

# PLACE ATTACHMENT IN A SUSTAINABLE NEIGHBOURHOOD: COMPARISON OF TWO CASES IN SURREY, B.C.

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*Abstract:* Scholars have voiced the emphasis of studies in sustainability on environmental sustainability over social sustainability. One of the dimensions of social sustainability is neighbourhood cohesion among residents of a neighbourhood. This paper compares the social sustainability of two neighbourhoods in Vancouver metropolitan area particularly in the city of Surrey, B.C. with respect to the sense of neighbourhood cohesion among their residents. Buckner's (1988) instrument for measuring neighbourhood cohesion index is used with the addition of a few questions to probe for a new conception of space that may link the degree of accessibility and permeability of a neighbourhood (or degree of gatedness) with the level of neighbourhood cohesion. Results of qualitative and quantitative analysis show that the neighbourhood having an enclosure model had a higher level of neighbourhood cohesion than the neighbourhood with an encounter model on both the affective and interactive dimensions of neighbourhood cohesion.

*Keywords:* place attachment, embodied space, social sustainability, enclave urbanism, Surrey.

## INTRODUCTION

Examining the interrelation between physical space and social space may be undertaken at the neighbourhood level in relation to the spatial structure of the city. Uneven geographical development at the regional as well as the urban scale is not merely an outcome of physical differentiation of space but is maintained and actively constructed by capitalism in order to ensure its survival (Soja 1980). Put differently, spatial structure, for Soja, should not be subordinated to social space but is, in effect, at par with the social, albeit not autonomous, in the reproduction of capitalist and class relations, i.e. a socio-spatial division. The most widespread spatial structure manifested in cities is the core-periphery structure and is assumed to be generated via a capitalist mode of production (Soja 1980). The core-periphery structure, in turn, is viewed in dialectic relation with the social and thus actively constructs it.

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Walks (2013) views core-periphery as a process rather than a structure. Such a view offers a better understanding of the active role of spatial structure. As Walks explains, referring to Lefebvre, urban space results from a first- and second-order synthesis that could manifest similarly in the urban or the suburban. The first-order synthesis is a dialectic tension between centrality and dispersion whereas the second-order synthesis is a dialectic tension between difference and compartmentalization. This second-order dialectic is more pertinent in accounting for the emergence of private residential enclaves, which are relatively homogeneous compared to the difference and heterogeneity of the urban core. Walks seeks to identify the underlying conceptual processes that work along an urbanism-suburbanism axis that, at the same time, need not lead to a singular association between suburbanism and the suburban or between urbanism and the urban. Rather, the dialectic tension between such processes may manifest elements of suburbanism in the urban or, alternatively, manifest elements of urbanism in the suburban.

Bourdieu (1995: 12) defines social space as: “an invisible set of relationships which tends to retranslate itself, in a more or less direct manner, into physical space in the form of a definite distributional arrangement of agents and properties.” At the most fundamental level, space, in a hierarchical society, is hierarchized and expresses social hierarchies (Bourdieu 1995). According to Bourdieu, social hierarchy is based on two differentiating principles: economic capital and cultural capital. The sum total of both forms of capital determine one’s position in social space. This social position is translated into a space of “position takings” or stances by the mediation of the space of dispositions or habitus, i.e. the choices made by social agents in their domains of practices. The domains of practices here include the body: its moves and movements, its poses and postures. In other words, the body inscribes within it the structures of social order; structures which, when “appropriated” into physical space, become incorporated structures and cognitive schemas, a symbolic language that qualifies one’s entry or exit, inclusion or exclusion (Saarinen 1948: 125). had previously expressed similar observations to Bourdieu’s as: “Every new mental experience sets its traces in the bodily aspect [...]. In this manner his outer aspect develops into an integrality of characteristics which reflect his inner characteristics.” Low (2009: 28)



extends Bourdieu's notion of body to the notion of "embodied space". She argues that the "bodily experience" or "embodied reality" of gating experienced by gated residents should be complemented by the discourse of fear propagated by those same residents. For Low, this complementarity is the crux of explaining gated-ness of neighbourhoods as a socio-spatial configuration.

## SOCIAL CAPITAL

For urban planners, a better understanding of social capital resides in linking social capital to space. Part of the difficulty in pinpointing and defining social capital are "circular" arguments that obfuscate its meaning (Smart 2008). Moreover, social capital has an ephemeral quality (Middleton et al. 2005) and is considered an unintended consequence of social networks (Saegert 2006).

Social capital can be simply conceived as a cumulative by-product of social interaction and as a quality of social networks. As a cumulative by-product of social interaction, it lends itself to the larger notions of social cohesion and social sustainability through the establishment of trust, common norms, support and reciprocity. For Dale (2005), social capital is not only a cumulative by-product but also a necessary means of achieving reconciliation and sustainable community development.

The literature, in general, tends to portray social capital as a positive gain for communities in terms of the benefits achievable and facilitated through social capital like, to name a few, social control, economic growth, development of democracy, avoidance of violence as well as, recently, physical and mental health (Poortinga 2012). Mohan and Mohan (2002) summarize the usefulness of social capital in three principal areas: explaining uneven development at various scales; understanding the comparative performance of governments; and accounting for spatial variations in health experience.

There may be a dark side to social capital. Smart and Hsu (2007) bring to light the sensitive balance existing between social capital and corruption, especially that both rely on networks of trust and obligation. They examine the concept of "guanxi" in China, as a surrogate for social capital, and find that the sensitive balance between social capital and corruption is highly contingent

on context and interpretation of others. Empirically, this dark side is manifested in the chaotic development of gated communities in Pilar, Buenos Aires which according to Libertun de Duren is the result of planning *à-la-carte* for developers' needs in exchange for reciprocal favors to public authorities. The outcome is an impressive economic development that is realized at the expense of an increasingly dysfunctional municipality (Libertun de Duren 2006: 322). The power of the elite in transforming social, cultural and symbolic capital into economic capital and political influence is expressed in Smart's (2008) notion of "economy of practices".

The contribution by Fernandez Kelly highlights the "toponomical" character of social capital as contingent upon physical location and characteristics (Haynes and Hernandez 2008) such that the debate on neighborhood effects is reinstated. Linking social capital to place was undertaken by Romig (2010). He argues that a higher sense of place is a pre-condition for forming a higher sense of community which is realized through the building of social capital, mostly bonding social capital. Interestingly, the sense of place alluded to by Romig refers more to the social environment rather than the physical landscape. The gated master-planned communities he studied were located in Phoenix where the landscape is generally bland. Residents have chosen to move into the gated communities looking more for a sense of community rather than prestige.

According to Sampson and Graif (2009: 1597), the link between social capital and place has been found to correlate with spatially proximal neighborhoods. Thus, neighborhoods that are structurally equivalent, from a social organization perspective, are found to be also geographically proximate. Nevertheless, the role of social capital in being a reason behind or consequence of, clustering phenomena is still vague (Staber 2007).

Gated communities (GCs) and private residential developments have been hypothesized to enhance the social capital of their residents. The enhancement to social capital is hypothesized to be achieved via cognitive and structural aspects of social capital (Grootaert and van Bastelaer 2002: 343). This brings the concept of social capital close to that of cohesion. The cognitive aspect is concerned with intangible qualities such as common norms and values while the structural aspect is concerned with the physical presence of formal institutions and formal laws.



Williams and Pocock's (2010) research of two case studies in South Australia and Victoria show that gated master-planned residential estates (MPREs) contribute to building social capital through familiarity, availability and social bridging which affect residents' well-being and their capacity to participate in private and public life. Alvarez-Rivadulla's (2007) thesis is that GCs in Montevideo, Uruguay, similar to gentrification as defined by Butler and Robson, are an instrument of class reproduction, a way to cope with the uncertainty, and a way to maintain and improve cultural, economic and social capital. Alvarez-Rivadulla's thesis is also empirically more clearly evidenced in the GC of Kemer Country, Istanbul where prospective residents undergo a strict application process to be accepted as resident within the GC (Geniş 2007: 784). This application process probes for, in addition to educational and occupational background, a level of cultural and social capital commensurate with the orientation and lifestyle of the GC residents in an attempt to preserve the quality of the place. Access to reside within the GC is facilitated by referrals from friends or co-workers living within the GC. As Geniş notes, this strategy became widely used in other upper-class GCs in Istanbul. Stated alternatively, the importance of Bourdieu's economic *and* cultural capital are being reinstated.

Interestingly, GCs have also been hypothesized to decrease one of social capital's main dimensions, namely, civic engagement. The decrease in civic engagement and responsibility is argued to result from the creation of alternative realities within the gates (Lemanski and Oldfield 2009) in such a manner that gated residents experience "a weightless urban experience" (Atkinson and Blandy 2005: 180). The "weightlessness" is all the more appealing for residents of those GCs that are well-connected to city-centres via freeways; thus, benefiting from services located within city centres while at the same time not carrying the weight of negative urban conditions (Irazábal 2006). An equivalent term to "alternative realities" used in the literature, albeit with connotations of an element of the local, is "spatial heteronomy" (Monterescu 2009). In other words, GCs achieve the difficult balance between being localized and being globalized; between sensitivity to local context and extensity of global and utopian symbolization.

In other words, by fortifying behind gates, gated residents are not only physically separating from the rest of the city but also civ-



ically separating in terms of partial fiscal autonomy of the gated affluent. This has led some researchers of the phenomena of GCs to refer to residents outside the gates as those who would qualify as “real citizens”. This adds another layer to the shift from “citizen” to “consumer” alluded to by Nissen (2008) when discussing consequences of privatization of space.

Although the neighborhoods studied by Sampson and Graif (2009) were not qualified as gated, their research establishes a link between neighborhood social capital and the type of neighborhood social organization. They propose a typology differentiating neighborhoods according to four dimensions of social capital. If this typology is applied to the case of gated communities, the Cosmopolitan Efficacy Cluster would best categorize these communities. What is distinctive about communities in this cluster is their high collective efficacy, or strong shared expectations, but low local networks. The positional contacts by elites in these communities result in high level of linking social capital (i.e. vertical networks as defined by Forrest and Kearns 2001).

## NEIGHBORHOOD COHESION

Buckner (1988) conceptualizes neighbourhood cohesion as a collective-level attribute, equivalent to “sense of community”, which has three dimensions: psychological sense of community PSOC, place-attachment, and social interaction/neighborhood. Some authors, unlike Buckner, conceptualize neighborhood cohesion and sense of community SOC as having different meanings. According to Wilson-Doenges (2000), sense of community is simply defined as social interaction and networks which are not contingent upon the geographical place of a neighborhood. In her research paper, she qualifies SOC as “sense of community within the gates”, a qualification which brings the term SOC closer to local social interaction rather than social networks non-contingent on geographical place.

On the other hand, Talen (2000: 174), like Buckner, conceptualizes sense of community as equivalent to neighborhood cohesion and not merely restricted to social interaction. In conceptualizing sense of community, she reduces the three dimensions of neighborhood cohesion to two: *affective* forms of community, en-

compassing PSOC and sense of place; and *interactive* forms of community, encompassing social interaction. Social interaction, for Talen, in turn, encompasses social networks and emotional support.

Callies et al. (2003: 183) observe that the term “sense of community” is borrowed from the field of community psychology and is defined as: “the feeling an individual has about belonging to a group and involves the strength of the attachment people feel for their communities or neighborhoods.” The use of the term “sense of community” in this research will be used in the sense provided by Talen as well as Callies et al. and is assumed to be equivalent to neighborhood cohesion; with the qualification that the two dimensions of sense of community are equivalent to the three dimensions of neighborhood cohesion.

Sense of community seems to have evaded suburban neighborhoods or, at least, is no longer a natural outcome of daily life but must be consciously produced and maintained (Callies et al. 2003). Gated communities are generally advertised to fill the gap of an increasingly absent sense of community and the term “gated *community*” has become widely used in the literature. The extent to which gated communities actually fulfil this need for sense of community is very low as shown in empirical studies throughout the literature. Nevertheless, as Le Goix (2004) emphasizes, gating of a residential development defines a common territory imbued with shared values and identities as well as participates in the creation and “protection” of a sense of community for the gated residents.

A pilot study by Blandy and Lister (2005: 293) show that expectations of neighborliness was high but only around half of the respondents moving into the GC were seeking a sense of community. The majority anticipated a low level of informal association with neighbors. The important role of leisure facilities was highlighted as a factor in contributing to a sense of community among residents. Another factor that is theoretically assumed to increase sense of community of residents is self-management and social control of the neighborhood legalized by the role of the HOA. Such an assumption is based on residents’ participation as well as norms for standard behavior for ensuring uniformity of appearance and conformity of the residents. Regaining a sense of belonging, over and above the physical decay and pollution, within the



urban environment is one of the reasons for residents seeking to live within GCs (Geniş 2007: 784).

The explanation that this research hypothesizes is that a particular type of space is formed as a result of neighborhood gated-ness. Due to lack of a better term, such a type of space was called an “enveloping space” or a “monadic space”; adopting the terminology of Leibniz in his paradigmatic view of space as being comprised of concatenated “monads”. Enveloping space is a cognitive sense of being within a particular socio-cultural realm. This research looks at the physical layout of communities and their socio-economic exclusivity as two factors that combine to create a “continuum of gated-ness” within which exclusion may occur with different implications for sense of community among residents. This new conception of space may contribute to the literature on neighborhood gating and add a further layer in explaining why a non-gated neighborhood differs from a semi-gated neighborhood in terms of neighborhood cohesion. It is argued that a semi-gated neighborhood provides for its residents a sense of enveloping space in such a way that space is more informing, and ex-forming (an analogous term to embodied space; cf. Low 2009), for its residents than a non-gated neighborhood.

## CASE STUDIES

Two neighbourhoods have been chosen in the Vancouver metropolitan area through a series of queries for comparability such as time of development of the neighbourhood (census tracts built after 2001), economic exclusivity (above average dwelling value), diversity of housing types within the neighbourhood, and diversity of population.

The two case studies are located within the city of Surrey, one of 21 municipalities in Vancouver metropolitan area. The two neighbourhoods, called East Clayton and Rosemary Heights, are about 15 km from downtown Surrey and have an area of 250 ha and 303 ha respectively (see figure 1). East Clayton is a residential community accommodating a population of 14,034 in 5,192 dwelling units (2011 Census) at a density of 1,950





Figure 1. Location Map of Case Studies in Surrey, B.C.

Source of base map: City of Surrey.

persons/km<sup>2</sup> and a net residential density of 40 units per hectare (16 units per acre). Rosemary Heights is a residential community accommodating a population of 6,910 in 2,275 dwelling units (2011 Census) at a density of 2,289 persons/km<sup>2</sup> and a net residential density of 14 units per hectare (6 units per acre).

## DATA COLLECTION

A total of 195 survey responses were collected: 97 from residents of East Clayton and 98 from Rosemary Heights. Sixty four of the 195 survey responses were returned by mail during the months of April and May 2014 from a total of 730 packages delivered to a random sample of residential addresses in East Clayton and Rosemary Heights. This represents a response rate of about 4.4 per cent which is typical of mail surveys. In order to reach the required sample size of at least 95 participants from each neighbourhood, the mail out survey was complemented with a phone survey from mid-April to mid-May 2014. The response rate was about 15 per cent from a total of 752 persons contacted by phone from both neighbourhoods. One of the mail survey responses was incomplete with 8 questions left unanswered, so it was not retained for analysis. Moreover, four completed mail surveys were received but with no indication of address or postal code. It was not evident if those four surveys belonged to East Clayton or Rosemary Heights, so they were not retained for analysis. In addition to a survey questionnaire, a total of 24 semi-structured interviews with 12 residents from each neighbourhood were undertaken during the month of March 2014 as well as two interviews with municipal planners at the City of Surrey.

*East Clayton Sample characteristics.* The ratio of male to female respondents was almost equal (46 and 50 respondents respectively with one respondent not mentioning gender). For length of residence in the neighbourhood, 3 per cent of the respondents resided for over 10 years and 6 per cent resided less than a year. Also, roughly two-fifths resided from 1 to 2 years or from 5 to 8 years and another two-fifths resided between 2 to 5 years and one-seventh resided between 8 to 10 years.





Figure 2. Photo of single family houses in East Clayton.

Source: Researcher.

*Rosemary Heights Sample Characteristics.* The ratio of male to female respondents was about two to one (64 and 33 respondents respectively). For length of residence in the neighbourhood, about one-fifth of the respondents resided for over 10 years while roughly from one-seventh to one-eighth of respondents resided for one of these three categories: 1 to 2 years, 5 to 8 years, and 8 to 10 years; and over one-third of respondents resided from 2 to 5 years.

*Quantitative Data Analysis.* The survey questionnaire consisted of 23 questions (see appendix) to which residents responded on a 5-point Likert scale from strongly disagree to strongly agree. The final five questions of the questionnaire probed for the sense of enveloping space for residents along two dimensions. The informing dimension was examined through the evaluation of the common values of caring for children in a suburban environment



Figure 3. *Photo of single family houses in Rosemary Heights.*

Source: Researcher.

and an evaluation of the uniqueness of the neighbourhood. The ex-forming dimension was examined through the perceptual evaluation by residents of the external appearance of other residents and social practices.

Six survey participants from East Clayton did not respond to one of the questions while only one survey participant from Rosemary Heights did not respond to one of the 23 questions. The first step of analysis consisted of coding the responses using an ordinal scale from 1 to 5 where 1 = strongly disagree and 5 = strongly agree except for two *questions* that underwent reverse coding: question no.5 (I would like to move out of this neighbourhood) and question no.15 (I rarely have neighbours over to my house to visit). Such coding and reverse coding of responses follows the analysis done by Buckner when comparing the Neigh-

bourhood Cohesion Index (NCI) of three Maryland suburban neighbourhoods in Washington, DC.

The second step of analysis consisted of dimension reduction of the 23-items into a few components or dimensions that constitute the neighbourhood cohesion construct. Dimension reduction was accomplished using Principal Component Analysis. The KMO measure of sampling adequacy was found to be 0.88, i.e. greater than 0.5; indicating that the sample is adequate. Bartlett's test was highly significant ( $p < .001$ ) and therefore factor analysis is appropriate.

From the results of the second step, five components had eigenvalues over 1.0 and explaining 67.1 per cent of variances. However, the scree plot suggested retention of only four components explaining 62.4 per cent of variances. The four components were named: Neighborliness, Psychological Sense of Community (PSOC), Place Attachment, and Enveloping Space (or Monadic Space). Items that loaded onto the same component were grouped together while excluding one of the 23 items (item no.22) as it did not load onto a theoretically appropriate component. The fourth step of analysis consisted of testing the reliability of the four components. Cronbach's Alpha was found to be 0.8, which is acceptable. The Interclass Correlation Coefficient ICC was found to be 0.5 which suggests that enough homogeneity exists for emergence of a neighbourhood-level attribute and that enough within-neighbourhood variation exists to look for important sub-group differences in neighbourhood cohesion. Furthermore, the reliability of each of the four components was also calculated based on the group of variables pertaining to each component.

A MANOVA (multivariate analysis of variance) was chosen as the method of quantitative analysis for the two neighbourhoods where the independent variables are: gender and length of residence while the dependent variables are the four components of the neighbourhood cohesion construct.



Table 1. Mean and SD for each component by neighbourhood

Component	Neighbourhood	Mean	Standard Deviation
Neighbourliness	East Clayton	3.45	.75
	Rosemary Heights	3.55	.69
Place Attachment	East Clayton	3.66	.58
	Rosemary Heights	3.87	.59
PSOC	East Clayton	3.82	.51
	Rosemary Heights	3.92	.51
Enveloping Space	East Clayton	2.92	.63
	Rosemary Heights	3.06	.61

## RESULTS OF QUANTITATIVE ANALYSIS

*Neighbourhood Cohesion Index (NCI)*. Following Buckner's NCI calculation represented by the mean value of 18-item questionnaire, the neighbourhood cohesion index NCI for East Clayton is represented by a mean value of 3.60 (SD = .60) compared to 3.73 for Rosemary Heights (SD = .53). If the 23-item is used, the NCI for East Clayton is represented by a mean value of 3.55 (SD = .53) compared to 3.68 (SD = .46) for Rosemary Heights. In both cases, the neighbourhood cohesion index is considered moderately high suggesting that East Clayton and Rosemary Heights are neighbourhoods whose residents have a very strong place attachment to the neighbourhood and a high sense of community at the individual and collective level. The following table shows the mean and SD for the two neighbourhoods for each of the four components.

The two neighbourhoods differed significantly only with respect to one of the four components: the sense of place attachment [ $F(1, 193) = 6.151, p = .014$ , effect size = .031, and power to detect effect was .694]. Residents of Rosemary Heights had a higher sense of neighbourliness, higher psychological sense of community, higher sense of place attachment, and higher sense of enveloping space than residents of East Clayton. However, the only statistically significant difference was with respect to place attachment.

Table 2. *Pairwise comparisons by length of residence*

Dependent Variable	Length of Residence	Neighbourhood	Neighbourhood	Mean Difference	Std. Error	Sig.
Neighbourliness	2 to 5 yrs.	Rosemary Heights	East Clayton	.047	.174	.789
	5+ yrs.			.039	.164	.812
PSOC	2 to 5 yrs.	Rosemary Heights	East Clayton	.077	.123	.532
	5+ yrs.			.231	.116	.048
Place Attachment	2 to 5 yrs.	Rosemary Heights	East Clayton	.069	.137	.617
	5+ yrs.			.389	.130	.003
Enveloping Space	2 to 5 yrs.	Rosemary Heights	East Clayton	.038	.155	.804
	5+ yrs.			.192	.146	.191

Pairwise comparisons of the two neighbourhoods by gender with Sidak adjustment for multiple comparisons showed that females in Rosemary Heights ( $M = 4.11$ ,  $SD = .09$ ) had a significantly higher sense of place attachment than females in East Clayton ( $M = 3.72$ ,  $SD = .08$ ). On the other hand, differences between males in Rosemary Heights and males in East Clayton in terms of place attachment were not significant.

Pairwise comparisons of the two neighbourhoods by length of residents with Sidak adjustment for multiple comparisons showed that residents residing more than 5 years in Rosemary Heights had a significantly higher psychological sense of community at  $p < .05$  as well as a significantly higher sense of place attachment at  $p < .01$  than their counterparts in East Clayton. However, there were no significant differences between residents of the two neighbourhoods who resided from 2 to 5 years for the four dependent variables. The following table summarizes the results.

The following graph shows the estimated marginal means for the sense of place attachment for the two neighbourhoods by length of residence.

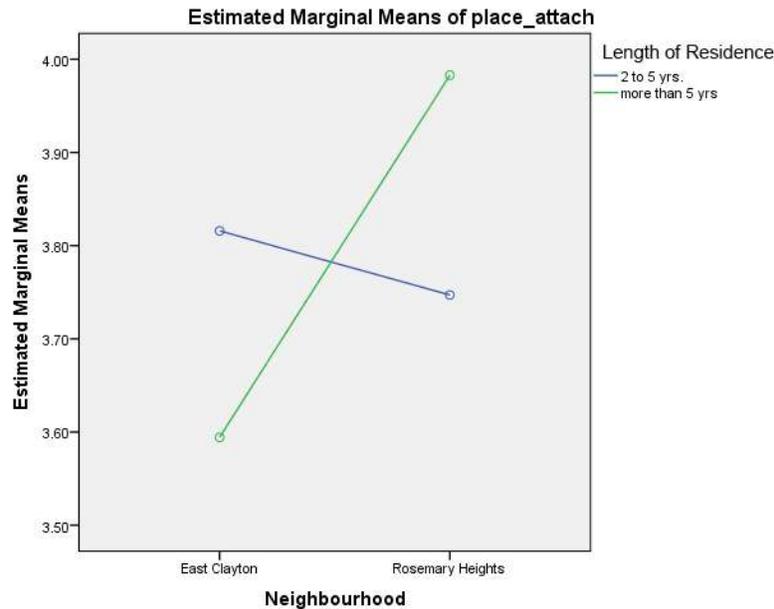


Figure 4. *Estimated Marginal Means of place attachment by neighbourhood and length of residence.*

Source: Researcher.

## QUALITATIVE DATA ANALYSIS: EAST CLAYTON

The top three reasons interviewees gave for choosing to live in their current neighbourhood: 1) The affordability of owning a house in the neighbourhood expressed by a third of interviewees, coupled with the cleanliness of a new neighbourhood with brand new houses and new neighbours (translated to “better people”), was a major reason for moving to the neighbourhood. The style of houses and townhouses was also appealing and the neighbourhood was considered a walkable and safe area for kids; 2) Being centrally-located, residents have the advantage of being close to Langley and close to Surrey. This translates to ease of commute to work and proximity to services and amenities such as schools,

banks, shopping and parks; 3) Close to parents and family was the third top reason for choosing to live in the neighbourhood.

When asked what particular features East Clayton has that are not found in other neighbourhoods, interviewees gave an iteration of the above three top reasons. Interviewees mentioned the design of the neighbourhood where young families were in mind, an abundance of parks, and safer and cleaner streets than other neighbourhoods as well as the nice walkable areas. A characteristic of the neighbourhood was expressed by one of the interviewees as: “close to everything yet removed”.

Five out of twelve interviewees deemed the neighbourhood like most other neighbourhoods with no particular features. On a negative note, two other interviewees remarked that the tight spacing of houses (tightly spaced to the extent that they resembled townhouses as expressed by the interviewee) with no yards meant less privacy and also set easy targets for crimes such as car theft. The latter added that high crime rates resulted from the mix of housing types: low income rentals (or coach houses) with expensive houses. The extracted formula is: low income rentals + expensive houses = high crime rate.

*Access to the neighbourhood.* When explicitly asked about the number of access points to the neighbourhood and its effect on their sense of safety, three out of twelve interviewees affirmed that there were really only one or two functional access points to the neighbourhood despite being planned out as a grid with many access points. Eight others observed that there were many access points to the neighbourhood, of which five found that it did not bear on their sense of safety. However, when interviewees were asked if the number of access points affected their willingness to stop and talk with residents in the neighbourhood, only two out of twelve interviewees of those who saw only two functional access points felt that they were more willing to stop and talk, but it was only clear for one of them for establishing a link with limited access points. For the other, the link was unclear when arguing that most neighbours go out for a walk around the neighbourhood and visit each other. Nevertheless, ten other interviewees negated any effect of number of access points on their willingness to stop and talk.



*Sense of community and quality of life.* When asked to elaborate on aspects of the neighbourhood that contributed to their sense of community or aspects that positively impacted the quality of their life, interviewees recalled the role of schools in terms of quality of schools, teachers and sports coaches, the parks and walkable places in the neighbourhoods as well as mutual respect of neighbours, the family lifestyle and presence of lots of kids. One interviewee remarked that the neighbourhood is not dominated by one particular ethnic group as is the case in Richmond, B.C. that is dominated by southeast Asians and Indo-Canadians; i.e. no segregation. Another highlighted the shared view of neighbours especially in regards to taking care of their homes on the outside so as to not worry about neighbours “striking up the boundary”. This was facilitated by the fact there was not much yard space to lawn. The house design was also a factor that contributed to residents’ quality of life, but it was only “a small part of the big picture” of being placed in a neighbourhood where the quality of people is paramount. One interviewee specifically mentioned the sense of community and community/sporting events. This was opposed by two interviewees who found nothing contributing to their quality of life in the neighbourhood. On an ironic note, a third interviewee, who had resided for more than 10 years, mentioned overcrowding in a negative sense towards contributing to her quality of life.

## ROSEMARY HEIGHTS

The top three reasons interviewees gave for choosing to live in their current neighbourhood: 1) The presence of a good school in the neighbourhood was a major factor for residents choosing to live in Rosemary Heights. The school was complemented with other amenities such as a good church and parks; 2) The second reason for choosing to live the neighbourhood was the presence of family either within the neighbourhood or in close by neighbourhoods such as White Rock. Also, the fact that residents were used to the area and had lived in the neighbourhood beforehand was a factor; 3) quiet/safe neighbourhood, and design/“format” of the neighbourhood (spacing of houses and abundance of green space), sense of community, and community “essence” were among the top



reasons but, overall, fared less than the presence of the school or family ties. The proximity to highways facilitated commute to work and to shopping/farmers' market as well as travel to the States and to nearby recreation areas (e.g. ocean).

*Access to the neighbourhood.* Residents were divided when explicitly asked about the number of access points to the neighbourhood and the effect with respect to their sense of safety. Three confirmed that there were one or two access points to the neighbourhood while nine confirmed that there were more than two (one affirmed there were four points). The reason for the disagreement was given by one of the interviewees who mentioned that most of the access points are blocked off because of the nearby high-end neighbourhood of Morgan Creek. Four out of twelve interviewees affirmed that their sense of safety increased; two from those who said there were a few access points (while remarking the drawbacks in terms of an emergency) and two from those who said there were one or two access points.

However, when interviewees were asked whether the number of access points affected their willingness to stop and talk with residents in the neighbourhood, only two out of twelve interviewees felt that they were more willing to stop and talk, arguing that multiple access points allowed/(represented) access by different types of people (young and old) and by different ethnic backgrounds. Nevertheless, ten other interviewees negated any effect of access points on their willingness to stop and talk, arguing that there was no bearing at all.

*Sense of community and quality of life.* When asked to elaborate on aspects of the neighbourhood that contributed to their sense of community or aspects that positively impacted the quality of their life, several interviewees highlighted several aspects for the role of the school in the neighbourhood. One interviewee stated that the school is usually where most relationships are formed. The proximity of the school allows children to walk to school. Children also go to the local church and this forges friendships inside and outside of classrooms. The school contributed to the sense of cohesion of the close-knit community and the feeling of being "all together". As one interviewee phrased it: "We all know each other very well through school and fund raising". The play-



fields of the school and new playgrounds provide opportunities to meet with other people who may be walking their dogs. The school was important so much so that an interviewee pondered that the picture may be different for the sense of community on the other side of the neighbourhood far from the school. The sense of community was strong, expressed by one of the interviewees as: "it felt like a community when you came into it". Residents are usually exercising and running and socialize via house parties where new residents are greeted. During the site visit, a cohort of upper-middle aged residents were seen running in an orderly fashion with lights that were attached to their caps. This reflected a sense of safety and neighbourliness of the community.

Other interviewees highlighted the neighbourliness aspect where everyone watches over others' houses and children especially for the cul-de-sac enclaves and there is communal interest to make neighbourhood families feel welcome when moving into the community. Aspects of the neighbourhood were also highlighted. For example, the peacefulness and quietude of the neighbourhood contributed to having more tolerance for the other as stated by one interviewee. In addition, the proximity of a fire station gave some sense of safety. As another example, the big yards of half-acreages and one acreage houses were great for kids. From a demographic perspective, the relative homogeneity of residents compared to high concentration of Asians in Richmond where one of the interviewees resided before moving to the neighbourhood impacted upon her sense of belonging in Rosemary Heights.

In spite of the positive aspects, a few interviewees commented that there were no common areas and that townhouses were constantly being built with negative environmental and social effects as trees were being cut to make way for the new townhouses and the increased density is impacting on the overall quietude of the neighbourhood. There is also an expressed need for a high school.

## DISCUSSION AND CONCLUSION

Buckner's instrument for measuring neighbourhood cohesion has proven to be robust in bringing out differences between neighbourhoods and assessing their overall level of neighbourhood cohesion. A new conceptualization of space is needed to ac-



count for the link between the degree of accessibility and permeability, or gated-ness of a neighbourhood, and higher levels of neighbourhood cohesion. The concept of an enveloping space/monadic space was suggested as one such possible link. The neighbourhood of Rosemary Heights had a significantly higher sense of place attachment than East Clayton and this was paralleled with a higher sense of enveloping space for residents of Rosemary Heights compared to East Clayton. Further research is needed to corroborate such findings.

The assumption in the literature on neighbourhood cohesion is that residents of affluent neighbourhoods have a higher sense of place attachment than neighbourliness. Such an assumption has been corroborated by the results of this research. What is noteworthy is that the more affluent neighbourhood of Rosemary Heights also scored higher than the relatively less affluent East Clayton in terms of sense of neighbourliness. Despite such a difference, both affluent neighbourhoods scored highly with respect to sense of neighbourliness as opposed to the general understanding that the more affluent, the more the affective dimension of neighbourhood cohesion on account of the interactive dimension of neighbourhood cohesion. Within a North American context, the results for sense of neighbourliness for both neighbourhoods are striking given that the general assumption is that residents of North American suburban neighbourhoods tend towards individualism and self-sufficiency rather than exercising traditional neighbourhood practices such as borrowing, lending, and visiting neighbours within the neighbourhood.

This research has provided evidence that neighbourliness is still an important aspect of affluent neighbourhoods that contributes to their overall sense of neighbourhood cohesion. This is not to overlook the fact that some residents are isolated from their neighbours and do not experience an interactive dimension within their neighbourhood of residence. Such an isolation has been voiced by residents of both East Clayton and Rosemary Heights.

The results should be interpreted within the context of key differences between the two neighbourhoods. Rosemary Heights is more secluded and designed according to the enclosure model of the cul-de-sac than East Clayton that is designed according to the encounter model of New Urbanism. East Clayton plan was championed as the first “green infrastructure” sustainable com-

munity in Surrey and British Columbia that is based upon sustainable principles and would provide a blueprint for the development of other sustainable communities in North America. However, experimenting with the new type of housing such as coach houses and secondary suites impeded the residents of a more cohesive sense of neighbourhood cohesion and place attachment due to increased density that was above capacity for services such as schools and parking space within the neighbourhood. Moreover, large disparity in socio-economic differences between residents was paralleled with a perceived increase in level of crimes, particularly, car theft and theft from vehicles which impacted upon the decision for coach houses to never be implemented again in Vancouver metropolitan area.

The results should also be interpreted within recent dynamics affecting cohesion of residents in Rosemary Heights due to the impact of globalization. A letter received by one of the survey participants complained about the phenomenon of absentee owners from mainland China who invested in buying real estate in the exclusive neighbourhood of Rosemary Heights. The houses were rented out to temporary residents who did not communicate with original residents of the neighbourhood or maintain the outward appearance of the house. In addition, the houses stayed vacant for a few months waiting for future renters. The survey participant pointed out that the issue was not social or racial especially that original neighbourhood residents made sure to welcome newcomers to the neighbourhood irrespective of their diverse background. The issue was the high turnover and the presence of “unknown” people in the neighbourhood.

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## Appendix

## SURVEY AND INTERVIEW QUESTIONNAIRE

*Participant information*

Name:

Address:

Length of Residence in Current Neighbourhood:

less than 1 year                       1 to 2 years                       2 to 5 years  
 5 to 8 years                               8 to 10 years                       more than 10 years

Gender:  male     female

Household income bracket (\$/year):

Less than \$24,000                       \$24,000-\$35,999                       \$36,000-\$47,999  
 \$48,000-\$59,999                       \$60,000-\$74,999                       \$75,000-\$89,999  
 \$90,000-\$114,999                       \$115,000-\$129,999                       over \$130,000

## SURVEY QUESTIONNAIRE

- 1) *Overall, I am very happy to be living in this neighbourhood.*  
Strongly disagree,    Disagree,    Not sure,    Agree,    Strongly agree
- 2) *I feel like I belong in this neighbourhood.*  
Strongly disagree,    Disagree,    Not sure,    Agree,    Strongly agree
- 3) *I visit my neighbours in their homes.*  
Strongly disagree,    Disagree,    Not sure,    Agree,    Strongly agree
- 4) *The friendships and associations I have with other people in my neighbourhood mean a lot to me.*  
Strongly disagree,    Disagree,    Not sure,    Agree,    Strongly agree
- 5) *I would like to move out of this neighbourhood.*  
Strongly disagree,    Disagree,    Not sure,    Agree,    Strongly agree
- 6) *If the people in my neighbourhood were planning something, I'd think of it as something "we" were doing rather than something "they" were doing.*  
Strongly disagree,    Disagree,    Not sure,    Agree,    Strongly agree
- 7) *If I needed advice about something I could go to someone in my neighbourhood.*  
Strongly disagree,    Disagree,    Not sure,    Agree,    Strongly agree
- 8) *I think I agree with most people in my neighbourhood about what is important in life.*  
Strongly disagree,    Disagree,    Not sure,    Agree,    Strongly agree
- 9) *I believe my neighbours would help me in an emergency.*  
Strongly disagree,    Disagree,    Not sure,    Agree,    Strongly agree
- 10) *I feel loyal to the people in my neighbourhood.*

Strongly disagree, Disagree, Not sure, Agree, Strongly agree

11) *I borrow things and exchange favours with my neighbors.*

Strongly disagree, Disagree, Not sure, Agree, Strongly agree

12) *I would be willing to work together with others on something to improve my neighbourhood.*

Strongly disagree, Disagree, Not sure, Agree, Strongly agree

13) *I plan to remain a resident of this neighbourhood for a number of years.*

Strongly disagree, Disagree, Not sure, Agree, Strongly agree

14) *I like to think of myself as similar to the people who live in this neighbourhood.*

Strongly disagree, Disagree, Not sure, Agree, Strongly agree

15) *I rarely have neighbours over to my house to visit.*

Strongly disagree, Disagree, Not sure, Agree, Strongly agree

16) *I have a strong feeling of fellowship for the people who live in this neighbourhood.*

Strongly disagree, Disagree, Not sure, Agree, Strongly agree

17) *I regularly stop and talk with people in my neighbourhood.*

Strongly disagree, Disagree, Not sure, Agree, Strongly agree

18) *Living in this neighbourhood gives me a sense of community.*

Strongly disagree, Disagree, Not sure, Agree, Strongly agree

19) *People in my neighbourhood work together to keep children safe.*

Strongly disagree, Disagree, Not sure, Agree, Strongly agree

20) *I consider my neighbourhood to be unique.*

Strongly disagree, Disagree, Not sure, Agree, Strongly agree

21) *There are certain dress codes, social practices, or events that characterize my neighbourhood.*

Strongly disagree, Disagree, Not sure, Agree, Strongly agree

22) *Having a well-maintained landscape is important to me.*

Strongly disagree, Disagree, Not sure, Agree, Strongly agree

23) *It is easy to distinguish residents from non-residents who are walking in the neighbourhood.*

Strongly disagree, Disagree, Not sure, Agree, Strongly agree

#### INTERVIEW QUESTIONS FOR RESIDENTS

1) How long have you been living in your current neighbourhood? Do you plan to remain as a resident of this neighbourhood for more than five years? Why or Why not?

2) Why did you choose to live in your current neighbourhood? Could you give three reasons in order of importance?



- 3) Do you think your neighbourhood has particular features that are not found in other neighbourhoods? If yes, could you state some of those features?
- 4) Are there any neighbourhoods that you perceive to be as appealing to live in as the neighbourhood you are currently living in? In what ways are the neighbourhoods equal?
- 5) Are there any neighbourhoods that you perceive to be superior to the neighbourhood you are currently living in? In what ways is the superior neighbourhood different?
- 6) Do you consider your neighbourhood affordable to people of different income categories (e.g. low income and middle income) or do you consider it an exclusive neighbourhood? Why?
- 7) As far as access to your neighbourhood is concerned, are there many entry points to your neighbourhood or only one or two?
- a. Does this affect your sense of safety in the neighbourhood?  
b. Does this affect your willingness to stop and talk with residents in the neighbourhood?
- 8) Would you say that your neighbourhood gives you a sense of community? If so, in which of the following ways:
- a. The physical landscape is appealing.  
Strongly disagree, Disagree, Not sure, Agree, Strongly agree
- b. You feel safe.  
Strongly disagree, Disagree, Not sure, Agree, Strongly agree
- c. You feel attached to the neighbourhood.  
Strongly disagree, Disagree, Not sure, Agree, Strongly agree
- d. The residents are friendly and this contributes towards your sense of belonging.  
Strongly disagree, Disagree, Not sure, Agree, Strongly agree
- e. You perceive other residents to be similar to you and you would agree with many residents on what is important in life.  
Strongly disagree, Disagree, Not sure, Agree, Strongly agree
- f. The lifestyle, events, and activities in the neighbourhood encourage you to stop and talk with other residents in your neighbourhood.  
Strongly disagree, Disagree, Not sure, Agree, Strongly agree
- g. Other. Please elaborate.
- 9) In your opinion, is your neighbourhood community or homeowner association dealing with residents' issues in an informal way?
- 10) Are there any other aspects of your neighbourhood that, in your opinion, positively impact the quality of your life here?



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