Sustainable Cities: Fact or Fiction?

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What makes a city sustainable? Is it a question of limits or scale - can a city be too big, can a community be too small to be sustainable? Or is it the most energy-efficient state-of-the-art green buildings and recycling programs that make a city sustainable? Or is it about good transit, walkable neighbourhoods and locally-produced foods, goods and services, or diversity? Of course, collectively, sustainability incorporates all of these – and in isolation, none of these! Indeed, the deeper and more subtle conditions for sustainable cities remain largely unaddressed. It is really guite simple, as we have learned more and more about the meaning of sustainable development. Sustainable development is development that integrates ecological, social and economic decision-making. Communities can be defined not only by place, but also as communities of practice, professional affiliation, shared interests and networks, and space, including, virtual communities. In addition, community usually implies some sort of regularly interacting system of networks, what we pointy-headed academics refer to as social capital. Thus, sustainable development is essentially the reconciliation of ecological, social and natural capitals; specifically the dynamic reconciliation of these capitals that a community defines as critical to its development.

A city is really a set of nested communities at a larger scale than smaller communities, that develop over time, expanding and shrinking as families evolve and people age. And what are communities but neighbourhoods of people who share the same place, and space in a moment of time, sometimes culturally defined. But what is a neighbourhood? We might say, simply, that a neighbour-

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hood is an interconnected web of relationships, within and outside one's family. Most often we think of neighbourhoods as located within a physically delimited spatial area, but our relationships and communities also exist and are maintained across time and space. So then, sustainable communities must indeed depend upon a diverse interconnected web of relationships and networks. But how densely connected should they be? Certainly they must be diverse and interconnected enough to ensure both the emergence of and access to an optimal level of diversity and innovative social capital. Yet, if we accept these conditions for sustainability, we are certainly not designing our cities

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for enhancing social capital – especially in the design of our transportation corridors, as critical connectivity between the downtown and the suburbs, between large urban centres, mid-sized and smaller communities is missing. Connectivity is important for two reasons. First, it is essential for increasing bridging social capital ties within and between communities. Connectivity within a community opens up access to different relationships, expanding the social capital base. Walkability is an important way of getting to know one's neighbourhood. But walkability is dependent upon a person's sense of safety and security, which is affected by many variables – the number of others walking, geography, the number of open cafes and business. And safe neighbourhoods may depend more upon people knowing their next door neighbour's name, than more police on the street (Putnam 2000). The old saying "It takes a community to raise a child" may be more true today than it was in the past. But walkability will not just happen without deliberate design and redesign of our cities for greater connectivity, first of the physical space and second, social spaces.

We can chose to design for walkability and enhanced connectivity, or we can continue to build islands of isolation, encouraging individual car use, increasing disconnections rather than reconciliation and reconnection. Cultural diversity and the arts may be an important connector between communities, through festivals, street parties, music and food. When a street needs to be repaired, think about narrowing the street by building more flower boxes, traffic calming, mazes, with access to diverse transportation modes, including looking at increasing the connectivity between different modes of transport. For example, in Vancouver, all buses have a bicycle rack on the front of the bus to allow cyclists to integrate bike transport with the bus system, which is now being piloted along a few bus lines in Toronto. And in Sweden, ethanol-fueled buses feature curb-height entry ramps accessible for strollers, wheelchairs and range of assisted-mobility devices, meaning everyone can access public transit, regardless of age or mobility.

Second, preliminary research is showing that many communities have already gone through reviews, produced consultant reports on what is needed for change, and yet, have never implemented them. One of the major reasons for this implementation gap is the gridlock in the planning and implementation processes for decision-making all Canadian communities face. This gridlock is not due to lack of research, knowledge and information residing in communities, but rather has arisen as a result of the solitudes, silos and stovepipes (Dale 2001) that characterize the research, business and governance sectors. It is multi-faceted and involves, among other things, a lack of coherent dialogue; congruence between political levels: political will, and a lack of 'sustainable development' ethos among various government levels and community stakeholders. Many experts have identified time and time again that one of the major barriers to the implementation of sustainable community development is governance (Dale 2001; Sabel 2001; Young and Maltke 1993), and the shrinking of public space for meaningful dialogue around critical public policy (Dale and Naylor 1995). Others have referred to fundamental disconnections – between federal, regional and local governments, between rural and urban communities and, critically, between the business and research communities (Bradford 2002; Dale 2001). Thus, increased connectivity can serve as a bridge across these gaps.

These challenges are common to all Canadian communities and cities, no matter what their scale. The social challenges facing cities and communities are complex not only because they are intricately entwined with economic, environmental and cultural issues, but also because they manifest themselves differently in communities. For example, in Canada's largest cities, the social challenges (homelessness/housing, distressed neighbourhoods, gangs, loss of diversity) are quite different from those in smaller communities (access to diverse capital, youth emigration, and medical services). Similarly, there are issues of particular importance to regional and local areas – such as Aboriginal issues in the West; the marginalization of many non-status immigrants in Toronto, Vancouver and Montreal (the lack of access by their children to education); and the attraction of immigrants to smaller communities, as well as critical services, especially medical.

The key challenges in the area of cultural sustainability reflect the very siloed approach to culture and the lack of integrated planning, even among traditional cultural disciplines of the arts, heritage and cultural industries. Even where arts and culture plans exist, there is limited integration with community development goals related to economic development, the environment, urban built strategies and social services. The city of Vancouver, however, now has a by-law that all new buildings must incorporate art into their landscape design. Thus, one new building has a constructed waterfall that runs along its side, which causes people to slow down as they walk by it, to pause for a moment, and hopefully, engage in a conversation. I believe that if you don't know a place, you won't love it, and you won't try and sustain it.

I would argue that all communities, regardless of size require essential system conditions for sustainable community development, that is, access to relationships, to diversity of place and space, to connectivity, to arts and culture. In fact, contrary to what David Suzuki maintains, internet communications may be critical to increasing space to diverse people normally outside the smaller community, and equally, connectivity between neighbourhoods, both spatial and virtual. Indeed virtual communities of every interest and description abound: some have created a vital sense of neighbourhood and belonging by fostering relationships among marginalized, disempowered or otherwise socially-excluded groups, allowing them to organize and mobilize their communities of interest - and environmental communities are certainly among these. In a spatial sense, suburbs are disconnected islands removed from the downtown core, and in some cases, no longer connected to the dynamics of how people's lives change over time, whether in terms of their mobility, food production, or job location. Perhaps then we need design for deconstruction and reconstruction as families change and evolve through their life-span?

Integrated community sustainability plans (ICSPs) could be a very important tool for increasing aggregate social capital. Interestingly, the federal gas tax rebate is now tied to every community developing such a plan, and part of that planning process requires multi-stakeholder consultations within the community. The gas tax template agreement includes a general definition of ICSPs:

a long-term plan, developed in consultation with community members, that provides direction for the community to realize 104 Environments 35(1)

sustainability objectives it has for the environmental, cultural, social and economic dimensions of its identity.

I would argue, instead of consultation, that these plans should be built through transparent and open community dialogues designed to share and develop consensus about the meaning of community for that particular place and space. For without shared meaning about future development, we no longer 'see' the aggregate impacts of our land use patterns, resulting in many communities, large, mid and small, suffering from uneven, under- or over-development. I also recommend that the planning integrate some tools of the academy – design charettes, community mapping and scenario building, in partnership with the arts, to create visually appealing pictures of our future options imbedded within the context of sustainable community development.

What should be included in an integrated community plan? First and foremost, it should commit to integrated decision-making, that is, every decision, no matter at what scale, reconciles four imperatives – ecological, social, cultural and economic. Integrated decision-making involves enlarged decision-making contexts, an expanded science, what some have referred to as post-normal science or civic science, since enlarged decision-making contexts are very dependent upon civic literacy about complex public policy issues. There is an expanded sense of expertise, the tyranny of the expert ends; and is replaced by interdisciplinary theory and thinking, moving in many cases to transdisciplinary forums – deliberatively designed to bring together the best minds and community leaders from diverse sectors.

Integration involves developing intra-organizational processes that allow for the broad range of ecological, social, cultural and economic impacts to be carefully analyzed and reconciled across government departments before decision-making occurs. Integration also suggests working more closely and cooperatively with other organizations, including neighboring municipalities, other levels of government and, most significantly, key partners within the local community, in strategic partnerships. It is essential that respective stakeholders from different sectors of society actively participate in reaching common meanings and consensus on the implementation of sustainable development for their community, or we will be doomed to plans that sit on shelves gathering dust.

In using an integrated approach, it is key to define problems and issues in ways that recognize the inter-sectoral relationships between the factors contributing to the problem. This way, solutions emerge in ways that simultaneously address different and sometimes conflicting human imperatives, such as the underlying social and economic challenges related to housing and homelessness issues, economic disparities and lack of access to education and economic opportunities that often lead to youth alienation, gangs and violence.

For me, integrated sustainability community plans should be developed by engaging the community in meaningful and sustained dialogue around the following elements.

Place. Each community is located in a specific geographic, historical and ecological landscape, and as such, each possesses particular and unique socioeconomic and cultural characteristics. Taken together, in synergy, these unique

characteristics define the spirit or sense of place (or "genus loci"). The notion of place is critical in that it determines access to particular types of resources, not the least of which are natural resources. Yet, communities everywhere are facing loss of ecological integrity, in large part due to the degradation and depletion of natural capital. In addition, globalization has dramatically changed the ability of place-based communities to be "maitres chez nous", and this is especially the case in Canada which has an overwhelmingly urban population. Large urban centres in particular are facing growth and development issues such as sprawl, and a corresponding sense of loss of place legibility (Lynch 1960) and identity in the landscape – a 'placelessness' due to homogenization of landmarks, land use and landform. Indeed, all urbanizing communities are facing spatial homogeneity through fragmentation of the natural landscape, homogenization of the cultural landscape, and an unwillingness or inability to plan growth and development at an appropriate scale.

Scale. The country's major population growth has occurred in four major urban areas: Montreal, Toronto and its surrounding area, the Edmonton-Calgary corridor, and British Columbia's Lower Mainland. One in three Canadians now lives in one of the country's three largest cities, and half of all Canadians live in one of the four major urban areas just mentioned (CRIC n.d.). Cities are becoming larger and larger, while relying less and less on the rural countryside that has historically supported their growth. Yet evidence shows that the urban ecological footprint far exceeds their local carrying capacity (Wackernagel and Rees 1996). Further, an increase in development, and therefore management scale has dramatic impacts upon critical access to resources, not the least of which is knowledge and diverse expertise.

Limits. Expanding dialogue around the meaning of limits – ecologically, economically (consumption) and socially – is also a part of an integrated community plan. Many communities, especially those that are geographically bounded, face decisions about how much growth is viable to maintain the very characteristics of place that attracted people in the first place. It is clear from some of the patchwork development that has happened, due to lack of integrated community planning, that we can't have our cake and eat it too. Community decisions on limits are highly pluralistic and normative, and therefore can only be decided by the community. These inevitably rely on sustained dialogue and enhanced civic literacy around critical social and political as well as ecological questions. Are there critical biophysical limits for sustainable community development? Are these limits plastic or absolute? How can these limits be determined? Are there important cultural differences concerning limits to development?

Diversity. Loss of ecological integrity everywhere is related to a concomitant loss of global biodiversity, which some have argued includes human cultural and linguistic diversity (V. Shiva, 1990). New estimates indicate a reduction by 10% of the world's forest cover over the past 10 years; nearly 50% of all fish stocks are fully exploited (Pauley 2003); and by 2025, 15% of all forest species will be extinct (World Resources Institute 2003). Human and cultural diversity is also declining; all but 200 of the modern world's 6,000 languages are likely to be extinct or moribund by the end of the next century (Diamond 1993). Coming to

understand the diversity of place (physical and non-physical), diversity of space (mental, emotional and spiritual), and diversity of life (human and non-human) may be one of the most important social imperatives facing communities in this century. And diversity is related to place, which is dependent upon scale and limits, another powerful argument for the critical need for integrated decision-making at all levels of government.

In conclusion, such plans include community processes that sustain dialogue within the community about the meaning of place and what ecological characteristics must be sustained; scale, what is the appropriate scale of human activities which sustain those characteristics of place the community has identified as priorities; and implementation of integrated decision-making processes throughout municipal decision-making, policies and programs, that hopefully will lead to more of us knowing our next door neighbour's name, and walking to a neighbourhood café for a bon café, to debate whether or not Vancouver has a better plan in place than Toronto.

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