

# Social Capital, Urban Sprawl, and Smart Growth:

A preliminary investigation into sustainable communities in Canada

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Sustainable development is a process of reconciliation of the ecological, economic, and social imperatives as defined by Dale (2001). Such a reconciliation requires that the context for decision-making be enlarged so that many sectors in society can participate. Yet, there is still debate as to the nature of the relationships between the ecological, the economic, and the social (Lehtonen, 2004). Reconciling the often competing priorities and logics within the domains of each imperative is still a challenge. However, Social capital seems a potentially useful tool in analyzing economy-society relationships, as it provides a metaphor that can structure thought and transcend disciplinary boundaries. Michael Cernea, Senior Adviser for Social Policy and Sociology to the World Bank until 1997, argues that sustainability must be socially constructed. He proposes that building social capital can enhance and sustain social welfare, stability, and environmental management (Cernea, 1993). Social capital is popular among academics from diverse disciplines and with policy makers at all levels of government. The UBC Task Force on Healthy and sustainable communities find that the quality of life in Vancouver's Lower Fraser Basin could be significantly improved through the development of that region's social capital. They argue that this would ultimately reduce patterns of over-consumption to within ecological limits (Woollard, 2000). According to their findings, a civil society infused with ecologically oriented social capital can be a catalyst for the cultural transformation needed for sustainable development (Carr, 2000). Social capital makes possible local mobilisation for sustainability goals, the spread of norms that support environmental consciousness and public participation and the reconciliation of interests between citizens, government, NGOs and the private sector.

In this review of the literature, the value of social capital for environmental management, sustainable development policy, and activism is documented through a number of studies. The ways in which social capital is employed to mobilise key players and catalyse community efforts is explored. Following this, the issue of sprawl, one of the major challenges for sustainable development is examined. Parallels are drawn between social capital, sprawl, and counter sprawl movements.

"It is very clear that the obstacles to sustainability are not technical or even economic: they are social, institutional and political"

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#### What is Social Capital?

On the surface, social capital seems to be a simple idea. "Despite its current popularity, the term does not embody any idea really new to sociologists. That involvement and participation in groups can have positive consequences for the individual and the community is a staple notion..." (Portes 1998, p. 2) Yet it is actually full of subtle implications. The allure of social capital is that it is neither a market-based solution nor a government intervention for social ills or economic failures, but by synthesising both the social and the economic, it transcends both and opens up new terrain. Our personal relationships, acquaintances and contacts are the domain of this resource as are the groups, firms, institutions and movements in which we forge our relationships and which arise from them.

Jane Jacobs was one of the first to consider social capital in Death and Life of Great American Cities (1961). She values social capital as a resource that enables the "informal and formal self-management of society." p144. Jacobs theorizes that people in cities form social networks at various geographic scales, and this allows them to develop the capacity to act collectively to address local issues. She defines three scales of social networks: the city street, the district and the city as a whole. Social relationships at the city street level are fundamental to city life, but communities at this scale often lack the political power and resources necessary to solve many of their problems. This dilemma is solved by forming networks of relationships that span geographical scales and connect street level communities. Jacobs, reflecting on the massive urban renewal projects undertaken at the time of her writing, cautions that social capital networks take time to develop and require a significant amount of the same people living and working within these networks continuously. She writes that "...new [social] capital is slowly and chancily accumulated" (p.138). However, Jacobs's treatment of social capital has not received much attention in the body of work that has developed recently on the subject.

Coleman's theory made a significant contribution to the study of social capital by giving the concept visibility in American sociology and by identifying some of the mechanisms by which it was generated (Portes 1998). Coleman (1988, 1990) aims to develop a theory that would account for how social contexts shape rational action by individuals. This theoretical explanation would also account for how independent and self-interested action can account for the development of social organisation.

According to Coleman, "social capital inheres in the structure of relations between actors" (1998, p.S98). Furthermore, Coleman postulates that "social capital is defined by its function" (1988, p.S98). As such, social capital is defined by its value to actors as a resource that can be used to achieve their interests, yet this value depends on the social organization in which the individual takes part. Colman also states that social capital is in fact "a variety of different entities" (1988, p. S98), but every instance of social capital has in common that they "consist of some aspect of social structure, and they facilitate certain action of actors – whether persons or corporate actors – within the structure" (1988, p. S98). He points out that social capital, unlike physical or human capital, has aspects of a public good, because it is available to all members of the organisation in which it is generated. Specific actions that bring social capital into being, such as doing a favour for a friend or sharing information, do not often directly benefit the individual. Therefore, individuals do not have an interest in producing social capital, so it is often created or destroyed as a by-product of other activities.

Putnam's work has received attention beyond the academic world, and he has been credited with popularising social capital theory (Portes 1998). His theory is informed by Coleman's, but it differs in a few important ways. Putnam broadens the effects of social capital, arguing that the level of social capital in a region or country affects political and economic outcomes. Putnam defines social capital as the "features of social organisation, such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions" (Putnam 1993, p. 167).

In Making Democracy work (1993), Putnam makes a causal link between civic community, rooted in centuries of civic culture, and the institutional performance of regional governments in Italy. In Bowling Alone (2000), Putnam applied his social capital analysis to the USA, and found that stocks of social capital there were declining. In both works, social capital is not a "capital asset for the individual" as it is in Coleman (1990, p. 302), but a resource that belongs to a group and that facilitates cooperation. It has also been argued that Putnam has reinterpreted Coleman's view of social capital as embedded within a rational-choice framework and instead framed social capital as a cultural phenomenon (Jackmann and Miller 1998).

There have been a number of criticisms of social capital theory as defined by Coleman and Putnam. First, social capital has been criticized for conflating cause and effect. There is an ambiguous differentiation between the outcomes of social capital and social capital itself (Portes 1998, Mayer 2003). In the current research the products of social capital will be treated as separate from its accumulation, although it is iterative in that the more it is used, the more is created (Dale, n.d).

Second, structural factors are often left out of social capital analyses. Social capital has been treated as independent of larger socioeconomic structure, yet it affects larger socioeconomic conditions. Tarrow (1996) argues that it was not simply social capital, but a history of exploitation of southern Italy by the country's north that resulted in a lack of associational activity. Yet, Putnam does not identify government intervention as a causal factor.

Others argue that Putnam did not pay enough attention to structural factors such as systemic racism, unemployment (Tarrow 1996, Levi 1996). Finally, Putnam negated the social capital within political associations and social movements, and thus their value for democracy (Foley and Edwards 1996). However, as will be documented, there has been much work since Putnam and Coleman that includes structural factors and studies social capital within politically charged contexts.

# Collective Action for Environmental Management

Many of the studies that highlight social capital as an important factor in bringing about sustainable development focus on environmental management. It is not in the interest of isolated individuals to maintain common ecological resources, yet there is evidence that co-operation makes this possible. For example, Theesfeld, in her 2004 study of Bulgeria's irrigation system,

Social capital, unlike physical or human capital, has aspects of a public good, because it is available to all members of the organisation in which it is generated. argued that social capital, premised on trust, is a prerequisite for collective action, which may enable societies to overcome the common-pool resource dilemma and devise sustainable resource management. In Michigan, the Eastern Upper Peninsula Ecosystem Management Group has established working relationships based on trust, which enables government agencies, forest product companies and a private conservation organisation to collaborate for ecosystem management (Beyer, Homan, Ewert 1997).

Jules Pretty, has done some significant work on the topic of social capital and environmental management. He documents the success of local stewardship groups in such sectors as watershed/catchments management, irrigation management, micro-finance delivery, forest management, integrated pest management, farmer' research groups, and farmers' research groups (Pretty and Ward, 2001). According to Pretty, social capital offers a conceptual framework under which the success of these local groups can be analyzed and that can inform future initiatives. He argues that community collaborations, that are rich in social capital, are a "third way" that may develop lasting solutions to environmental problems.

Pretty highlights the fundamental problem with the way that ecosystems are valued economically (Pretty 2003, Pretty and Smith 2004, Pretty and Ward 2001). That is that they are a common good, which means that consumption by any private actor does not prevent other actors from consuming ecological resources. Furthermore, ecosystems in themselves are not valued, but the products that they can be converted to are. Thus, there is a market-based incentive for private actors to continue to convert forests to timber and to urbanize natural landscapes. Traditionally, this problem has been addressed by privatization and enclosure of natural systems, or enforcement of laws and regulations. Pretty points out that these methods of conservation fail when laws are changed or incentives for enclosure drop off.

James Coleman

Furthermore, neither incentives nor regulatory schemes lead to the changes in personal behaviour or social norms that are necessary for sustainable ecosystem management. Yet, local social networks can sustain positive biodiversity outcomes in the long-term when engaged in planning and implementing conservation schemes. The successful schemes are those based on meaningful participation and social learning. It is the richness of social capital in these networks that leads to new social norms and institutions, reinforcing environmental stewardship as a collective goal and an individual benefit.

# Social Capital and Sustainable Development Policy

Social Capital has also been investigated as a tool for formulating and implementing sustainable development policies. In this context social capital tends to be valued in terms of its utility in making environmental sustainability a priority for local actors, in getting sustainable development on the agenda in local political decisions, and in getting policy implemented.

Moore (2000) studied the barriers to implementation of the *1990 Clouds* of *Change* report prepared by the City of Vancouver Task Force on Atmospheric Change. Although the report was unanimously endorsed by city council, nine years later the city was still working through implementation and some recommendations had not yet been addressed. Moore identified forty-eight barriers to implementation as identified by councillors, city staff, task force members and citizens who were involved in the public participation process.

Respondents were also asked to suggest strategies to overcome such barriers as a lack of understanding about the issues, a perceived lack of empowerment, and the political fear of loosing constituent support. In her conclusion Moore focuses on what emerged as a key strategy: improving civic morale. Here, Moore draws In communities with a higher degree of civic involvement, citizens believe they have a right and a responsibility to take part in public affairs. The existence of dense social networks may enforce norms of compliance and cooperation.

Jennie L. Moore

on Putnam's findings that a civically engaged populace improves the effectiveness of government policy, and provides motivation for action beyond economic self-interest. In communities with a higher degree of civic involvement, citizens believe they have a right and a responsibility to take part in public affairs. The existence of dense social networks may enforce norms of compliance and cooperation. "Thus, civic moral provides a means of completing the feedback loops that encourage actions to support sustainability, when such loops are not being completed by other social stimuli" (p.126). As well, social capital could be a nonmonetary resource for implementing sustainability policies, since residents may be motivated by a sense of place or community spirit to take part in local initiatives.

Rydin and Holman (2004) clarify the role of social capital addressing the underlying causes of barriers to implementing sustainable development. The value of social capital in these situations is that it can overcome collective action problems and reduce transaction costs. It overcomes collective action problems by increasing the benefits that individuals receive for working together, such as enjoyment and access to information.

The free-rider problem, a major impediment to collective action, is minimised by enforcing soft sanctions, such as tarnishing a selfish individual's reputation. Reducing the transaction costs associated with the risk of free-riders makes communication easier and more likely to occur. Social capital involves flows of information through networks so that ideas and knowledge are readily shared among actors. The costs of exchanges are further reduced by increases reciprocity in relationships and predictability in exchanges.

Rydin and Holman breakdown social capital into five dimensions: boundaries, place and territoriality, scale, the nature of the linkages, and the types of actors involved. This analysis reveals the need for a more strategic from of social capital that employs vertical linkages to reach across scales, involving a dense network of actors from multiple sectors. They call this bracing social capital, and give a number of examples found in the literature to which this concept may apply. Although initiatives are linked to a local place, the boundaries of the network involved in bracing social capital are defined by the project or policy problem at hand. Bracing social capital is different from both bonding and bridging social capital in that it involves vertical linkages between the micro scale of local networks and the macro scale of the state. In contrast, bonding and bridging social capital involve only horizontal relationships that do not cross scales.

According to Rydin and Holman, bridging social capital may be too diffuse and may lack the focus needed to address specific policy goals. Commonly, where local government actors and local economic actors have developed substantial reserves of bonding capital over time, economic growth policies have traditionally taken precedence. It is argued that endowments of bracing social capital could be put towards changing the policy agenda.

Agyeman and Angus (2003) draw a correlation between increasing social capital and meaningful public participation in the development of sus-

tainable communities. Based on an extensive review of the literature on civic environmentalism in the USA they distinguish between 'narrow focus' and 'broad focus' civic environmentalism. Conventional 'narrow focus' civic environmentalism focuses on increasing public awareness of important environmental information, and the authors argue that it has been unsuccessful in bringing about the fundamental policy changes necessary for sustainability. Broad focus civic environmentalism stresses the interdependence of the environmental, social, and economic and involves power-sharing among local governments and communities. "It stresses the need for the rebuilding of social capital as part of a process of civic and environmental renewal at the community level" (p. 358). This is because it is face-to face interactions, which build social capital and develop community norms that can successfully change behaviour. Rather than the availability of technical information about the nature of environmental problems, a general underlying concern and collectively held sense of morals are likely to prompt people to participate in collective action for sustainability.

Selman's (2001) study looks at the nature of civic engagement in local sustainability projects in the UK. Specifically, the projects studied employed a strategy of mobilizing social capital to meet goals within the environmental dimension of sustainable development. Initiatives were based on 'deliberative and inclusive processes' and involved collaboration between volunteers in the community and the public and private sectors. Sleman found that existing stocks of social capital within communities underlie successful approaches to local participation. In this respect his findings could be taken as an instance of Putnam's idea that social capital supported civic participation. However, he highlights the difficulties that many initiatives have in building on existing levels of social capital. Increasing levels of social capital

and civic engagement are presumed to be an aspect of sustainable development, and so the findings of this study shed light on some of the barriers in this. Among his observations Selman found that:

"The overall pool of volunteers remains fairly stable, but is reconstituted in response to changing circumstances" (p. 19)

"The natural tendency of community initiatives to attract middle-aged and retired is compounded by the poorly developed means of involving children and youth." (p. 21)

"Over-reliance on a small nucleus may impose intolerable personal burden on those who do volunteer." (p. 22)

Long-term voluntary participation was harder to bring about, although there was some evidence that shortterm participation lead to changes in attitude, political beliefs and consumer behaviour. He concludes that the planner's role in such endeavours, rather than espousing an *"uncritical faith in the rhetoric of participation"* (p. 28), is to be realistic and supportive of volunteers.

In the preceding articles social capital was identified as a mechanism for establishing norms of civic participation, and support for sustainability policy. Community interaction is the mechanism by which these norms are spread, yet as Selman points out, there are real difficulties in attracting and keeping participants in community-based sustainability projects. The analysis by Rydin and Holman of the dimensions of social capital may be a useful method for considering the theory. Their conclusions about the need for directed networks that engage relevant actors from different scales and sectors point to one way in which social capital may be employed to address stagnation in community involvement. In all these studies, it is assumed that sustainable development has been already defined. However, the meaning of sustainability and implementation of sustainability policy is usually contentious.

# **Conflicts and Capital**

Sustainable development requires collaboration between civil society, government and the private sector. It is promised that social capital may be a means of fostering such collaboration. However, when divergent interests coalesce into common goals conflict is inevitable in the process. A major criticism of social capital is that it tends to gloss over inherent conflicts.

The [social capital] perspective has difficulties with certain forms of civic engagement: new types of urban activism and movements involving protest and other forms of disruptive repertoires do not appear on the radar screen of most social capital scholars and never on that of policy discourse. (Mayer 2003, p.117)

Mayer's analysis deals with urban movements of the homeless, underemployed and marginalized. However, her criticism of the social capital discourse could be valid for all social movements that challenge dominant paradigms and power structures. That such movements draw on and generate social capital has been largely ignored.

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The 'social capital' and 'capacity building' discourse deals almost exclusively with ... the rather institutionalised community-based organisations that have routinized their collaboration with local as well as other levels of government and/or with funding agencies. (Mayer 2003, p.119)

Yet, it is often through conflict that the negative externalities of urban processes are brought to light and that politicians are held accountable. Putnam in particular does not assign much importance to political organisations in fostering a "civic community" (Putnam 1993), while at the same time he negates the importance of grassroots social movements in contributing to social capital (Putnam 2000). Putnam emphasises traditional community groups like choral societies and the Rotary Club, but just how apolitical bird watching clubs contribute to democracy is ambiguous (Levi 1996, Putzel 1997, Mayer 2003). Whereas, politically oriented groups have an agenda of political participation.

We are likely to find that socialmovement organisations, grassroots interest groups, and grassroots political associations of all sorts are far more likely to generate Putnam's activated citizenry than the choral societies, birdwatching clubs, and bowling leagues he is so fond of citing. (Foley and Edwards 1996)

Critics of the often apolitical nature of social capital analysis do not contest that many national movement organisations are "direct-mail organisations" that rely on anonymous checks rather than broadbased networks of support. However, they do argued that grassroots social movements remain significant in their numbers and as a source of social capital that directly contributes to democratic debate.

## Activism - Reframing Social Capital as Resource for Change

Recent research has attempted to apply the social capital analysis to political movements. Thus, the utility of social capital for challenging paradigms is being recognised. In more recent studies, the structural factors that shape the context for action are considered in the analysis. In all scenarios where activism materialises and movements emerge, social capital is directed to address specific problems.

In Sydney Tarrow's 1994 study of social movements, he theorized that the resources in social networks are vital to the sustained functioning of social movements, which ultimately may have indirect influence on government policy. Although Tarrow did not use the concept of social capital in his analysis, the concept could easily be applied to social movements. According to Tarrow, the foundation of social movement resides in faceto-face interactions among members of social networks and it is in these networks that collective action is activated and sustained.

More recent studies have explicitly included social capital in the analysis of social movements and political activism. In a study of protests world wide Benson and Rocho (2004) find that interpersonal trust make individuals more likely to take part in political actions, despite uncertainty as to the outcomes. Protesters who trust are more likely to believe that others will also take part and that the protest will have an impact.

Swain (2000) found that weak ties, or bridging capital that cut across societal divisions facilitate social movements by building support in diverse communities. Thus, larger numbers of people can be mobilised in sustained opposition. This conclusion is based on a study of the effects of different types of associations on the success of environmental movements in Orissa, India. In this region movements have arisen to oppose big damns, large industries and mines that would have displaced large populations. However, opposition around the coast of Orissa has been significantly more successful than in the interior. Swain attributes this to the fact that associational membership in the costal region is more inclusive that in the interior, and there was also greater participation in associations in the coastal region.

Fisherman Co-operatives and other professional associations, along with cultural and village development associations are the context for people from different communities and castes to develop relationships on the coast. In the interior, youth and women's associations are the main group activities and are often exclusive to specific castes. Swain concluded that the weak ties that resulted in inter-community networks on the coast allowed for movements to spread and be sustained.

In contrast, within the interior, strong intra-group ties discouraged people to come together in popular movements. In this case, structural factors were not the focus of analysis. Yet, Swain notes that *"in the postindependence period, the coastal region of Orissa was politically and economically more powerful that the rest (inland)."* Thus, the quality of associational life in the regions may be only one of the explanations for differing outcomes of popular mobilisation.

Other studies make explicit the effects of structural factors on activism and participation. A survey of Mississippi communities found that smaller places tend to be less environmentally active, as are economically disadvantaged communities with lower education levels (Domenico, Parisi, Taquino, Michael, Grice, Steven Michael, Duane, A. Gill. 2004). Nevertheless, communities where more people take part in protecting the environment also take on more projects, such as changing zoning ordinances to protect environmentally sensitive areas. In this context, social capital promotes collective action by converging diverse interests into a common agenda, facilitating the flow of information among groups within the collective and linking actors to external resources.

A similar conclusion was drawn from a study of community social networks in Bangkok Thailand (Daniere, Amerita, Takahashi, Lois M., Naranong, Anchana 2002). In these communities, increased social interaction and environmental knowledge was found to be clearly linked with increased community participation. However, "Communities with few economic resources may be ill equipped to develop or manage social capital resources and simply designing supportive policies without increasing financial resources will do little to improve their situation" (p. 477).

From these examples of social capital and activism in the literature it is apparent that social capital is often mobilised in response to environmental problems. Yet, one study in particular makes this point plain. Adger (2003), in studying collective action for coping with extreme weather finds that "many aspects of adaptive capacity reside in the networks and social capital of the groups that are likely to be affected" (p. 401). Furthermore, the quality of the adaptation or the response to a perceived threat is highly dependant on place, the locality and community where the issue arises. "The nature of adaptive capacity is such that it has culture and place-specific characteristics that can be identified only through culture and place-specific research" (p. 400).

## **Urban Activism and Social Capital**

Two case studies in particular highlight the ways and mechanisms by which social capital is involved in activism in an urban context. In each case, networks have formed in response to perceived problems and are engaged in collective action to bring about solutions. The networks have at their core, residents and concerned citizens, but connections to NGOs and government provide important leverage for advancing the groups' agendas. Sometimes groups oppose local government, at other times they ally with them. The first case study does not mention "social capital", but in both studies social capital is being employed towards sustainability goals.

Porta and Andretta conducted a study of citizen committees in Florence, Italy that investigated their organizational structure, their strategies for action, resources, and their interactions with institutions. It is argued that the rise of citizen committees stemmed from a failure of the political representation to respond to local needs. Citizen committees mobilized in response to local issues ranging from security to pollution and planning issues. It was found that the committees are based on friendship and neighbourhood networks. Often there were only a few active members (often less than 10) and the structure of the organization was highly informal, yet committees were able to mobilize actions at the district or even provincial levels.

Building relationships with public authorities, and making allies with politicians and administrators was found to be important for these committees to access public resources and to influence policy decisions. Another important resource was the knowledge activists had gained from

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previous associations with political parties, unions, or on other committees.

Resources for collective action have been transferred from the collective movements of the past to new mobilizations, bringing the capacity to promote protest and to use it through the communications media and with the [political] institutions. It also seems as it past mobilization experiences have left other institutions broadly-if selectively --- open to negotiating, at least with those actors considered worthy of recognition (p. 262).

Although social capital is not addressed in this article, it is readily apparent that the committees relied on it. Bonding capital within committees and their neighbourhood networks was a resource in protest activities. Bridging social capital within relations between the committees and allies in political and administrative positions enabled access to the policy process.

Batterbury made a study of the Ealing Cycling Campaign (ECC), a branch of the London Cycling Campaign located in west London. He posits that environmental groups in London, like the ECC function as social networks, with shared values, trust, and solidarity around specific goals or projects. Like the citizen committees in Florence, although member share values, efforts are focused on influencing policy, rather than constructing a collective identity (Porta and Andretta, p. 262).

Another similarity is that the networks were run by a few committed activists (five to twelve), but this represented a wider membership (about 300). Thus, Batterbury characterizes the ECC as a small social network. In order to influence planning decisions, relationships with key councillors were cultivated, but the nature of relations fluctuated between strategic lobbying and "blatant flattery" (p.11) when demands were meet. Members that held

professional engineering qualifications and others who held jobs in council brought further resources to the group. Particularly, this legitimated the group's position on planning issues to some extent, when they were dismissed by professional planners.

Alignment with other pro-enviromentalist camps in council brought further rewards. Other activities raised the profile of the ECC and fostered the trust of the community, other groups, and council. These included participation in public events like National Bike Week, which attracted a wide range of participants and press coverage. The group also participated in a number of town meetings and, in partnership with other environmental groups, organized a meeting where council members and the local Member of Parliament explained policies and responded to public criticism.

While these activities maintained the ECC's relations with politicians, they did not result in "real inclusion in formal planning" (p. 13) Indeed, Batterbury concluded that a social network like the ECC can not bring about sustainable travel behaviour among urban citizens. What is needed is comprehensive planning that makes radical changes towards sustainability. Small advocacy networks though can aim to generate a groundswell of public support for sustainability that would prompt urban planners to make these changes. Batterbury concludes that this requires networks like the ECC to build working relationships with elements of local government, while "retaining their own political space for action and debate" (p. 16).

This case study draws attention to an application of synergy as characterized by Ostrom and Evans. Also by characterising the ECC as a social network, it becomes apparent how social capital resources were accessed, both from bringing in members with valuable human capital (engineering degrees) and from establishing relationships with policy makers.

# Sprawl - A Collective Action Problem?

One of the most far reaching urban problems is sprawl, but what exactly is this phenomenon? Ewing's discussion of the causes and negative effects of sprawl in Is Los Angelis Style Sprawl Desirable? (1997) seems to have become a touchstone in planning literature. Ewing specified three forms of development most often characterised as sprawl: leapfrog or scattered development, commercial strip development, large expanses of low density or singleuse development.

Ewing then identifies two indicators of sprawl from Florida's anti-sprawl rule: poor accessibility, and lack of functional open space. Unlike, Gordon and Richardson (2000), who represent a view that sprawl is simply rapid suburban growth, he noted that it is "not suburbanisation per se, but the wasteful form it so often takes that most critics of sprawl attack" (p. 108).

Often sprawl is identified in a definitive, yet highly qualitative fashion: like pornography, people know sprawl when they see it. Ewing, however, point out that *"sprawl is a matter of degree"* (p. 108). For example, the exact point at which an activity corridor becomes commercial strip development is hard to pin down, unless the distinction is quantifiable and related to impacts. Based on an extensive literature review Johnson (2001) summarises six different characteristics of sprawl:

- 1. segregated land uses,
- 2. emphasis on the automobile for transit,
- 3. a push for growth at the boundary of the metropolitan area,
- residential and employment densities that are generally lower than those in further-in suburbs of in the central city,
- 5. populations that are homogenous in terms of race, ethnicity, class (to a lesser extent), and housing status,
- 6. the inability of governments to work together to devise common policies to address perceived negative characteristics of the current growth regime.

The manner in which sprawl is defined often depends on who is making the definition. Environmentalist organisations focus on the issues such as loss of natural areas and climate change in their definitions. For example, the Federation of Ontario Naturalists (2002) characterise sprawl as "A loss of natural areas and productive farmland to urban development instead of using land and re-using buildings within existing cities, towns and villages to meet growth needs" (p. 8). In contrast, the Urban Development Institute (2003) writes that "It's not sprawl it is just growth fuelled by a strong economy, low interest rates and immigration. We should not apologise for growth - but we do have to manage growth responsibly" (slide 11). Thus, definitions of sprawl outside of academia are highly coloured by the agendas of the organisations making the definition.

Various interest groups define it according to their agendas whether it be a natural, although unguided, extension of economic growth or a wholly un-natural assault on the ecological systems that support human populations. Whatever the case, it is obvious that many players are involved, which is what makes Daggar's (2003) argument interesting. He argues that sprawl is actually a collective action problem.

If we ask someone who wants a single family house on a suburban-style lot whether he or she also wants this house to be part of a sprawling, congested, polluted metropolis, the answer will almost certainly be no. But this person will also know that one more house by itself produces neither sprawl nor congestion nor significantly more pollution. Like the driver who wants everyone else to join car pools or ride the bus so that he or she can drive to work on less crowded roads in less polluted air, the suburban homeowner knows that he or she is not the one who tipped the balance or made all the difference by moving into a new house. If one cannot have the house on wants in a sprawlfree environment, then one may as well take the house, sprawl and all, for the sprawl will be there no matter what the individual does. (Daggar 2003, p 31)

Certainly, as Putnam points out, social capital is a resource for overcoming collective action problems. In the mid-1990s the Smart Growth movement arose in response to sprawl. It is indeed a collective response to the threats of sprawl as it involves many actors. The next section will explore the meaning of Smart Growth and relate it to sustainable development.

# Smart Growth

The concept of Smart Growth arose largely in response to the problem of sprawl. It is the opposite of "dumb growth" rather then "no growth". This definition implies that growth is inevitable, but that planning can mitigate many of the ill effects of unchecked sprawl.

As it is a response to unsustainable sprawling development, Smart Growth has been characterised as sustainable urban development. "The concept is not a reformulation of sustainability, but a new iteration of it" (Tregoning, Harriet, Agyeman, Julian, Shenot, Christine 2002, p. 342). By appealing to quality of life issues the appeal of Smart Growth attracts a broader group of adherents than the sustainability discourse, which appeals largely to environmentalism (ibid.).

Gillham (2002), based on a review of publications and websites on the subject found seven most recommended smart growth programs:

- 1. Open space conservation,
- 2. Boundaries limiting outward expansion of growth,
- 3. Compact-mixed use developments.
- 4. Revitalization of older downtowns, inner ring suburbs, and rundown commercial areas,
- 5. Viable public transit to reduce auto dependence and support alternative development patterns.
- 6. Regional planning coordination (particularly of transportation and land use),
- 7. Equitable sharing of fiscal resources and financing burdens, including affordable housing across metropolitan regions . (p. 158)

Government lead planning and policy have received much attention in studies of Smart Growth, and growth management (Feitelson 1993, Carruthers 2002, Bengston, Fletcher, Nelson 2004, Anthony 2004). However, Wheeler (2003), based on a study of Toronto and Portland, takes a different view.

Widespread adoption of sustainable urban form, if it ever comes about, is most likely to appear through the synergy of urban social movements and public sector planning.... NGOs and networks of activists in turn nudge these public sector actors towards more effective action. Based on such evidence, a mutually reinforcing framework between many different groups-governmental agencies, non-governmental organisations, urban social movements, political leaders and citizen activists-seems necessary in order to move towards establishment of more livable and sustainable patterns of urban form.

Although there has been scant treatment of anti-sprawl movements in the literature, Wheeler's thesis is that urban social movements are vital to changing urban form. This resonates with Dagger's characterisation of sprawl as a collective action problem, and acknowledges that solutions to sprawl will be defined by a convergence of interests into a common agenda.

Definitions of sprawl outside of academia are highly coloured by the agendas of the organisations making the definition.

## A Brief History of the Smart **Growth Movement-And How Smart** Growth is Defined Collectively

The Smart Growth movement began in 1996, when the Smart Growth Network formed in the USA, and defined the following principles:

- 1. Mix Land Uses,
- 2. Take Advantage of Compact Building Design,
- 3. Create a Range of Housing Opportunities and Choices,
- 4. Create walkable neighbourhoods,
- 5. Foster distinctive, attractive communities with a strong sense of place.
- 6. Preserve open space, farmland, natural beauty, and critical environemental areas,
- 7. Strengthen and direct development towards existing communities.
- 8. Provide a variety of Transportation Choices,
- 9. Make Development decisions predictable, fair, and cost effective.
- 10. Encourage community and stakeholder collaboration in development decisions.

(Smart Growth Network 2003).

Smart Growth was first adopted as a policy by the Stare of Maryland in 1997 as part of their Neighbourhood Conservation and Smart Growth act (Daniels 2001). The approach differed from the growth boundaries used in the past, since Smart Growth incorporated incentives for concentrating development in Priority Funding areas, rather than setting ridged limits.

Canada did not import Smart Growth until recently. In Ontario, the Central Ontario Smart Growth Panel released its final report Shape the Future in 2003 (COSGP 2003). With the Liberal Government's release of Places to Growth in July 2004, the recommendations of the Smart Growth Panel, as well as previous efforts dating back to the Toronto Centred Region Plan of 1970, are being developed into a comprehensive growth management

These six principles differ noticeably form those of the American Smart Growth Network. Here the food security and environmental concerns are emphasized. The natural area should

not just be preserved but, the quality of the overall environment should be enhanced. In contrast the Urban Development institute contends that

plan for southern Ontario (MPIR Smart Growth must be modeled on a 2004). Although, the terms sprawl principle of choice in terms of housand Smart Growth are absent from ing, employment and transportation the recent debate about growth (UDI 2003). UDI views Smart Growth as management in the Greater Golden strategy for creating opportunities for Horseshoe, many of the proposed investment. Comparing these definitions shows how open Smart Growth is strategies encapsulate elements of Smart Growth. For example, the to interpretation. plan emphasises intensification and compact development within priority

urban centers, creating an integrated

regional transportation network, and

The Ontario Smart Growth Network

formed in July of 2003 and is shad-

owing the growth management plan

as it develops, as well as other initia-

tives that include provincial revision

of the Planning Act, the Ontario Mu-

nicipal Board, and the provincial poli-

cy statements (OSGN July 15, 2004).

The group seeks to be pro-active in

creating a Smart Growth movement.

Already they have a membership of

41 organisations, many of which are

environmental groups, but there are

also urban groups like the City Cen-

tre Coalition (Ottawa) (OSGN, n.d.).

The network has defined the follow-

1. protect our foodland - providing

2. protect and enhance natural areas

and greenspace - giving nature

places where people want to live

environment - clean air and water

resources - promoting resource

efficiency and renewable energy

6. promote a sustainable economy -

ing principles of Smart Growth

food for our communities

3. create livable communities -

4. improve the quality of our

5. conserve energy and other

a vibrant local economy

a chance

in particular

(OSGN, n.d.)

establishing a regional greenbelt.

Politicians, environmentalists, developers, community based organisations, farmers, planners, business leaders, and others all have an interest in Smart Growth. It is inevitable that Smart Growth will mean different things to these different actors. Downs (2001) divides that debate into four main groups: Anti-or slow growth advocates and environmentalists, pro-growth advocates, inner-city advocates, and Better-growth advocates. He then outlines fourteen elements of Smart Growth on which there is a range of opinions from extreme disagreement to consensus.

Major points of contention include growth boundaries, financing new infrastructure, and reducing vehicle dependency. For example, Anti-or slow growth advocates and environmentalists favour a combination of tactics such as raising gas taxes and shifting government money form road construction to transit. Whereas, pro-growth advocates support some increased transit spending, but maintain that there is a need to expand existing roads and highways. What is smart to the local chamber of commerce, can be dumb to the farmer whose field will abut the new provincial highway. Achieving consensus on Smart Growth requires negotiation between all competing interests, and the recognition that policy needs to be tailored to the specific region.

# Critical Perspectives- Is Smart Growth Really Sustainable Development?

Despite the varying definitions of Smart Growth, it has been cast as a response to the crisis of sprawl. It is an urban approach to sustainability, and it renders the long-term, abstract concept of sustainability present and concrete. As Tregoning et al. writes... "The real world orientation of Smart Growth has given it a sense of immediate relevance that was lacking in earlier discussions of sustainability. What has happened is that the debate over sprawl and its consequences had been made to matter right now, not just to future generations." (2002, p. 345)

Nevertheless, as interests converge in the Smart Growth agenda there is a risk that the smart growth movement may be co-opted to support an agenda of economic growth. As well, urban social problems may be overlooked, when these issues are actually an important aspect of the regional effort that would be necessary to counteract sprawl. If this were so, any reconciliation of sustainability imperatives would be hollow.

An examination of planning documents for the city of Toronto reveal that planning direction is being justified in terms of a "Sprawl versus intensification" argument (Bunce 2004). Although the plans call for urban intensification to remedy regional effects of sprawl on the environment, the initiatives put forth frame intensification as primarily a vehicle for economic prosperity. The rhetoric of this argument uses largely the terms of Smart Growth.

What is implicit in this argument is that "if residents do not endorse intensification, then they can be considered insensitive to regional environmental concerns" (p. 183). Since it is likely that the main opposition to the plan will come from rate-payers who oppose increased density in their neighbourhoods, focusing on the environmental costs of sprawl may make intensification more politically feasible. In this instance, Smart Growth in effect has economic growth as its primary aim, and the main value of intensification is that it will create livable cities, that are culturally and socially lively, and where close proximity of services and businesses enhances economic activity. "Thus, the environmental

problems of regional sprawl serve as a public rationale for the primary municipal goal of increasing Toronto's economic and land-use development through private-sector investment and the attraction of skilled, professional labour to the city" (p.180).

The risks involved in an reduction of the urban environmental debate to one of "sprawl vs. intensification" are recognized by an earlier study done in Florida. It was concluded that ... "a simplistic compact development policy based on the dictum that sprawl is "bad," and, therefore, compactness must be "good" may be harmful to the environment, especially in Florida's coastal areas where most of the urban population is concentrated and higher densities and intensities of land use can worsen already strained environmental conditions." (Audirac and Shermyen 1990 in Audirac and Shermyen 1992)

Simplistic "sprawl vs. intensification" arguments may divert public attention and government resources from programs that would directly address environmental concerns, but that would perhaps be more costly and would not have immediate economic spin-offs. Thus, there is a danger that economic imperatives may overshadow the ecological, and upset the balance required for sustainable development.

Baum (2004) argues that Smart Growth proscriptions are too limited to bring about significant urban change. Smart Growth emphasizes physical planning and design, but not social planning or analysis, which would address the social problems that have resulted from sprawl. Attention is focused on suburban areas, because this is where sprawl happens, but not on urban areas that are in decline because of sprawl. "In trying to manage sprawl, the mainstream Smart Growth movement concentrates on improving suburban amenities, giving little attention to urban problems" (p. 14). Baum's argument seeks to insert the perspective of minorities and lower income families into the sprawl dialogue, because the ills of decline

experienced by these groups in urban areas have reinforced the demand among the more affluent for suburban living.

None of the Smart Growth principles as defined by the Smart Growth Network include urban priorities, which include "public safety, employment, housing, child care, and drug treatment." (p.16). Smart growth views urban growth problems as aggregate trends resulting from individual decisions, where individual choice is considered completely free and unhindered by economic or social conditions. "Middle class and White families have many choices that lower-income and minority families lack" (p. 24). Social problems contribute to sprawl, while at the same time limit the choices of those who remain in deteriorating central cities and suburbs. Yet, in Smart Growth the government's role is solely to regulate private development, with little mention of government intervention to ensure equitable access to basic services such as housing and education for economically disadvantaged areas.

Smart Growth seeks to provide a range of choices to meet market demand. Rather than Smart Growth, Baum advocates for sophisticated development that seeks to increase the human and social capital of those who have little, as well as redistributing financial capital from those with more to those with less. Urban and Suburban activists need to identify common interests and negotiate common problems. "Once cities and suburbs have learned to develop agreements on land use, they can use these foundations to wrestle with harder issues, such as drug use of education."

Baum's argument is interesting because he dissects the principles of Smart Growth and exposes value laden axioms. Again, to the extent that Smart Growth is market centered, sustainability will be compromised as the social imperative will not be met.

# Suburban Activism and Anti-Sprawl

Despite current research on the neqative effects of sprawl on social capital (Putnam 2000, Freeman 2001, Leyden 2003) and auto-dependency on political participation (Williamson, 2002), there is clear evidence that it was suburban activism that first brought the problems of sprawl onto national agendas (Rome 2001). After WWII advances in technology enabled the suburbanisation of larger tracts of land than ever before. In the mid-1960s and early 1950s, an area roughly the size of Rhode Island was being converted from natural land to housing every year (p. 8).

Suburban residents lived on the crest of this tide of urbanisation, and general concern arose over the loss of open space for outdoor recreation and wilderness. Middle class suburbanites became concerned about "quality of life", as nearby open spaces were bulldozed. Hundreds of grassroots campaigns were organized to challenge sprawl. The movement drew on the conservation movement of the past, but unlike before there was a clear association between wilderness conservation and urban development. Furthermore, the expertise of architects, urban planners and landscape architects informed the critique of suburban development.

This activism lead to a "quiet revolution" in American land use planning (Bosselman and Callies 1971 in Rome 2001, p. 227). State-wide land use legislation was introduced from Hawaii to Oregon in the late 60s and early 70s. In the 1990s the antisprawl movement in the USA lead to state ballot initiatives (Gillham 2002). Despite the mixed success at meeting environmental objectives and countering sprawl, the anti-sprawl and smart growth movements continue to frame urban policy.

Over the past decade in Ontario, citizen activism has continued the history of the anti-sprawl movement. Grassroots groups have partnered with local politicians, provincial MPPs and environmental organisations to save the Oak Ridges Moraine from ceaseless suburbanisation. These efforts have arguably been significant in bringing about a number of government interventions, most recently the proposed Growth Management Plan and Planning Reform mentioned earlier. Yet, they have not received much academic attention. Wheeler (2003), makes note of the importance of "networks of activists" that have become an "influential force" in the GTA (p. 333). Certainly though, the controversy over urban growth issues have received much media attention.

## Conclusion

This review has attempted to frame social capital theory, urban sprawl and smart growth within sustainable development. Indeed, social capital has been identified as an important resource for achieving a sustainable society. What is unique about this capital resource is that it resides in human relationships.

As a resource to individuals it is a rational for collective action, and as a resource within collectives, it facilitates further cooperation. Since it was first conceived of in Putnam and Coleman, the theory of social capital has been expanded and refined. It has been applied to collective action problems in environmental management and in the formulation and implementation of sustainable development policy. Whereas it was initially considered primarily in apolitical organisations, its explanatory potential has been expanded to include political movements.

In Putnam, social capital was a primary determinant of socioeconomic conditions, whereas in recent studies the conditions have been considered in terms of their impact on levels social capital. A theme throughout, has been that social capital can and is often directed to issues and problems that have been collectively defined and requires broad co-operation to be resolved. Urban sprawl is such an issue. As a pattern of development characterising and affecting entire metropolitan regions, numerous actors have a stake in the sprawl issues.

These issues and the responses to sprawl have been defined collectively. In this review, Smart Growth and antisprawl activism where touched on as movements that have responded to sprawl. Although social capital theory has not yet been applied to either of these movements, parallels between the two are evident in the literature.



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