.

As individuals, we are linked together in social groups and in societies by ideas. Such cohesion depends on the intensity with which people accept collective sentiments and values as their own which in turn requires that societies via their social networks make provision for the articulation and reinforcement of values. In smaller groups, typically defined by closed social networks, this is generally satisfied through informal interactions among members who know one another and the relationship of each to the others. In larger population centers, where social networks without closure dominate, an individual's circle of acquaintances often overlaps only partially or not at all with those of the others, and the degree of the overlap is generally unknown. In this instance, more formal processes and specialized roles are often required to maintain values and the institutional forms that the values support. In early historical periods, this function was performed primarily by religion. (Porter, 1965, p.457). In modern times, although religion is still important, it has been largely replaced by the rule of law and legislation, the activities of interest groups, the media and international associations.

Just as traditional values are reinforced and maintained differently today than they were in the past, new values are also introduced in a different manner. Social movements, defined as collective efforts to bring about a new order of life, are the primary means by

which new values are introduced in modern societies. Modern societies, more complex and more urbanized than traditional societies, include numerous competing groups each demanding something for itself. These demands often manifest in social movements that support a single point of view represented by a long-term collectivity. And yet, not all social movements focus on “new” values as such. Some advocate a return to old values rather than the creation and introduction of new values. Regardless of the demand being made, social movements make a new moral claim on the conscience of the wider society in the name of a new value. (Spencer, 1981, p.335).

Social movements have three primary functions. First they are active mediating agents between individuals, structures and social realities. In this function they serve to make society and social structures known to their members and other interested parties. They explain certain social realities in order to defend them, criticize them or suggest changes and as such, act as a socializing agent. In this function, social movements are also a powerful medium of participation for modern, urban societies which typically require more complex forms of participation in collective life than traditional societies. Second, social movements help to clarify a collective consciousness in a society or particular sector of society by developing the ideas that are used in discussions throughout a society about a particular issue or group of related issues. Finally, social movements influence the historical development of societies through the pressure they are able to exert on individuals in authority and power elites. While pressure on authorities is only one of the various forms of action used by social movements, it is so widespread and common that it is often considered the main function of social movements. (Rocher, 1972, pp. 445-447). Social movements almost always give rise to organized groups that try to get their demands put into operation.

While values and attitudes are related, each can affect actions and behaviors differently. When patterns of behavior are observed in relation to values, the constraints they exert, the adherence they require and the ties that unite them are clarified. The patterns take the form of specific applications in concrete situations of more general and universal judgments. The power of these patterns is understood more easily when we see they are

supported by a deeper level of feeling and rationale called values. This level of understanding touches the central core of the personality and has a range of influence wider than the observable patterns. Rules of etiquette are a good example of patterns of behavior that may appear on the surface to have little meaning. The real meaning of such patterns comes with being able to connect them to something much deeper, e.g., a respect for other people, a respect for all forms of life. Such connections make apparent that the constraining power of patterns of behavior is much more than positive and negative sanctions. It is supported by our adherence or orientation to values.

Although values are closely linked with patterns of behavior it is often not possible to move directly from values to patterns, and even when a link can be made, often there is not perfect agreement between patterns and values. The reason for this is that different patterns of behavior can express the same value equally well and be accepted in the same society, and patterns of behavior sometimes become cut off from the values that inspired them but continue to serve as rules of conduct. (Rocher, 1972, p.56-57).

In comparison to values, our attitudes influence our actions and behaviors under very specific conditions. First, our attitudes guide our behavior when other influences on our attitudes and actions are minimized. Other influences, like social expectations, can blur the connection between attitudes and actions since we may adjust what we say to please our listeners. When this happens, our expressed attitudes are sometimes not our “real” attitudes nor do they reflect our future behavior. Second, our attitudes guide our behavior when the attitude is specifically relevant to the behavior. While we may easily profess general beliefs and feelings that are inconsistent with our actions, when an attitude relates to a specific behavior, what we say and do tends to be more similar. Thus, we may claim to support reduced reliance on private vehicles for personal transportation and make little effort to curb our own reliance. Yet when attitudes pertain to a given behavior, we are more likely to “do what we say”, i.e., our attitudes toward specific political candidates is often a reliable indicator of our voting behavior. Third, our attitudes guide our behavior when we are keenly aware of them, either through being reminded of them or because the

way we acquired them makes them strong. Thus, in familiar situations, we often act according to a habitual response without stopping to think before we act.

Conversely, actions and behaviors can also shape attitudes. This is most apparent in situations where we acquire or take on new roles. Such roles may be professional, associated with social positions such as student or politician, or personal such as parent or mentor. While the behaviors associated with the role may feel false to begin with, gradually we tend to internalize or absorb the role so that it becomes less and less foreign. Cognitive-behavioral therapy often emphasizes change in patterns of thought and speech in an attempt to encourage a change in attitudes. (Myers, 1986, p.537-538).

Values can be described as social products as demonstrated by the different values held by those who live in different societies about themselves and the world around them. What this implies for sustainability is that values that support sustainable lifestyles, once identified and articulated, can be reinforced in much the same way that traditional values are passed on to younger generations and new members who join a society. The reinforcement of traditional values is beneficial in that it provides a generally accepted system to work within, a rationale for the existing social order and is the essential glue that keeps a social structure together. (Porter, 1965, p.460). For a complex structure to survive, the overall value system must have some meaning for the individual groups and at the same time, consistency for the total society. Because traditional values are familiar, they tend to be reinforced more often than new ones are articulated.

The reinforcement of traditional values is problematic however, when issues arise that cannot be resolved within the existing value system. This may be the case for the concept of sustainability and the values that support it, i.e., if these values are not shared across different economic strata for example or if the values conflict with those that support economic development and thus the goals of certain economic strata, conflict can arise. The potential for conflict is heightened in that the reinforcement of values often imparts a rationale for the existing social order including its power structures. The power structures in a given society are often reflected in the distribution of power observed in the

character and shape of its cities, resulting in highly differentiated social structures where groups experience different social lives because income, ethnicity, language or some other barrier cuts them off from one another. In this respect cities become venues where institutionalized urban political and economic power is expressed and implemented by those who rule, and interpreted and often fought by those without power who must live with or combat the rules. Democratically elected governing bodies that provide a forum for input by all civic citizens help to equalize this situation but differences among groups persist. The greater these differences the less shared experience upon which to foster values that support sustainability and the greater the challenge to address issues of environmental protection and social equity, of who a city is for and whose interests should be served.

For values to have explanatory worth they must have some stability, be susceptible to measurement and be demonstrated as relevant to real urban situations. At the same time sometimes values need to change or at least be re-interpreted. For example, one could argue that the value that privileges the worth of individual human lives — which in its growth over the past several hundred years has contributed to better lives for humans — may have become counter-productive in that it promotes egoism and the desire for excessive accumulation of material goods. The perils of modern freedom, as discussed by authors such as Charles Taylor, when manifested in an attachment to individualism and instrumental reason can impoverish our lives by making us less concerned with others and the creatures that surround us. (Taylor, 1991, pp. 4-5). We need not become misanthropic in response and de-value human lives, but rather we may need to re-value how individuals assess self-worth. In much the same way that early surveys and the location of properties imposed a measure of permanence on the form of cities, political structures and values rooted in the initial period of rapid urbanization imposed restraints on the future value structure. It is this form and value structure we have inherited that functions as both inspiration and limitation in the design of our cities.

2.1 Values that Support Sustainable Urban Communities

What are the kinds of values that support ecologically sustainable urban lifestyles? In responding to this question, the ideas of Henry David Thoreau, John Muir, Aldo Leopold, and more recently Rachel Carson, David McClelland, Neil Evernden and Jane Jacobs have been edifying. Their emphasis on values such as beauty, preservation, caring, community, respect for people and for all life forms, influence attitudes, beliefs and feelings that support sustainable lifestyles. It was Thoreau for example who promoted wilderness as essential to a better society, Muir who argued that none of nature's landscapes were ugly as long as they were wild, and Jacobs who has worked to reintroduce the value of community into the design of urban spaces.

Prior to discussing how these kinds of values support sustainable urban lifestyles, it helps to identify some of the problems facing urban centers.

Choice and social context

Our expectations around quality of life and standard of living are intimately connected to the choices we make around resource use. The lifestyles we choose influence our relationship with the community of nature and often dictate how we adapt to the general terrain and its natural features. Put another way, our lifestyle choices influence whether urban life will be shaped by a reactive, respond-as-needed approach or by collective aspirations around what cities can do to enable environments and cultures to flourish. And yet, choice is not equally available. Just as all individuals in a society do not contribute equally to the social psychology of value formation, some individuals have greater choice than others around urban lifestyles.

Choice is affected by social context. As a rough gauge, the more economically prosperous a society, the greater the choice available to it and the greater the consumption of resources as demonstrated by the disproportionately high consumption by the developed world. And yet the converse does not necessarily hold true. A less affluent society may have less choice, but this does not necessarily result in a reduced

consumption of *available* resources. Witness the mass clear cutting of forests and erosion of top soils in poorer countries in Central and South America. Such observations lead to questions about society's use of resources, i.e., was there ever a time when society chose *not* to exploit available resources? Prior to modern times, was choice to exploit or not to exploit even contemplated? While we can choose to live within the earth's naturally restorative capacities, this choice is shaped by social context, and choice in and of itself provides no guarantees that sustainable lifestyles will be adopted.

Important determinants of environmental quality and social equity that contribute to sustainability are the decisions of individuals, families, businesses and communities acting through responsible local, national and international institutions. However, making responsible decisions requires more than good intentions. Awareness, concern, the availability of information, and opportunity to become involved are key to leveraging the force of these intentions. To the extent that lifestyles are chosen, we have a voice, individual and collective, in whether our day to day decisions are sustainable. Yet, in the absence of values that support sustainable lifestyles, we are left to question how we create a desire for sustainable urban living, i.e., how do we cultivate an appreciation for sustainability such that it becomes laudable to choose a sustainable lifestyle and possible to make this choice?

Renewable versus non-renewable resources

The sustainable use of resources applies to renewable resources used at rates within their capacity for renewal. This statement raises more questions than it answers most of which come back to one fundamental question — are there degrees of sustainability? Resource use is a critical aspect of sustainability. Referring back to the definition of sustainability — the ability to live within the earth's naturally restorative capacities in a manner that protects the long term health of human and ecological systems — the sustainable use of resources can include the use of non-renewable resources used over the short-term and in specific situations to move consumers to renewable alternatives. Such an approach to resource use needs to take into account current values that support the unrestricted

consumption of resources, where there is little incentive to consume less and in some cases, little distinction between a renewable and non-renewable resource.

Center and periphery

Cities that thrive at the expense of supporting regions are not sustainable. How often do we hear concern expressed by rural communities that cities reap all the benefits but incur none of the impacts? From energy development to the provision of health and educational services, cities are portrayed as the golden reapers — as heartlands disconnected from their hinterlands. Displaced impacts are inconsistent with sustainability and yet, such impacts are readily observed. Perhaps nowhere is this more evident than with energy use. On a continuum that began with wind and water and moved to coal, it was the eventual use of oil and gas, followed by a growing reliance on foreign reserves that brought home the connection between cities and their hinterlands.

The manner in which urban spaces are used is a measure of the attitudes and values of people in relation to the places in which they live. The city today is the result of the 19th century's industrial revolution that centralized the activities of production and exchange, and the 20th century's technological revolutions in transportation and communication that decentralized these activities. This implosion and explosion contrasts dramatically with the past when cities and towns were relatively static in their form and their growth was in predictable concentric rings. Whereas cities in the past were closely connected with their peripheries, modern cities are more aptly described as separated from these regions.

Old, preindustrial cities were built as working urban and rural landscapes where a symbiotic relationship between land and settlement could be observed. Settlement could not grow beyond the limits of local water and food sources until better transportation and more sophisticated administration evolved. Despite these limits, the amount of usable, open space within medieval cities throughout their existence was greater per head of population than any later form of city. (Hough, 1984, pp. 10). From a design perspective, the preindustrial city made the most of what it had within the means and technology available. It encouraged a respect for variations in climate, topography, soils and water

supply. Its open spaces and buildings were functional with groupings of houses arranged to conserve heat, minimize wind, and provide access to sunlight and space. Such design minimized distances between households and businesses allowing for frequent and casual interaction among residents.

In contrast, during the nineteenth century, functional geographic associations and boundaries were largely ignored. States were set up, municipalities created, administrative districts bounded and new areas of authority outlined with little attention paid to the geographic constants and the underlying community relations they generated. In sum, little effort was made to create harmonious regional units that helped balance the needs of the countryside with the needs of the city. Up to a point, these arbitrary units of administration worked better than might have been expected for the simple reason that any sort of boundary that defines the limits of obligation and interest, is generally better than no boundary.

Patterns of space in the modern city contrast even further with the preindustrial city. Where industry develops, towns spread and land values rise. In the name of progress, urbanization has become a technique of capitalizing land by turning land and nature into commodities. However, as the *economic* value of the land increases, other kinds of value decline, e.g., agricultural, recreational, and the intellectual/aesthetic value derived from knowing an area has been protected. The product of market forces, transportation systems and design ideologies that are radically different from the older city building tradition, the modern city resembles a landscape of extraordinary scale better suited to the automobile than the pedestrian. And yet, while there is an awareness of the shortcomings associated with this kind of design, the market is (arguably) reacting to consumer preferences. Many individuals choose a lifestyle heavily dependent on vehicles and largely segregated from locality. Such individuals may not be willing to return to a less mobile condition. The psychological and physical separation between urban and rural environments continues to widen as cities grow larger and become more industrialized and remote from the rural areas with which they were originally connected. (Mumford, 1938, pp. 305-309).

The new city-state

Contributing to the patterns of space in many modern cities is a tension between the suburbs and the cities they surround. Urban areas today consist of two different kinds of cities with different values. The first, the old city, was conceived in the 19th century. The second, the new city, emerged after the Second World War. The shift between the two was more sudden in Canada as compared to the U.S. The best example of the latter type of city, characterized by suburban development, is Don Mills, the first corporate suburb in Canada under construction in 1952. With roots selectively borrowed from visions associated with the Garden City of Ebenezer Howard, the Radiant City of Le Corbusier, and Broadacre City by Frank Lloyd Wright, Don Mills expressed what the “new city” was all about.

The principles of Don Mills contrasted in many respects with urban planning principles that shaped North American cities in the nineteenth and twentieth centuries. They included:

- a curvilinear street system that meandered across sites providing only a hint of order and delineation between accessible public and private space;
- an outright rejection of mingling different land uses in favor of designating land for one particular use and often for one very specific activity;
- density restrictions far below those permitted in traditional urban development;
- a love/hate relationship with the automobile whereby the curvilinear street system discouraged non-resident vehicles but encouraged maximum vehicle use by residents who had few if any sidewalks or pathways to use;
- a dearth of public transit rationalized by low densities and circuitous streets;
- a social structure built into the community that gave precedence to the school as the centre of social life both metaphorically and figuratively resulting in limited cultural facilities and activities.

Don Mills' style of development was repeated in Toronto and every other city in Canada. While there are valid questions to be asked about whether it represents "good development", there is no question that the style persisted in the development industry and continues to be popular today. Upon completion Don Mills embodied a system of values that exemplified the new vision of the city but clashed with the old vision. While the two visions differed on many points, primary among these were density, transportation, uses and public space.

Density — the old city with a density of between 15,000 and 20,000 residents per square mile contrasted with a new city density of something under 8000 residents in the same area. Densities affect us. High densities bring with them a certain dynamic possibility of interaction both good and bad. They teach us how to live and let live, that we're all a bit different and these differences should be tolerated. The new city emphasizes privacy and minding your own business combined with a self reliance that gives primacy to the individual.

Transportation — densities in the old city support public transportation with enough riders that the service can usually operate without substantial deficits and a grid road system adaptable to transit routes. The new city relies on private vehicles. Road systems are often discontinuous and not conducive to transit routes and densities are often so low that fewer riders use the service that in turn affects high deficits. Such differences reinforce deeper distinctions between the community and the individual. Where the transit rider becomes part of a larger community each day, the vehicle driver has a sense of being an individual in competition with other drivers.

Uses — the mingling of different land uses in the old city produces a diversity entirely lacking in the segregated uses of the new city. Segregated uses dictate a certain order and predictability, traits not as common in the old city. The old city offers a host of diversions and stimulating encounters, a kind of controlled disorder that the new city cannot match.

Public spaces — the old city thrives on public spaces; the new city discourages public spaces or any kind of space where people might be inclined to congregate and mix. Human activity is relegated to shopping centres, where space is private and activity is monitored.

People in the old city see things differently from people in the new city with different priorities and values. At the same time, we choose which city we want to live in and our choices act back on us, evoking or producing different value systems and shaping us as individuals and a society. We have not always recognized these differences as witnessed by urban renewal efforts of the 1950s and 1960s that attempted to impose the new city values on the old. These efforts included the development of expressways to serve the new cities, and shopping centres that threatened the vitality of commercial districts in the old cities. They did not proceed without debate.

Efforts that followed this period of renewal were more encouraging. The 1970s and 1980s were characterized in part by planners who seemed to plan “people environments” such as Gastown in Vancouver, Old Montreal and the Waterfront and Historic Properties in Halifax, and politicians who began to reestablish their links with neighborhoods and neighborhood groups. Even more encouraging are activities in the last decade where public debate seems to have become almost de rigour when public land is slated for development or sale.

It is of primary importance that we recognize the different value systems associated with the new and old city and in particular, the place of old city values. Past debates over proposed urban developments occurred in large part because they involved differences in basic values, not just differences in degree. The cities considered “successful” today tend to be those where the old city was protected from the new. The emphasis given to the new city when it emerged and subsequently the old city as still having something to offer is revealing in itself. It points to a realization that the new kind of city and the changes it created on the human condition were not entirely satisfactory. People wanted more than the new city offered and thus we saw ideas of community, neighborhood and citizen participation revived. By learning to balance the vision of the old city with the new, we help ensure the individual a meaningful place in the social context. (Gerecke, 1991, pp.31-37).

Community and capitalism

A community can be defined as a group of people bound by common interests and a shared destiny, where a society or social order and civic responsibilities can be observed. Communities often share geography. Through community, processes of experimentation and evolution occur where traditional forms of organization are adapted and new ones developed that help the community as a whole adjust to changes in the environment and learn from its collective experiences. This emergence of community helps with managing the complexities and uncertainties of society. It represents the capacity or social capital created through the personal investment of time and emotion. (Barton, 2000, pp. 150 – 152).

Community is connected to society but is also different from society as observed by theorist and social thinker, Ferdinand Tonnies (1855 – 1936). Tonnies acknowledged that modern societies had advanced in many ways, but held that they had regressed in others, namely in the erosion of primary relationships where societies were held together by a set of inflexible bonds that created stability and security. He referred to this kind of social environment as *Gemeinschaft* and viewed it as *real* community. The theory of *Gemeinschaft* identifies two human wills, the natural and the human or rational, and assumes a perfect unity between them as an original or neutral condition that is preserved. In *Gemeinschaft*, relationships are natural, intimate, organic, mutual and whole, comprised of people living and working together in conditions of mutual sharing and concern.

In contrast, Tonnies described modern societies in terms of impersonal relationships attributed to an increased division of labour into different roles and a corresponding decline in the importance of kinship and tradition as a way of life. He characterized the modern person as cut off from major sources of creativity and deprived of the satisfaction and solace previously provided by work, religious faith, politics and close relationships. The theory of *Gesellschaft* refers to patterns of social life that stem from impersonal or associational relationships and is based on an understanding of modern individuals

experiencing a form of chaos, from which the premodern person had been shielded, that engenders a sense of alienation. (Rocher., 1972, pp. 178-181, Spencer, 1981, p.174). The result is the construction of superficial relationships based on individuals relating to one another in terms of the rational achievement of their own ends.

That we live in urban societies where a sense of community can still be observed draws our attention to the social relations of cities in the context of people's everyday lives in specific places. These relations are shaped by many elements including the physical proximity of individuals and the range of dynamic encounters that are unique to an urban environment. Through community, the physical organization of the city works in tandem with its social needs, a process that can move us closer to or further away from sustainability. Efforts to engage individuals in sustainable urban living can draw upon the sense of community where it exists and work with individuals to identify those elements that are unique to their cities, combined with elements, like transportation and housing, which are common to many cities.

Alienation and intimacy in a modern society

Within the city, our physical contacts may be close but our social contacts tend to be distant. Building on previous discussion about the value of community are observations made by Georg Simmel in the early 1950s about the volume of stimulation city dwellers are subject to and the lasting impact this has had on personality. Simmel argued that as a result of an unusual volume of stimulation experienced by city residents, we developed a mentality that protected us against elements in the external environment that threatened to uproot us. Such over-stimulation resulted in a weakening of our capacity to respond. What this means is that we have learned to react with our heads rather than our hearts, by experiencing an environment that intensified our awareness rather than our feeling, leading to a dominance of intelligence. This intelligence, which extended in many directions with the specialization of the urban environment, became a fundamental characteristic of the city resident. (Martindale and Neuwirth, 1958, p.33). Whether this emphasis is good or bad, whether the parameters of good and bad are even relevant is

open to debate. What is important to the immediate discussion is an awareness of the role of the intellect in defining urban issues.

Simmel attributed the great creativity of ancient cities such as Athens to their retention of some of the aspects of a small town coupled in tension with the stimulating intellectuality and personality of the metropolis. Developing a theory of an urban personality, Simmel characterized the attitude of the typical urban dweller as tending toward formality and reserve. He reasoned that the inner aspect of reserve was not only a pronounced indifference but a slight aversion or at least a mutual strangeness and repulsion. Reserve with this overtone of aversion he argued, has allowed us as individuals to secure a kind of personal freedom impossible under most other conditions. However, while the sheer number of persons made the metropolis the locale for this kind of freedom, city life also entailed an interhuman struggle for gain, increasingly composed of impersonal components that displaced personal colorations. This left the individual to summon whatever was required to define her or himself as unique in the hope of preserving the personal core of self. (Martindale and Neuwirth, 1958, p.34). Translated into today's language — are we free or are we alienated from fundamental human connections?

Contributing to the thoughts of Tonnies and Simmel, Martin Buber viewed the modern person as increasingly alienated from other persons, the divine and her or his own authentic self, cut off from those humanizing forces necessary to her or his actualization as an independent self. Like Tonnies and Simmel, Buber pointed to the dissolution of organic, communal forms that he associated with the spread of industrialization and modern life and identified a critical need for the renewal of authentic communal forms. For Buber, individuals possess inherent tendencies and capacities whose nurturance is necessary to growth and creativity. This capacity is located neither within the individual nor within the social group but somewhere in between in what he referred to as the interhuman or *Zwischemenschliche*. Within the modern world we are increasingly dehumanized as we are conditioned to see ourselves, our products, our activities and other people in economic, political, religions and other categories that deny our human possibilities. Focused on the social forms of alienation and the structures within which

people related to one another, Buber's primary concern was to arouse the consciousness of his audience to the alienating conditions of modern life and to develop ways to tackle these. His theory of social revolution based on education, provided a unique interpretation of social alienation, relevant to the current discussion. (Silberstein, 1989, pp.5-9).

Place in a mobile society

Attachment to or development of a sense of place influences the degree to which we emotionally invest in that place. As a general guide the greater our emotional investment in a place, the greater our interest in protecting that place. So why do we attach to some places and not to others?

In part, answers to these questions are found in the distinction between *place* and *space*. Place, unlike space, offers us an opportunity to address others and to be addressed by others and the physical environment. Attachment is encouraged through opportunity for internal dialogue inspired by an awareness of attributes that comprise our immediate environment and the individuals in it. This type of attachment can be linked to emotional investment and protection. By maximizing opportunities for individuals to connect with and form attachments to urban communities, we can encourage protection of those places. Mumford and Stelter have discussed physical proximity and the range of encounters that give rise to what we can see and sense, encounters that are unique to urban environments. These authors focus on built environments that encourage encounters, formal and informal, planned and spontaneous, that offer the possibility of engagement.

Commitment to the city or at least the concept of city flows from an attachment to or development of a sense of place. Yet, many North American cities have yet to cultivate a commitment to their cities that entails primacy of place. North Americans, in contrast to Europeans for example, are less likely to describe their cities as positive forces for good or places where culture can grow and the human spirit can thrive. There are reasons for this. The Canadian system of government has worked against the development of an

urban ethos. From early colonial times Canadian cities have been kept politically weak resulting in urban governments that have been removed from active citizen involvement. In contrast, European cities were home to some of the world's great civilizations that flourished within and beyond their confines. As cities on both continents evolved from living places to places of work, some of the enthusiasm and commitment that accompanied their early development evolved as well. In North America, this evolution manifested in a period of social reform or city planning that adopted a view of the city as essentially an evil place. By comparison, Europeans and other cultures seemed to salvage somewhere in their cultural psyche a pro-urban bias that made it difficult to abandon the city, or at least the concept of city. In the absence of an attachment to or development of a sense of place, it is difficult to embrace the concept of city. Lacking a sense of connection, it is difficult to cultivate commitment. (Stelter, 1990, p.122-3).

City size and isolation

Debate about the origins of human settlements and our propensity to live in groups can be traced back to the Neolithic period, a time characterized by the existence of settled villages and the transition from food collecting to food producing cultures. While the precise period and cultural content associated with the term varies with geographic location, the termination of the era was marked more uniformly by the rise of urban civilizations in areas as diverse as Southwest Asia, the Middle East, Europe, India, China and South America. In all these civilizations, cities were the centers of internal change and development. Even as their importance in this regard dwindled and rose over the years, they became the foundations of early, modern cities and today's urban centers.

While hardly a recent occurrence, urban centers continue to be an expression of our choice to organize ourselves in a manner in which populations are concentrated and resources are centralized. Indeed the city reflects a basic drive toward sociality that seems to be universal among humans and while the phenomenon of city living may not be new, the degree of urbanization within cultures, regions and nations is recent. Today's communities concentrated in urban centers represent a unique form of organization, one that is distinct from small towns, suburban neighborhoods, rural settlements and early

cities. As our cities continue to grow, we are faced with two realities. The first is that our cities are growing as defined by absolute numbers and developed land base. The second is that this kind of growth has been associated with escalating environmental destruction and increasing social inequities. The result is a less than desirable expression of urban growth and form, one that is characterized by extreme concentrations and extreme separations. The concentrations — of people, cars and settlements — result in environmental pollution and ecological risk. The separations — of economic classes, racial and ethnic minorities — result in social inequity, isolation and a loss of community. (Geddes, 1997, pp. xviii – xix.).

A city and its needs are defined in part by the opportunities it offers to different social groups acting through a nucleus of civic institutions and associations. As such, limitations on size, density and area of an urban unit become essential to its productive organization and opportunities for effective social intercourse and culture. Put more simply, there is an “adequate” ratio of population to the process to be served. In one of Le Corbusier’s early schemes for an ideal city, he chose three million as the number to be accommodated. This was roughly the size of the urban aggregate of Paris, but this did not explain why it should have been taken as a norm for a more rational type of city development. From Le Corbusier we learned what mattered was not absolute population figure or area, but to express size always as a function of the social relationship to be served. Just as there is an optimal numerical size, beyond which each further increment of inhabitants creates difficulties out of all proportion to the benefits, there is an optimum area of expansion beyond which anything further tends to paralyze vital social relationships. (Le Gates, 2000, p. 95).

As cities continue to grow, aided by expanding transportation and communication networks, physical proximity and the range of dynamic encounters that are unique to an urban environment are impacted. The result is a privatizing of experience and a devaluing of the public realm contributing to isolation. Social interaction is gradually redefined and structured not by shared experience but by the comparison of solitary encounters with media events. Beyond simply concentrating people and structures, cities can enhance the

prospect for mutual exchange by reintroducing the idea of the public realm. (Geddes, 1997, pp.80-81).

Capitalism and private ownership

The current division in much of the developed world between public and private ownership of property regulated by government protection has produced some unsatisfactory results. Accompanying the concept of capitalism and market structured economies are ideas about ownership, property and the alteration of land and other resources. Consistent with such ideas, nature is cast as subservient to humankind and resources are limitless public goods with inefficiencies moderated by government protecting the common interest. Within such a system, the boundaries for intervention are limited. Individual land ownership makes it difficult to protect areas in perpetuity or to zone for permanent uses that meet the needs and interests of the community, and public ownership with government management has itself been implicated in the alteration of natural processes. (Geddes, 1997, p.54).

Collective attitudes and actions around the enhancement and protection of property and resources are influenced by many variables, paramount among these is private versus public ownership. Private ownership of property limits access to and enjoyment of that property and makes it difficult to zone areas for permanent uses that meet the needs and interests of the community. While private ownership can be viewed as a form of protection it can also become a license to destroy and exploit. Public ownership of property, where no individual or group has a vested interest, does not necessarily fare better as evidenced by the decay and destruction that occurs around abandoned property and public spaces and the mismanagement of resources where profit adds to the public purse.

While conservation practices have had some success, often this has amounted to the more economic use of raw materials. Plans for land use that include preservation require a certain security of tenure that supports continuity of use or lack of use, permanent

improvements and long range investment of effort. Such security requires a balance be achieved between private and public ownership.⁶

Values that support ecologically sustainable urban lifestyles

Values such as beauty, caring, a respect for people and for all life forms, landforms, climates and bodies of water, influence attitudes, beliefs and feelings that support ecologically sustainable lifestyles.

Beauty informs the aesthetic and in doing so influences our desire to protect those aspects of cities that have aesthetic value such as green spaces, historical structures and waterfronts. Aesthetic concerns go hand in hand with social, economic and environmental concerns. To the extent that we are inclined to protect what we value and we value that which has aesthetic appeal, we can support sustainability. And yet, different periods of time within the same society can represent distinct ideas about what is socially desirable and aesthetically pleasing. This concept was perhaps easier to grasp when cities were first developing and when, as Lewis Mumford observed, “The dome and the spire, the open avenue and the closed court, tell the story, not merely of different physical accommodations but of essentially different conceptions of man’s destiny.” (Mumford, 1938, p.4). In addition, our sense of the aesthetic and what is beautiful can be short-lived. As noted by Yi-Fu Tuan, the most intense aesthetic experiences of nature are likely to catch one by surprise. “Beauty is felt as the sudden contact with an aspect of reality that one has not known before; it is the antithesis of the acquired taste for certain landscapes

⁶ A recent and arguably successful example of resource preservation via land tenure occurred in New Brunswick. This province, known for some of the best fishing in the world, has auctioned angling leases since 1883. In early, 2003, it made available leases for 10 per cent of its Crown-owned salmon waters for the first time in thirteen years. Fred Eaton, whose family made its fortune in the now defunct Eaton’s department-store chain, was one of the individuals who gathered to bid for exclusive, 10-year rights to the best fishing spots in the province, among the finest in the world. Mr. Eaton snagged what was considered a “relative bargain” a 5.1 kilometre stretch of Cross Point at its opening bid of \$68,000 a year. Cross Point, on the renowned Restigouche River, has been “in the hands” of the Restigouche Salmon club for more than a century, and Mr. Eaton, part of the group, has fished there for more than 25 years. The lease, paid annually for 10 years and adjusted for inflation, is just a fraction of the cost. Lease owners must pay for game wardens, lodge staff and property tax. Of the 18 leases available — 155 kilometers of river and lake — only one failed to sell. The recent event will net the province \$50 million over the next decade. Mr. Eaton described the area as “beautiful and full of wonderful wildlife...one of the most beautiful rivers in the world.”

or the warm feeling for places that one knows well.” (Tuan, 1974, p.94). More to the point were the words of art historian, Sir Kenneth Clark summing up the ephemerality of visual pleasure. “I fancy that one cannot enjoy a pure aesthetic sensation (so-called) for longer than one can enjoy the smell of an orange, which in my case is less than two minutes.” (Tuan, 1974, p.94). While our sense of the aesthetic may be fleeting or subject to change over time and across cultures, the value of beauty can be constant.

The value of caring, particularly when informed by an understanding of humans in a “natural” or innately holistic union with nature, encourages actions that reflect a sense of connection to others. Yet simply knowing that everything is related does not guide one’s actions since relations can be treated as objects that we dominate and control for our own gratification. There is a fundamental distinction to be made between a person acting as an individual and a person acting in relationship or based on connection to others. This distinction has been discussed in terms of an “I – it” relationship to the world versus an “I-thou” relationship. I-thou relationships between individuals do not expect or demand a return on investment, but rather are done for love, friendship and respect. I-thou relationships can be extended to the community of nature where they contrast with I-it relationships that are based on subject object relations that assign nature a subservient role to humankind. (Mumford, 1938, pp.306-307). Such an approach is consistent with Martin Buber’s criteria for I-thou relationships with nature where nature is understood as subject rather than object.

In attempting to understand how the value of caring supports sustainable urban lifestyles, it is important to consider how humans have evolved in relation to the natural or the non-human environment. Understanding how humans have historically interfaced and interacted with the natural environment sheds light on the concept of sustainable urban communities today. Where we once saw ourselves as separate from nature we now see ourselves as connected to nature so arguably self interest motivates us to act in a more caring way. In the absence of understanding how these relationships have changed with increased urbanization, examining the concept of sustainable urban communities occurs in a temporal vacuum of unsupported assumptions. Paramount among these is the

assumption that urban communities are unnatural and therefore, inherently or *naturally* unsustainable.

A respect for people, while putting people at the centre, fosters subjective relations among people that can extend to the rest of nature. This respect rests on the ideals of equality and community and is facilitated by design that maximizes opportunities for human interaction, for individuals to engage with one another and the environment. A respect for people helps to build social capital that in turn can help us move beyond a narrow concern with the environment, often an impediment to resolving global environmental problems.

A respect for all life forms, landforms, climates and bodies of water informed by the philosophy of nature first and humanity second, supports the protection of natural environments for their own sake and encourages a design form based on urban natural processes. This respect rests on a subjective relationship between humans and the rest of the natural world built on the ideals of reciprocity and ecocentrism. Ecosystems understood as dynamic, self-organizing systems humans have evolved within, encourage a oneness with nature and set the protection of dynamic, creative systems in nature as a primary goal. An ecological approach applied to regions helps to define them as dynamic social and geographic realities with patterns of behavioral spatial continuity that must remain healthy if humans are to thrive.

Values that support ecological sustainability are enhanced where a sustainable environmental ethic can be articulated. Building on the ideas of individuals such as Henry David Thoreau and John Muir, Aldo Leopold introduced the concept of a “land ethic” or the extension of ethical criteria that entailed obligation to the use of land.⁷ Since obligation has no meaning without conscience, the dilemma was how to *extend* the social conscience from people to land and how to *expand* the social conscience to include an ecological conscience. A land ethic required the existence of an ecological conscience or

⁷ A land ethic cannot prevent the alteration, management and use of resources, but it does affirm their use to continued existence, and in some cases, their continued existence in a natural state.

a conviction of individual responsibility for the health of the land; the capacity of the land for self-renewal. As the ethical frontier advanced from individual to the community, Leopold rationalized that its intellectual content would also increase. The mechanism of operation was the same as it was for any ethic — social approbation for right actions and social disapproval for wrong actions. “A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise.” (Leopold, 1949, p.224-225).

Rolston and others have helped articulate how a land ethic could evolve into an environmental ethic, an ethic that in the primary, naturalistic sense is approached only when we are able to ask questions not merely of prudent use but of appropriate respect and duty. An environmental ethic extends the boundaries of the community to include the elements that comprise the non-human community, the air, soils, waters, plants, and animals. A *sustainable* environmental ethic characterizes nature as a community, not just a commodity. It rests upon the discovery of certain values such as integrity, protection, life support, and community — already present in ecosystems — and it imposes an obligation to act so as to maintain these. (Rolston, 1996, p.228).

An ethic, defined as a moral principal governing or influencing conduct, applies to individuals as members of a community of interdependent parts. However, from this it can be reasoned that the only *true* community is one with shared beliefs and values where members recognize mutual obligation. As such, the universe of living creatures is *not* a community in any morally relevant sense since the human community is the sole medium of morality. To this Leopold and Rolston have argued for extending the logic of ethics beyond nature by replacing “mutually recognized obligations and interests” with “respect and love for ecosystem integrity, stability and beauty”. Their argument rests on the belief that what we value in culture and relation to one another — compassion, charity, rights, justice, fairness — is different from what we value in nature — an ecology, a prolific system in which individuals can prosper but can also be sacrificed. There is violence, struggle and death for the individual combined with harmony, interdependence and ever continuing life for the system. (Rolston, 1996, pp. 161, 225).

2.2 Changing Values

With all the emphasis on identifying the kinds of values that support sustainable urban lifestyles, it is also important to recognize that sometimes values need to change or at least be re-interpreted. As to what affects a change in values, it helps to refer back to the elements identified in the formation of values — attitudes, beliefs, feelings, actions and behaviors — as change can be observed on many levels not all of which impact values. Change can be superficial, expressed on a verbal level and forgotten in a short lapse of time, it may be lasting, affecting attitudes, beliefs and feelings manifesting in a wide range of situations that integrate into a person's value system, or it may lie somewhere in between these points. While culture has a role in conditioning our environmental perceptions and values, society and culture evolve and with it our attitude toward an environment can change or even reverse itself. (Tuan, 1974, p.75). Only by knowing something about the nature and depth of change can we make meaningful predictions about future actions and reactions to events.

Our behavior tends towards societal norms as we choose among various possible ways of acting. This can mean choosing among contradictory patterns of behavior, several preferred patterns or one or more substitute or deviant patterns, all of which presuppose a choice among values with the former flowing from the latter. Our tendency toward societal norms, while essential to providing a generally accepted system to work within, can also be characterized as a resistance to change.

In the same manner that culture is learned, values are learned. The basic values that guide our economic system for example reflect conditions prior to a heightened concern about constraints to economic growth, i.e., depletion of the earth's resources and the accumulation of poisons and wastes in our ecosystem. We are not born believing that growth can continue unchecked, we learn this. Human cognitive reactions involved in learning, such as perceiving, thinking, imagining and reasoning, represent efforts to achieve meaning and balance. Our cognitive systems continually strive for cognitive

balance between the thoughts, beliefs, values and actions that make up a structure of cognitions about some object or set of events. The introduction of new information that conflicts with or aims to change our understanding creates disequilibrium often resulting in new efforts to achieve consistency and minimize dissonance. (Cohen, 1964, p.63).

However, our adherence to a value rarely stems exclusively from rational and logical thought but rather from a mixture of reasoning and spontaneous intuition in which emotion plays an important role. Adherence to values includes an impulse which moves us toward the recognition of an ideal in particular ways of being or acting. As such, values entail an affective attachment as well as a rational component. The affectivity surrounding a value impacts the orientation of action of individuals and collectives and at least partially explains the stability of values over time and the resistance often encountered to a change in values within a society. It also provides some insight into why contradictory values can coexist. Emotions are often able to link values in a way that reason alone would have difficulty doing. (Rocher, 1972, pp. 58-59).

Just as values and attitudes affect actions and behaviors differently, values and attitudes can be distinguished on the basis of how they can be manipulated or changed. In relation to attitude change, it helps to examine two elements; the motivation behind the change and the cognitive/affective links involved. There are motives for actions of which individuals are well aware and able to articulate, motives of which individuals who are moved by them are not wholly conscious, and motives about which we are largely unaware. Regardless of our level of awareness, our motives usually have a history, based in individual and/or collective experience. When we are motivated to act, we may or may not be aware of this history. However, depending on the motivations that underlie the change, different predictions can be made about the manifestations and consequences of the change, its durability, the number of different attitudinal areas that will be affected by the change, and the ways in which these will be translated into actions and reactions. Similarly, our predictions about the history that will develop around *new* attitudes will depend on their cognitive and affective links and the particular structure within which the new attitude is embedded. (Kelman, 1958, p.469).

Questions about changing attitudes, particularly as shaped by social influence, are relevant to the discussion on urban sustainability since the process by which individuals accept influence or conform, affects the level at which change occurs and how lasting change will be. There are three primary patterns of accepting influence: compliance, identification and internalization.

Compliance occurs when an individual accepts influence because she/he hopes to achieve a favorable reaction from another person or group. In this instance the adopted behavior is based not so much on belief in its content but rather on expectations of gaining rewards and avoiding punishments. The satisfaction derived from compliance is a result of the social effect of accepting influence.

Identification occurs when an individual accepts influence because she/he wants to establish or maintain a satisfying self-defining relationship to another person or a group. The individual may actually believe in the responses she/he adopts through identification, but their specific content is more or less irrelevant. Satisfaction is derived from adopting the induced behavior that is associated with the desired relationship.

Internalization occurs when an individual accepts influence because the content of the induced behavior — the ideas and actions of which it is composed — is intrinsically rewarding. The induced behavior is adopted because it is congruent with the individual's value system and tends to integrate easily with existing values. The satisfaction derived is based on the content of the new behavior.

The three patterns represent very different ways of accepting influence. The probability of accepting influence at any level is in turn influenced by the combined function of three key variables; the relative importance of the anticipated effect; the relative power of the influencing agent and the prepotency of the induced response. These variables are also referred to as the *nature* of the anticipated effect, the *source* of the influencing agent's power and the *manner* in which the induced response has become preponent. (Kelman, 1958, p.470-71).

Understanding the nature of changing values leads into a related area of study in social behavior, namely, the conditions under which lasting change occurs, i.e., changes that are generalized to many situations and represent some degree of value reorganization. In order to examine lasting change in relation to urban sustainability, it helps to define a physical unit within which study can occur and an institutional unit within which systems of social relations relative to social action can be examined.

With regard to a physical unit, Park, in his investigation of human behavior in the urban environment, identified “proximity and neighborly contact as the basis for the simplest and most elementary form of association in the organization of city life.” (Park, 1925, p. 7). He further observed that in a system that makes residence the basis for participation in government, the neighborhood was the smallest local unit of political control in the social and political organization of the city.

Since Park’s study in the 1920s, our physical and interpersonal mobility has increased dramatically with the expansion of transportation and communication networks. The role of neighborhoods has also changed. Despite these changes, Park’s research contributes to the current discussion on urban sustainability. In Park’s words, what we want to know about neighborhoods is what we want to know about all other social groups.

- What elements make up the neighborhood?
- To what extent are these elements the product of a selective process?
- How permanent and stable is the population?
- What is the history of the neighborhood and its subconscious that influences its sentiments and attitudes?
- What is there in clear conscience, i.e., its avowed sentiments, doctrines, etc.?
- What does it regard as matter of fact versus what is news?
- What constitutes change and how does it respond?
- What models does it imitate and are these within or without the group?
- What are the characteristics of a progressive neighborhood in respect to its resistance to novel suggestions? (Park, 1925, p25).

Concerning the second item, an institutional unit, Max Weber in the course of examining theories of the city, sought to explain the meaningful dimensions of human conduct beyond simply the external. His explanations of human conduct focused on inter-human actions in terms of the meanings they had to the parties involved as well as the specific physical changes they entailed. Weber identified these interactions as social relations and a *system* of social relations as an institution. A system such as a state, a family, a religion, or a tradition of law existed only insofar as people within it acted in certain ways. Where the term social relation economized explanation of the maintenance of a pattern in inter-human actions, the term institution economized the occurrence of complex sets of social interactions. Society was thus reduced to meaningful social interaction or meaningful inter-human behavior.

While there have been many institutional theories of the city, Weber recognized the inherent limitation of institutions to account for all of social life since individuals live out their experience in more than single institutions. His theoretical approach thus allowed for the interpretation of social action from the conceptual traditions and segmented milieus of the city as well as from the stable patterns persistent throughout time — the institutions of the city. It was Weber's theory of urban community that brought together the various forms of the institutional theory of the city that is most relevant to the present discussion. The key elements in this theory are:

social actions — inter-human behaviors having meaning to the parties involved;

social relations — the stable arrangement of elements appearing in social actions. These do not exist outside social action but rather represent the abstractly conceived arrangements or patterns an action displays.

social institutions — a similar way to abstractly conceptualize the social relations in a whole network of social actions. In practice, social institutions are usually manifest as more or less stable patterns of behavior.

community — a distinct and limited pattern of human life. It represents a total system of life forces brought into some kind of equilibrium. It is self-maintaining, restoring its order in the face of disturbances. (Martindale and Neuwirth, 1958, p.51-54).

Efforts to encourage and facilitate sustainable urban lifestyles can be advanced by examining current societal values, with an eye to identifying and cultivating those that support sustainability. Critical to this assessment are three questions:

- what kinds of values support sustainable urban lifestyles
- how are these values expressed
- who actually identifies and labels certain values as sustainable and others as not.

Such an approach has the advantage of reinforcing existing values where possible and supplementing these where required with new information that encourages different ways of thinking about environmental protection, economic prosperity and social equity.

Robert Geddes provided an example of how this approach can work in his review of what he called the “extended city” of Los Angeles. After drawing attention to the kind of detachment that privatizes experience and devalues the public realm in the extended city, he points to the opportunities for change and adaptability that are inherent in its design. In Geddes’ opinion, the extended city lends itself to change because

- so much of it is open space
- the quality of much of its construction is ersatz
- density is dispersed and it is therefore possible to provide for growth in almost unnoticeable increments with a flexibility that allows for selective concentrations of denser, mixed-use development
- the cultural preferences that underlie the organization of many extended cities (especially those of the Southern California region), e.g., the sanctity of private space, may be more adaptable to constraints than previously imagined. Environmental, traffic and even social constraints may be accepted if they are seen as a way of preserving the essential freedoms of middle class lifestyles. (Geddes, 1997, p.80).

In summary, when change is observed or when it is being contemplated it is important to examine the motivational and cognitive/affective systems involved. If we want to know how important sustainability is to an urban population we need to define what is meant by sustainability, find out what people value by asking them what is important to them, and compare the outcomes. The results can be used to determine how much a population needs to change to meet the level of importance it assigns to sustainability and what level of change would be most beneficial. This entails going beyond simply isolating the mechanisms for change, and developing an ideology that creates a determination for change.

3. VALUES THAT CHARACTERIZE MODERN LIFE IN URBAN CENTRES

What are the values that characterize modern western societies and cities and how do these values compliment/conflict with the values that support sustainable urban lifestyles? Values are what motivate us. Their importance is understood more easily when observed in relation to patterns of behavior that are supported by a deeper level of feeling and rationale. At the same time, because values touch the central core of the personality, they have a range of influence wider than observable patterns of behavior.

Values are also hierarchical in nature meaning that there is an order according to which a person or collectivity appreciates or respects the ideals to which they adhere. When members of a society adopt one solution in preference to any other to solve a particular problem, the solution corresponds to a dominant value. However, most problems have more than one solution and those solutions not chosen remain present within the society as variant or substitute values. The system of values in a society includes dominant and substitute values that are combined in a value hierarchy. The decisions that individuals and collectivities make therefore, reflect not only the values to which they adhere but also the *order* of values to which they adhere. Further complicating this situation is that we may adopt one set of values choices in a given context and another set of choices in a different context. (Rocher, 1972, pp. 61-64). The complete hierarchical profile of values helps to explain and sometimes predict social change since substitute values can be a strong indicator for how a particular society will evolve. When the circumstances of a society change, substitute values tend to become dominant values. Since few truly new values appear in a society, a change in values is often really a change in the hierarchy of values rather than the creation of new ones.

Modern cities have largely been guided by urban policy. Such policy tends to include the pursuit of a carefully defined set of goals that in turn reflect the national goals and values

of a larger society that form the basis of national policy. In Canada and other western countries these goals and values have traditionally included freedom, social equity, justice, progress and national unity, each of which has influenced to varying degrees our choices around how we organize ourselves. From these broader based values flow individual values such as progress, achievement and growth.

Ideally, the advancement of modern urban centres reflects an interaction among prevailing national goals balancing political, social, environmental and economic needs. However, in practice, and particularly in western, democratic countries, cities have tended to evolve largely in pursuit of economic development. As a result, urbanization within these countries has tended to accompany the demands of industrial specialization and modern technology. The implications for urbanization that occurs along these lines are threefold:

- other goals are subverted as the goal of economic development is pursued;
- the opportunity for the inclusion of new goals such as sustainability is limited;
- the framework for urbanization, once entrenched is not easy to change. (Lithwick, 1970, p.16.)

So why one might ask is there a divergence between a “society’s” national values and goals and the primacy of economic imperatives in a city when the people are the same in the national culture and the urban culture? The answer can be found in part by examining the internal power structure of the city which — even more than the national power structure — appears to be controlled or dominated by narrowly conceived economic interests.

In much of the west, cities have become increasingly important as centers of control for a wide range of financial transactions and headquarters for clusters of financial and related businesses. Accompanying this development has been a shift in the city function whereby cities concentrate the capital wealth but house most of the poor, a situation that exacerbates tensions between rich and poor. (Geddes, 1997, pp. 4-5). Urban power

structures associated with these shifts tend to support a system of domination that is organized to facilitate capitalism that leads to the specific spatial form of the capitalist city. Such structures also impact which values will be reinforced and in some cases, which values will be on the table for consideration. When examined as a primary force in the shape of cities, urban power structures contribute to an understanding of cultural and built environments as products of the societies they help constitute. These societies in turn, are products of myriad relationships among people and between people and their natural environment; as these relationships change so will society and its spatial forms.

From a radical political economic perspective, cities result primarily from the activities of, and conflicts between, different social classes that arise from the dominant modes of economic production. As such, the city is viewed as a kind of mechanism through which private and political interests find not only collective but also corporate expression. While this approach downplays other realms of social life, such as gender and race relations, ethnic communities and religious beliefs, it does not ignore these realms. Rather, cities become a consequence of multiple, interacting forces, where space and spatial relations not only arise from, but also influence, the social relations that create them. As such, the spaces we construct can act back on us in ways we had never imagined and for this reason, the control of space and its production becomes an important force in society's everyday life and its ongoing reproduction. (Caulfield, 1996, p.306).

When considering space in relation to the conflicts in which social groups engage, social struggles become spatial struggles as particular groups try to control space and produce spatial relations that help them reproduce. Spatial relations are vital to the dynamics and survival of urban areas since they not only reflect social forces at play but also help reproduce and alter those social forces. The reproduction of capitalist social relations for example typically entails ownership of land and control of the built environment and certain types of spaces that allows capital accumulation to occur, e.g., shopping malls and other retail spaces. Within this context, urban land development has become one of the major sectors in capitalist economies, alongside manufacturing industries, commerce and

finance. Yet, social forces do not act alone in shaping spatial relations. The production of space is the result of social and ecological forces acting together. In the same way that people create social space, the relations that constitute the natural environment — ecological forces — create ecological space or spatial relations that manifest in the physical environment.

The western world is comprised of nations whose history is rooted in capitalism. As a pervasive mode of social organization whose combined dominant values, behavioral patterns and psychological dispositions, permeate virtually every aspect of daily experience in the modern city, the requirements for capital accumulation and capital reproduction have come to be mirrored in every metropolis in North America and other western regions. At the level of cultural experience cities have evolved to reinforce market patterns of mass consumption, atomization, devotion to interior space, and the association of public space with commercial relations and short term profit. (Gerecke, 1991, p.52). These patterns are supported by a dominant value structure that emphasizes values such as progress, achievement, and growth.

The conflict we are faced with is that we cannot wish away capitalism and the dominant values associated with it, nor can we survive if it retains its current course. Values that presently dominate market societies when “redefined” and combined with values that support sustainable urban lifestyles present an opportunity for these societies to become more ecologically sustainable and sufficiently equitable to allow human communities to flourish.

As to how the transition from dominant values that are associated with non-sustaining behavior to more sustaining values might occur, it helps to examine current influences on environmental quality and social equity. Cities are the products of ecological and social forces that change over time. The ecological forces including plants, animals and weather, reclaim and reorganize ecological space. The social forces arise from a range of social realms such as gender, race relations, state institutions, economic relations, social class and modes of production. While economic relations and specifically capitalism

influence a pervasive mode of social organization, cities are more than simply spaces of social and ecological domination by capital. Important determinants of environmental quality and social equity are the decisions and behaviors of individuals, families, businesses and communities acting through local, national and international institutions that affect community cohesion and ecological reproduction. However, making responsible decisions requires more than good intentions. Awareness, concern, the availability of information, and opportunity to become involved are essential to leveraging the force of good intentions.

Ecological values had little history in policy or legislation prior to 1955, though there was considerable public sentiment about the intrinsic value in nature well before this time. Many of the changes that started to occur at the political and legislative levels were for the most part *not* initiated by political leaders but began with value changes at the grassroots public level assisted by environmental activists and citizens' groups. The resulting policy and legislative changes reflect citizen reassessments in ethics and values associated with the natural environment. (Rolston, 1996, p.247-253). There are also more recent, historical examples of changes in social values where value identification and clarification have helped to meet the larger national goals of social justice and equality, e.g., shared values that support women's and minority rights.

Most recently, residents have been voicing their "demand for change" as evidenced by their involvement in *Local Agenda 21*, the program of action toward sustainable development launched by the 1992 Earth Summit in Rio de Janeiro. The task began with a focus on neighborhood design based on quality and sustainability. Many local governments responded by becoming involved in processes that helped to articulate principles for the planning of neighborhoods that did not rely on exceptional commitment for their implementation and avoided polarized options in favor of solutions that connected human welfare with ecological robustness. (Barton, 2000, p.62).

Community and collective values that bring individuals together are as essential to modern capitalist culture as are environmental values that uphold protection and

preservation. In the same manner that capitalism works best in societies where individuals feel a sense of connection and responsibility to community, it also functions best where resources and ecosystems are protected. Communities that thrive in environments that are protected help economies to prosper. In this respect, capitalism and sustainability share common ground. When community and collective values erode, there is often incentive within existing political and economic structures for self-correction that results in a closer alignment with sustainable values. A similar situation results with regard to environmental destruction; when damage begins to jeopardize profit, the system of profit and competition in a 'free' market can be maintained, but there are new incentives to start incorporating environmental costs into economic equations.

3.1 Dominant Values and Sustainability

Individual values flow from national values that characterize modern western societies and cities. In relation to sustainability, progress, achievement and growth stand out as dominant values that have traditionally conflicted with sustainability but that have the potential to support ecologically sustainable urban lifestyles.

Progress

While goals may be individually pursued, rarely are they individually achieved. More often, an improvement or decline in one changes and shapes another. For example, the goal of progress and the value attached to it has been commonly measured by economic development. Applied to cities and urbanization, economic development has frequently entailed the capitalization of land that turns land and nature into commodities. Progress defined in this manner is often achieved through the application of modern technology that expands our capacity for choice within the rules established by our economic system. However, the expansion of choice within such parameters can undermine other individual freedoms around work and basic consumption choices. (Lithwick, 1970, p.16.).

Progress can be measured in a myriad of ways besides economic development, although frequently less precise. For example, there are quality of life measures, “health” measures, and happiness quotients used to measure progress. There are also the ideas of individuals such as John Stuart Mill and Lewis Mumford. Mill measured progress by absolute freedom or the number of individuals who were free to live their lives independently. The greater the individual freedom, the greater he considered the opportunity for discovery of the truth through cultural and intellectual enlightenment, and ultimately happiness. (Mill, 1968, p.128). Mumford was somewhat more concrete in his assessment of progress, comparing what he called “paleotechnic methods of industry” — the opening of new mines and the settlement of mining areas — with the “neotechnic complex” — the closing up of mines and the phasing out of the mining process. Mumford envisioned such *technical* progress building on itself. In the same manner that petroleum would replace coal, solar would replace petroleum. Each step would represent a revolutionary displacement from the inorganic to the organic, from the constructive to the conservative utilization of land and energy, from the paleotechnic to the neotechnic and ultimately the biotechnic — technics based on the culture of life. (Mumford, 1938, p.326). In some respects, Mumford’s vision is unfolding although not quite in the linear fashion he envisioned. One might ask how progress can be redefined to support sustainability and what role cities can have in helping to achieve this goal.

Achievement

The definitions of traditional goals and the values they are associated with can also change. Achievement motivation, defined as the motivation that impels individuals to set up increasingly difficult objectives for themselves, to impose standards of competence, to want to succeed in what they have undertaken and to wish to succeed in life in general, has been examined in relation to its role in social change and economic development. (McClelland, 1953, p.103). In that sustainability is about social change, it is impacted by the actions of individuals with certain psychological traits and reactions. One of the primary psychological traits that can affect historical action is achievement motivation.

Following in the wake of Max Weber, who showed that the entrepreneurial spirit was an essential element of the original mentality of capitalism, various efforts have been made to identify the social function of the need for achievement or success. Extending Weber's idea, a number of American sociologists have shown that personal success is not valued equally from one society to another or one period to another despite being a characteristic value of the mentality of industrial society. (Rocher, 1972, p.457). More recently, David McClelland transposed the notion of achievement from the level of values to the socio-psychological level of motivation and need. McClelland's work on achievement motivation and the need for achievement revealed an intense need on behalf of some individuals to achieve as a distinct human motive that could be distinguished from other needs. For McClelland, the achievement motive was a personality trait whereas the need for achievement was a need that could be fostered through certain social conditions. (McClelland, 1953).

Most relevant to sustainability is the prevalence of the achievement motive observed among individuals and collectives in industrialized societies, and the links made between a strong achievement motive and rapid expansion and economic development in the same societies. Individuals such as McClelland argued that where the personality trait existed, it could be nurtured by certain social conditions such as family education, social class, aspirations to mobility and ideological climate. With regard to the last condition, the ideological climate, McClelland observed a rise in the *need* for achievement with the move toward ideological conversion, whatever the ideology. Further, it seems that an active ideological climate that prompts the redefinition of a collectivity and its goals entails at the same time and at least among some of the population, a great achievement *motive*. (Rocher, 1972, p.459-462). The obvious question arises. How might a strong achievement motive benefit sustainability?

Growth

The west indeed and much of the developing world has grown to depend upon exponential growth. Using GNP as the prime measure of exponential growth, we now expect this figure to increase by a substantial and sustained percentage each year.

Continued growth is counted on to help us maintain full employment, to meet the demands for a just and more equitable distribution of benefits, and to contribute to economic development and therefore progress. This dependence on growth has manifested into a commitment to growth or, as individuals such as Charles Taylor have argued, an addiction to growth. Taylor traced the roots of this addiction to a prevailing sense of what it means to be a human being in modern civilization: control over nature, the shaping of things to our freely chosen projects (with the attendant definition of autonomy as self-dependence), and a focus on the future. (Taylor, 1976, p.53).

The impacts of growth on sustainability are twofold. First, confronted with demands for greater equality by those who feel themselves disadvantaged, our commitment/addiction to growth continues to increase. In the absence of growth as a means to help everyone have more, greater equality would mean redistribution or lowering the living standard of those who are better off to raise that of those who are poorer, a suggestion that is antithetical to the definition of happiness and the good life in a technological civilization. We have been socialized to expect a progressive increase in prosperity over the life-cycle, defined as greater control over goods and services. However, growth typically tends to happen where it has already happened resulting in a widening of the gap between the advantaged and disadvantaged. (Taylor, 1976, p.51-52). Given that growth is seldom effective in responding to the demands for greater equality, we are left to contemplate the potential of redistribution. However, if a slow or no growth economy is beyond consideration or belief, a cut back or lowering of control and consumption levels seems almost unimaginable.

The second impact of growth on sustainability relates to the opportunity for mutual exchange. The city is a kind eco-system created by people for mutual enrichment where, through a diversity of mutual exchanges, we mature and our nurtured. By concentrating people and structures, cities enable mutual exchange to take place, of friendship, material goods, culture, knowledge, insight, skills and also emotional, psychological and spiritual support. The extent to which a city succeeds in this regard is determined in part by the opportunities it offers for exchange and the access individuals have to these

opportunities. (Engwicht, 1993, p. 17) Up to a certain point, cities facilitate exchange, planned and unplanned, by minimizing travel and movement. However, as cities continue to grow, opportunities for exchange often diminish with increased travel and movement. While telecommunications has provided some relief by redefining *planned* access to exchange opportunities, a reliance on electronic communications over more direct interactions essentially eliminates *spontaneous* exchanges or the types of chaotic, dynamic encounters that give a city its life. By eliminating the opportunity for this kind of exchange, we eliminate the chance for new relationships, new ideas and new cultural experiences. We also eliminate our opportunity to be addressed by the physical environment. Most of us can recall moments when some aspect of our physical environment, a fountain, a sculpture, the song of a bird, triggered a line of thought which opened up new insight and understanding. Speed via automobile and increased distance between interactions exclude us from experiencing the places we travel through and the chance to be addressed by the elements of that place. (Engwicht, 1993, pp. 33-36).

Nothing physical can grow indefinitely and despite indications of depopulation and population stabilization the potential positive impacts of these trends will not be felt immediately, nor does declining population necessarily mean a decline in other kinds of growth. This leaves us to ponder what the growth and form a sustainable city, i.e., a fair, just, democratic and ecological city, should look like.

4. SUMMARY

What does the future hold for our cities and what form can we envision for the urban culture and landscape? How might we redefine or introduce values to further sustainability and to what extent should we influence this aspect of city life?

Detailed answers to these questions are influenced by the approach taken to understanding the city. For example, an area can be defined by working upward from the smallest unit of human habitation, in terms of functions, activities and values, or by working downward in terms of land mass, climate, and physical interactions. As social and natural conditions come together to create a regional character, the boundaries of a city-region become more apparent in terms of the spheres of attraction and dominant characteristics. In contrast to abstract divisions often associated with cities, a city-region exists as a dynamic social and geographic reality that takes into account the wishes and aspirations of its population, the sense in which the area exists as a geographic unit and the corresponding conditions it lays down for human occupation.

Combining these approaches to understanding the city also sheds light on the concept of dynamic processes and the dependence of form on process. Just as the form of the landscape is the result of processes that give rise to it such as erosion and hydrology, combined with the plants, animals and humankind that live on the land, the form of “place” reveals its natural and human history and the continuing cycles of natural process. In a sense, place persists because nature persists since part of the natural human condition is to congregate and large cities provide the means although they are not necessarily the best means. As places, cities rapidly transform themselves in the physical sense and in economic and social terms, as they continually change and develop in both form and function. How we perceive natural phenomena is part of process in that we observe, consciously or unconsciously, a mere instant of time on an evolving continuum. (Hough, 1984, p.18). The tendency to view natural phenomena as static events rather than

moments on a continuum is the root cause of many of the environmental dilemmas we face, and contrasts with an ability to grasp a region as a dynamic social and geographic reality with patterns of behavioral spatial continuity.

Environment is never isolated from values and beliefs, and a discussion of environmental protection is inevitably an account of the relationship of mind to nature, a relationship with a history informed by philosophical debate⁸. The connection between beliefs, actions and environmentalism has perhaps been captured best by Neil Evernden as he wrote about humankind as a natural alien in the environment. As he noted, “Our perceptions and expectations of environment are inseparable from our moral commitment to particular beliefs and institutions.” (Evernden, p.xii, 1993).

Explicitly or implicitly, every person, every culture has a concept of nature and a sense of the relationship between human communities and the natural environment. For some, nature refers only to those areas and life forms that are unaffected by human activities. For others, nature is viewed as something produced by the relationships between people and the natural environment, something that arises out of the interaction among all life forms on earth including people. While the latter view is more consistent with sustainability as defined in this paper, we remain caught in the dualism of culture *versus* nature. Even the idea of environmental protection is based on the separation of humanity from nature as we designate “certain aspects of nature” for protection but fail in many instances to limit human activity outside these aspects that can have far greater impact. (Roseland, 1998, p.4). This separation of human communities from nature is in many respects false, since as individuals we exist within nature and are in fact an integral part of nature. Indeed, we inhabit natural communities as surely as we do cultural communities.

⁸ It was Locke for example who wrote about wild America as a waste, and Mill who lamented that nature was an odious scene of violence. Such ideas diverged with those of Bacon who commented that nature was not to be commanded except by being obeyed, and Kant who cautioned that in appreciating natural beauty, we should not assume that nature had fashioned its forms for human delight. These latter views were expanded on by Muir, who argued that none of nature’s landscapes were ugly as long as they were wild, and Thoreau, who promoted wilderness as essential to a better society, and influenced more recent thoughts on the Deep Ecology approach to environmental issues.

Sustainability is about social change directed at the relationships within human communities and between human communities and the natural environment. The dominant values of progress, achievement and growth when redefined and combined with values that support sustainability can help protect the long term systemic welfare of human and ecological communities and in so doing, contribute to sustainable urban communities. Progress, traditionally defined as economic development and measured by the capitalization of land, can be redefined to include the displacement of non-renewable with renewable resources, a shift that does not need to negate economic development. The need for achievement, as linked with ideological conversion, can be redefined to foster greater subjectiveness between human communities and the rest of nature, a shift that builds on the historical extension of subjectiveness within human communities. Growth, as associated with the control and domination of nature, can be redefined to include development that helps protect the long term health of human and ecological systems, a shift that is qualitative but can still constitute growth when the end result is more valuable and production involves no greater use of material resources.

If change is required, the next logical question to ask is what is the starting point for the introduction of change into a society? As observed by Lewis Mumford, the assimilation of the past and the making of the future are the two ever present poles of existence in a human community. Our day to day existence lies somewhere in between in a world we create and recreate to respond to ever changing conditions. Change, as represented by sustainable regions does not just happen. It is created by the people who live in those regions. One of the most difficult tasks in trying to move a community toward a vision of sustainability can be that of engaging people. In large, urban centres the challenge can be twofold. First, there is the task of reaching those individuals who have remained arms length from the issue. Second, beyond simply *reaching* individuals, there is often a need to *persuade* people that as individuals they can make a difference and involvement need not be confrontational. Individual, voluntary involvement is a critical component of change to achieve sustainable urban communities.

A final question that arises is how can society's members encourage and reward ecologically and socially responsible behavior? For cities to enhance the quality of life and move toward sustainability, their member institutions must integrate these goals into their organizational structure and function. Corporations, institutions, and individuals working within a redefined context of numerous interrelated associations and the constraints of natural systems will be the defining difference if the future is to be sustainable. (Geddes, 1997, pp. 56-58). Accompanying such thoughts are observations about how we seem to be moving towards a new kind of settlement pattern where an urban way of life is no longer exclusive to those who live in large cities. As communication and information processing technology break down the traditional distinction between urban and rural, future ideas of urbanism may be associated more readily with a state of mind rather than a sense of place, a situation that could add to the challenge of creating a sustainable future. (Roseland, 1998, p.4).

Cities, often portrayed as a defining hallmark of advanced cultures and civilized societies, are more often experienced as spaces where tension and harmony coexist. When described in the same breath with civilization, cities become the cultural instruments by which humanity has attempted to achieve a higher, more inclusive concept of community, one where a multitude of patterns either find their common elements or become elements in a more complex configuration that includes them.

At a glance, it is tempting to conclude that cities cannot help but cause environmental degradation because they destroy natural habitat and displace other organisms in order to accommodate large numbers of people. This argument rests heavily on one element common to many definitions of "urban" — high population density — and has much intuitive appeal — the greater the number of people, the greater the environmental impact. However, it is problematic on a number of counts. First, it suggests that all high density spatial patterns have a negative environmental impact. Arguments against this include examples of pre-industrial, high density towns that in some cases had no significant harmful effect on the environment, and other cases where harm to ecosystems was noted but the effects were generally localized in comparison with contemporary

cities. In addition, major environmental damage occurs in non-urban areas for reasons unrelated to simple population density. While high density spatial forms, in and of themselves may not result in environmental damage, certain “types” of high density spatial forms may be closely linked to environmental damage.

Urban growth and development during the last century has focused on expanding the physical plant somewhat recklessly in the name of progress while treating the essential social nucleus, the organs of government, education and social service, as an afterthought. Today, we almost need to reverse this trend and treat the social nucleus as the essential element in every city plan by making the location of schools, libraries, theatres and community centers the first task in defining the urban neighborhood and laying down the outlines of a sustainable, integrated city. (LeGates, 2000, p.94). Structures such as buildings, houses, shops and highways that comprise the built environment usually outlast the generation that build them and, in doing so, impose restraints on those who have to adapt them to their use. As noted by Jane Jacobs, architecture and urban design may not determine human behavior, but bad design can numb the human spirit and good design can have powerful, positive influences on human beings.

In much the same way that early surveys and the location of properties imposed a measure of permanence on the form of cities, political structures and values rooted in the initial period of rapid urbanization imposed restraints on the future value structure. It is this form and value structure we have inherited that functions as both inspiration and limitation in the design of our cities. And yet, while the growth and form of cities impacts our ability to achieve and maintain environmental health and social equity, cities offer opportunities to redress some of the very problems they have helped create.

Concentrating development in urban centres can encourage the conservative use of land, materials and energy resulting in a reduced per capita consumption of air and water, and reduced waste. Similarly, while growing populations concentrated in urban centres can exacerbate social tension and fragmentation, such growth can also result in increased security, commerce, opportunity, and even cultural and economic vibrancy.

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