Social Enterprise in British Columbia: The Profile Page as a Crisis Heterotopia

by

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B.A. (Hons.), University of Birmingham, 2011

Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Arts

in the Department of Geography Faculty of Environment

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Ethics Statement

The author, whose name appears on the title page of this work, has obtained, for the research described in this work, either:

a. human research ethics approval from the Simon Fraser University Office of Research Ethics

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Abstract

Social enterprises in British Columbia now labour online on social media websites through profile pages. The online profile pages of senior staff in British Columbian social enterprises revealed regional and localized links to Cartesian workplaces in British Columbia following spatial analysis. A network of senior staff profile pages within these data was statistically analysed. The results showed that the material deprivation, urbanity and category of Cartesian social enterprise workplaces were statistically significantly related to the betweenness centrality of nodes in the network. Ten year-long studies then looked at the online Facebook pages of social enterprises highlighted in the analysis of professional networks. Facebook pages reached cities that their senior staff members were connected to in their professional network, and social enterprise Facebook pages were accessed primarily by women throughout the year. Thirteen semi-structured interviews about profile pages were analysed and theorised as Foucauldian heterotopias that 1): allow social enterprises to experience a crisis in targeted communication in a networked non-place that offers control; 2) allow smaller social enterprises to experience a crisis in time and resources.

Keywords: Social Enterprise, Social Media, Heterotopia, Foucault
Dedication

To social enterprises across British Columbia and the world over
Acknowledgements

A big thank you to:

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Josh Evans

Those I interviewed and worked with in the university-community partnership.
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List of Acronyms

SE    Social Enterprise
ENP   Enterprising Non Profits
SFU   Simon Fraser University
B.C.  British Columbia
Chapter 1.

Introduction & Literature Review

1.1. Thesis Aims and Objectives

The overall aim of this thesis is to understand an online social network of social enterprises in British Columbia, and how this network relates to Cartesian places. There are three sub-aims. The first is to locate where Cartesian workplaces related to an online professional social network of social enterprises are located. The objective is to gather online network data, display it on a GIS and conduct statistical spatial analysis.

The second aim of the study is to find out who and where the Facebook profile pages of social enterprises in British Columbia reaches in terms of gender and city. The objective is to launch a university-community partnership with 10 social enterprises and to install Hootsuite Pro on their machines so longitudinal data can be gathered.

The final aim is to conduct interviews to understand the findings. The objective is to conduct semi-structured interviews with thirteen social enterprise staff about usage of the online social media sites that were looked at in the study. Foucault’s idea of heterotopia is used to theorise the results. The next section details the background to this study.

1.2. Background

This study builds on a study by Dr. Hall and Dr. Elson in 2010. They write (Hall & Elson, 2010, p.8, sq. brackets added):

this report is the first attempt to literally and figuratively map the location, purpose and operations of social enterprises in the two provinces [British
Columbia and Alberta. We certainly hope it will not be the last as social enterprises are just beginning to make their presence felt.

Enterprising Non Profits (ENP) provided data for the (Hall & Elson, 2010) study. The ENP had been founded as a pilot project in 1997, “by VanCity Community Foundation in partnership with Vancouver Foundation, the United Way of the Lower Mainland and VanCity Credit Union,” (Caledon Institute of Social Policy, 2002, p.1), and had helped create some of the social enterprises that would appear in the (Hall & Elson, 2010) study. The ENP was created from a partnership between several non-profit structures whose main aim was to help finance community-based projects. The ENP was funded from the top-down, and aimed at the bottom-up growth of local social enterprises by funding them. The study (Hall & Elson, 2010) marked the beginning of a reflective approach by the ENP aimed at understanding its own impact. This study builds on this research trend by aiming to understand an online social network of social enterprises in British Columbia, and how the network relates to Cartesian workplaces, but not explicitly to the impact of the ENP. The ENP only provides the data for this study.

The Vancity Community Foundation, set up by the Vancity Credit Union with an initial grant of a million dollars (Vancity Community Foundation, 2015), created the ENP. The Vancity Community Foundation is first mentioned in Kemp (1993, p.35):

“although many credit unions have taken conservative approaches to CED, Vancouver City Savings Credit Union, the largest credit union in British Columbia, has actively supported CED through the establishment of the “Vancity Community Foundation” whose mandate includes CED”.

Dave Mowat, the CEO of the Vancity Credit Union in 2002, spoke about the marketing strategy behind the creation of the Vancity Community Foundation (Mowat, 2002, p.26 – 28), “84 per cent of those polled said they would be more likely to purchase a product or service from a socially responsible company”. This comment suggests that the foundation was partially performing a marketing role for the non-profit credit union by creating social enterprises through the ENP. It could also be argued that the foundation was also part of the decline of the welfare state, which favoured the privatisation of public services through the creation of social enterprises (Dart, 2004). Therefore while the ENP benefitted the community, it also could have served as a marketing tool. This could have
been advantageous for the Vancity Credit Union. The social enterprises the Vancity Credit Union had helped create indirectly served as an advertisement of the credit union’s social responsibility. Community development and marketing are both seen within the context of the development of the ENP.

The professional social networks that grew up among social enterprises may have been based around access to the Vancity Community Foundation, the ENP and other affiliated organizations (for example Union Way) who had access to funds. High visibility, for example well connected and organized social enterprise heads, could help with funding because highly visible, organized social enterprises make for better marketing tools for funding organizations. This was also seen among philanthropic investors Curry & Dunbar (2011).

This fits with the broader literature on social networks and their relationship to funding. Shane and Cable (2002, p.380) demonstrated that:

social ties provide a mechanism by which investors obtain information, thereby allowing entrepreneurs without high-capital endowments to obtain resources to pursue business opportunities”. Furthermore, “social relationships are used to overcome market failure in venture finance.

Social ties, then, can be important for obtaining finance. They are also important for sharing information and resources. The discovery of new inter-firm social networks would demonstrate potential paths for resources, knowledge and finance. A partial geography of potential financial, informational and resource paths could be deduced from the geography of an online social network with links back to Cartesian places.

1.3. Social Enterprises and Hybridity

A social enterprise is a business that sells products and services on behalf of a non-profit. There are many definitions of a social enterprise. This study uses the definition by Hall & Elson (2010, p.10):

social enterprise (SE) is defined as a business venture, owned or operated by a non-profit organization, that sells goods or provides services in the
market for the purpose of creating a blended return on investment; financial, social, environmental, and cultural

This definition positions social enterprises as hybrid businesses that blend social and business goals for non-profit revenue generation. There are other legal definitions that do not require a social enterprise to be owned or operated by non-profit. This study does not include these social enterprises. British Columbia currently has around 750 social enterprises that meet the definition provided by Hall & Elson (2010) above, using data provided by the ENP.

“Social enterprise” implies a tension between business and social goals in the Hall & Elson (2010) definition above. Recent debates focus on what social enterprises are and how they function within economies. This part of the literature review argues that the literature conceptualizes social enterprises as hybridised and at times “messy” (Corner & Ho, 2010) constructs. A critique of the spatial focus of some social enterprise studies and explorations of social networks and hybridity follow below.

Doherty (et al, 2014) provided figures on the number of studies on social enterprises. Doherty (et al, 2014) cited 129 academic papers written about social enterprises and concluded that the central theme was the hybridity of social enterprises. A breakdown of their literature review can be seen in Table 1 below:

Table 1: From Doherty et al (2014), showing the number of papers on social enterprises and their methodologies

<table>
<thead>
<tr>
<th>Research methodologies in reviewed publications</th>
<th>Number of papers</th>
<th>Qualitative (%)</th>
<th>Quantitative (%)</th>
<th>Exemplars (%)</th>
<th>Theory only (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1 (in higher-ranked journals)</td>
<td>68</td>
<td>42.6</td>
<td>14.7</td>
<td>14.7</td>
<td>44.1</td>
</tr>
<tr>
<td>Stage 2 (other literature referred to in stage 1 papers)</td>
<td>61</td>
<td>26.2</td>
<td>14.8</td>
<td>26.2</td>
<td>32.8</td>
</tr>
<tr>
<td>All papers</td>
<td>129</td>
<td>34.6</td>
<td>14.6</td>
<td>20.0</td>
<td>38.5</td>
</tr>
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*Note: some papers adopt more than one methodology.*

Table 1 shows that studies favor qualitative methodologies, and that less is known quantitatively about social enterprises. It is unclear how many studies pursued mixed methodologies. Table 1 provides an overview of the figures on social enterprise studies. The remainder of this section explores some themes in the literature starting with spatial
critiques of social enterprise studies moving through to discourses on social networks to manifestations of hybridity, in that order.

The spatial focus of some social enterprise studies has been critiqued. Lepoutre (et al, 2013) argue that some studies show a methodological over-focus on single countries or case-studies. For example, Liu & Ko (2012) explore social enterprises within the UK using eight individual case studies but their findings are positioned as applying to social enterprises anywhere. Teasdale (et al, 2013) critiques data practices that create myths about social enterprises, but this can only be applied in the context of the UK and UK government data. Teasdale (2012, p.99) writes that:

existing academic literature provides a bewildering array of definitions and explanations for the emergence of social enterprise. This conceptual confusion is because social enterprise is a fluid and contested concept constructed by different actors promoting different discourses connected to different organisational forms and drawing upon different academic theories

However, Teasdale (2012, p.99) then writes, “this article makes sense of these different social enterprise forms, academic explanations and policy and practitioner discourses…using the example of England”. Global conclusions get drawn from national case studies. Similarly “social enterprise” is sometimes explored without reference to scale or place, or is explored in very particular places that may not shed light on other types of social enterprises in other parts of the world, and an example of this very particular focus is, “data from an in-depth case study of an embryonic social enterprise,” (Teasdale, 2010, p. 271). Teasdale (2010; 2012; 2013) explores social enterprises using geographically specific examples, but the findings are sometimes cast as applicable to social enterprises anywhere, and this does not appreciate geographic variation in the ways that Lepoutre (et al, 2013) flag. However, other studies have focused on wider areas, for example social enterprises across the European and North American continents (Defourny and Nyssens, 2010) so there are exceptions to the observation that social enterprises are studied at too fine a scale. Additionally legal structures often lock some social enterprises into the spatial boundaries that coincide with the jurisdiction of the law. This is seen in the UK, which has created Community Interest Companies (Nicholls, 2010a) and in British Columbia, Canada, which has created Community Contribution Companies (O’Connor, 2014). Both
these pieces of legislation allow social enterprises to exist according to a legal definition that is confined, in the UK to state boundaries, and in British Columbia to provincial boundaries. This can incentivise a methodological over-focus on single countries or areas as Lepoutre (et al, 2013) have shown.

These studies in place are also accompanied by studies across space. Networks are discussed in the literature, though more could be done to explore networks. Stone and Ostrower (2007, p.425) call for a greater understanding of, “informal horizontal and network relationships” and Campi (et al, 2006, p.36) acknowledge that:

informal elements seem to be particularly important in third sector organizations, where it is not unusual to find groups of members interacting outside meetings to discuss board business without the participation of stakeholders, who, although formally involved in the decision-making process, are not part of the informal network ‘governing’ the organization.

Other research shows informal clusters and networks are cited as important to emerging geographies of entrepreneurship (Steyaert and Katz, 2004). These networks may form outside well-funded channels. A scarcity of resources is linked to the innovativeness of social enterprises, “scarce resources may also stimulate social entrepreneurs to become creative and think of better ways to tackle social problems,” (Lumpkin et al, 2013, p.772). In a more formal context Lyons (2011) emphasizes the importance of networks between social enterprises and institutions. Lyons & Fernandez (2012) also suggest social enterprises can increase their external social impact by developing networks, and Somerville and McElwee (2010, p.322) point out the spatial consequences of network-building as social entrepreneurs:

build networks and organizations that stretch beyond the boundaries of their community (e.g. citywide, regional, national and even international networks), some move on to representing their community in a variety of arenas (e.g. local, regional and national forums, partnerships and political decision-making assemblies).

This suggests a spatial structure to the social networks of social enterprises. Attached to this structure is also a qualitative dimension, which has been positioned as gendered, “the nature of the networks drawn on to identify people, and the extent to which these networks
are gendered,” (Lyon & Humbert, 2012, p.842) was cited as an area for further research. This shows a consistent discussion of networks at wider scales, across different contexts.

More specifically, the social networks of social enterprises can lead to new possibilities by bringing together different sectors into one space, as in the case of cultural tourism in Ireland (McCarthy, 2012, p.259), “the development of cultural tourism was made possible by the unique networks of relationships and associations that underpin music, festival and language fields”. However, these examples do not incorporate the mathematical literature on networks (Watts & Strogatz, 1998) used by sociologists. This research gap is highlighted by Dufays & Huybrechts (2014, p.214) who write that, “the sociology of social networks may contribute to explain how and why social entrepreneurship arises by bridging micro- and macro-levels of analysis”. As of writing this research gap has not been addressed. Easter & Conway Dato-On (2015) explore “ties” within a Vietnamese social enterprise, but this is done using an ethnography outside mathematical social network analysis (Watts & Strogatz, 1998), and Granovetter’s (1973) sociological ideas on the micro and macro networked ties. Perrini (et al, 2010, p.530) emphasize a spatial approach that includes temporal data calling for time to be considered in relation to social networks and social enterprises, “further research might address networks and social capital, to explore how they change over time and how, in turn, the relative position of SE organizations within the networks changes over time”. This longitudinal research agenda is one the mathematical community has engaged less successfully. Overall, the literature on social enterprise does explore social networks, but on a mostly qualitative level.

Another discourse in the SE literature centres on hybridity and this has received widespread coverage, more so than networks. The borders that define the “social” and the “enterprise” in any social enterprise often move. This could be a consequence of neoliberal governance. The UK government recently changed the policy environment as part of a “Big Society” initiative and this threatens the Third Sector (Alcock, 2010). Public policies change arbitrarily, sometimes, but public policies have also excluded minorities from founding social enterprises (Sepulveda et al, 2013), and institutions have failed “basic human needs” (Seelos and Mair, 2005) arguably creating an environment disruptive to welfare projects. Alvord et al (2004) identified 7 modes of innovation social enterprises
could use, suggesting a complicated environment, with many possible development avenues. The assumption that social enterprises bring the unemployed back into the workforce has also been questioned as misleading (Amin, 2009), which again flags a difficult operational environment. These forces are dynamic and create instability as they act on social enterprises. Social enterprise is, “a fragile organizational model, extremely sensitive to changes in market conditions and public policies,” (Bacchigia & Borzaga, 2001, p.291). These fragile conditions trickle down to the “grassroots” level (Mason, 2010). Therefore while a broad framework exists to support social enterprises, there is a hybridised dynamic public and private operational environment that can create difficulties.

The construction of an “identity” for social enterprises has been one response to this hybrid operational environment. Social enterprises could build a common hybrid identity (Battilana & Dorado, 2010) in what Battilana (et al, 2012) call the “hybrid ideal”. This has been seen in the context of voluntary organizations run for “women, Blacks and other ethnic groups” (Minkoff, D.C. (2002, p.377). It is a tactic that has also been used by commercial enterprises that have used a welfare discourse to advance an organization into a non-profit terrain (Pache & Santos, (2012). Paradoxically, organizations with social origins already hold legitimacy and can use commercial strategies more freely (Pache and Santos, 2011). In both cases the deployment of a hybrid identity aims to mask the, “severe imbalances among operational explanations, root system, and governing body,” (Billis, 1991, p.57). However, Billis (2010, p.46) suggests a hybrid identity sometimes, “engenders unease and distrust”. Therefore while hybrid identities aim to mask some contradictions inherent in the concept of social enterprise, and may at times succeed, this is not always successful.

Academics also inadvertently mask conceptual contradictions, even as they advance the understanding of social enterprises. Bloom and Chatterji (2009) propose a model social enterprises can use to increase their social impact, but do not incorporate financial elements important for enterprise in their model. Borzaga and Solari (2001) argue that legislation (in the context of Europe) could be the decisive factor that allows social enterprises to grow, leaving out social and financial angles. Brandsen and Karré (2011) focus on the risks hybrid social enterprises pose to the public sector, but focus less on the risks social enterprises may pose to private enterprises. Bransden (et al, 2005)
highlight the “fuzzy” aspect of hybridity but use a rational diagram to explain this (see figure 1):

![Diagram showing the Hybrid Pyramid]

**Figure 1:** From Bransden et al (2005): Social Enterprise in the Hybrid Pyramid

Therefore while these studies do advance understandings of social enterprises, at times parts of the hybrid picture are missing.

This pattern carries on in other studies. Bridgstock (et al, 2010) show innovation is a way for social enterprises to realize “business performance” but focus less on community goals. Carroll and Stater (2009) develop revenue solutions without exploring community well-being. Chell (2007) argues that social enterprises can either be non-profit champions or entrepreneurial success stories. This again leads to unbalanced explorations of one side over the other. Munoz and Tindsley (2008, p.43) argue, “for social enterprises to begin to measure their added value (or social/community/environmental impacts) in economic terms and present it as a cost-benefit to procurement officers in the public sector”. Here social impacts are recast as economic phenomena. Chetkovich and Frumkin (2003) argue that nonprofits and their financial strategies can only be conceptualised in terms of competition, and not cooperation. This macro-level analysis contrasts with the micro-level internal focus of Cooney (2006). These see-saws within the literature suggest discourses focusing on different parts of hybridity. These focused studies are useful steps forward but can lead to unbalanced explorations of social enterprises.
However, social enterprises have been conceptualised as “messy” (Corner & Ho, 2010) hybrid constructs, which represents a more rounded effort at engaging with hybridity. This focus on messiness is rooted in the fragmented epistemology of social entrepreneurship studies. The literature on new, emergent forms of organizations was not transparent before the introduction of social enterprises into the debate as (Romanelli, 1991, p.79) writes:

no long stream of research has been produced to validate the arguments of any perspective. What we find instead is a disparate group of mostly nascent theories from organizational ecology, economics, institutional sociology, strategic management, and others, all seeking to explicate the nature of…new organizational forms.

Social entrepreneurship has seen its, “theory and understanding lag far behind its practice,” (Murphy & Coombes, 2009, p.325) and, “lacks an established epistemology,” (Nicholls, 2010c, p.611). Though acknowledging messiness can have damaging consequences (Mason, 2012) social enterprises are cast as a “paradox” (Cornforth, 2004; Peattie & Morley, 2008) made up of “ambiguities and tensions” (Cornforth, 2004, p.11). The “social” has been associated with “diversity” (Cornforth & Spear, 2010) and “enterprise” with “complexity” (Moizer & Tracey, 2010). Neck, Bush and Allen (2009; cited by Cukier et al, 2011) conceptualize what social enterprises do as sitting under a “big tent”.

Dacin et al (2010) write that social enterprise staff experience “high levels of uncertainty” (Dacin et al, 2011) and not always in a hierarchical workplace. Dart (2004, p.421) questions the idea that social enterprises are modern enterprises since, “social enterprise has documented precedents more than one hundred years ago in Victorian England”. This suggests that “social enterprise” can take many forms within different kinds of societies, and exists as hybrid in different contexts.

These accountings aim to step outside “static descriptions of hybridity” (Mullins et al, 2012, p.405). Dees and Elias (1998, p.167) note, “boundaries are being tested and discarded”. Social enterprise has not always been analysed using a realist approach to economics (Dees, 1998). Social enterprise has been positioned as a “culture” that required engineering, “engineering a new culture is never easy or quick,” (Dees, 1998, p.67). Therefore clear enterprise-based definitions of social enterprise were not always the main focus of discussion. There are also slogans such as “The Five R’s”: Readiness,
Receptivity, Resources, Risk, Returns,” (Dees et al, 2004) that suggest social enterprises could be many things. Social enterprises have a role to play in altruism, self-help and market-trading all at the same time (Defourny & Nyssens, 2006), and this suggests many broad areas related to hybridity. Santos (2012) casts social entrepreneurship as the “second invisible hand”, guiding our economies towards being more “human”. Therefore how social enterprises are hybridised can change and at times the details are unclear.

However whether clear or not, hybridity poses challenges for those running a social enterprise. During social enterprise partnerships with private sector partners, “antithetical forces inherent within the relationship must be resolved,” (Di Domenico et al, 2009, p.887) before a partnership unfolds. Policies also regularly change, impacting social enterprises (Evans and Syrett, 2007). Among SE staff social capital is influenced by social networks (Evers, 2005, p.737) and government policies (Fawcett and Hanlon, 2009). In this fluid setting the responsibility for stabilising SE operating environments has been placed with lawmakers, “it is the responsibility of lawmakers to review and reform the hodge-podge of organizational and regulatory law that applies to nonprofits,” (Hansmann, 1980, p.835). Such stability could come from “associational democracy” but this has yet to materialise (Smith & Teasdale, 2012). Operating environments are further destabilised by a reliance on volunteers among SEs (Haug, 2007). The innovativeness of voluntary groups has been shown to be dependent on public policy (Osborne et al, 2008). The use of voluntary labour makes running a social enterprise more difficult at times (Zahra et al, 2009). Social enterprises reviewed by Royce (2007) reported relying “heavily” on voluntary labour. Only 59% reported that they felt voluntary labour was essential to the running of their organization. Therefore even if hybridity is at times unclear, the often negative consequences of hybridity are visible.

There are other negative consequences of hybridity besides these. The market can lure SEs away from social goals (Young and Salamon, 2002) and “satisfying some demands requires defying others,” (Pache & Santos, 2010, p.455) sometimes resulting in “organizational paralysis”. Directors of social enterprises are caught also “between the haves and the have nots” (Haug and Kitson, 2007). Saddled between institutions, economic models and class priorities, social enterprise directors are at times caught between “a rock and hard place”. “Hybrid or multiple identities are possible; however, this
situation poses immense challenges,” (Young, 2001, p.155). Social enterprises, and the individuals running them, then, are sometimes caught in a hybridised “mess”, that drives both the reinvention of hybrid identities, and also the symptoms of crises.

Therefore an individual working for a social enterprise likely works in a hybrid environment that presents difficulties, but also advantages. This can affect their workplace identity, and shapes their responses (Pache & Santos, 2013). Hemingway (2015) argues that any employee of an organisation is a “moral agent”. Hemingway (2015) casts the employee as a moral decision maker. This person is guided in one direction by economics but must develop good social causes through an individual effort. However, this does not apply exclusively to social enterprises. It has also been argued that social enterprise employees must act individually to hybridise across social and enterprise goals (Wilson & Post, 2013). Social enterprise staff have been argued to be important gatekeepers of “values, capabilities and relational learning in shaping strategies and addressing the tensions and challenges encountered,” Vickers and Lyon (2012, p.1). Nga and Shamuganathan (2010, p.259) created a study to look at, “determining the personality traits that influence social entrepreneurs’ start-up intentions”. This suggests a discourse at a smaller scale, the scale of individuals, and how they hybridise social enterprises.

There is an argument at the larger scale of the social enterprise as an organisation, where hybridisation is said to occur among for-profit, non-profit and public sectors. “Borders between the nonprofit and both the for-profit and public sectors are being crossed increasingly,” (Weisbrod, 1997, p.541). Low (2006) also comes to this conclusion. This can be a “David versus Goliath” situation (Hockerts and Wustenhagen, 2010). Hudson (2009, p.493) elaborates:

the tensions between the ‘economic’ and the ‘social’ can become acute, especially in those that seek to become self-consciously near-market social ‘enterprises’, with a growing focus upon their economic role and contribution and trading as the route to growth. This typically leads them into competition with firms in the mainstream capitalist economy, engendering tensions between the need to survive in competitive markets and the ethical and social motivations that informed their original formation.

It can be a “life on the edge” for a social enterprise (Hudson, 2009, p.493), and this has been analysed in ecological, competitive terms (Ruef, 2000). However, there are
examples of cooperation between non-profit sector social enterprises and the private sector. The Chicago Field Museum of Natural History, purchased the world’s largest fossilized Tyrannosaurus rex for $8.3 million and that this was largely financed by McDonald’s and Walt Disney (Weisbrod, 1988, p.2). Furthermore, from 2003 – 2007 the amount of revenue charities in England and Wales generated from commercial sources increased (McKay et al, 2011). Whether sectors including social enterprises compete or cooperate in China is less clear. More than twenty years ago the observation was made that, “the spread of markets…increasingly favor private firms,” (Nee, 1992, p.1). But now things have changed. Zhao (2012) has hailed a new era when “the social enterprise emerges in China” so further research is required. What is known is that social enterprises are part of competition and cooperation between the non-profit, public and private sectors, in areas where studies have been carried out.

A sub-sector that cooperates more than it competes with social enterprises is philanthropic investment, which functions similarly to “traditional venture capital” in the SE context (Scarlata and Alemany, 2010). Social enterprises are increasingly investment ready (Mason & Kwok, 2010) and venture capitalists have been found to view hybrid organisations as more attractive (Pontikes, 2012). How social enterprises are changing the investment scene is a current field of research (Nicholls, 2010b). The exact nature of hybridity and how a sub-sector like philanthropic investment or traditional venture capital might be hybridised by the social enterprise sector requires further research.

Therefore social enterprises are “hybrid” and “hybridisers” across many contexts, and in different ways. This suggests that social enterprises could be constructed from unstable, contingent and paradoxical performances. Social enterprises are adept at, “making do, a refusal to be constrained by limitations, and improvisation,” (Di Domenico et al, 2010, p.681). Jay (2012, p.137) writes about, “paradoxes of performing (Smith & Lewis, 2011) that generate ambiguity about whether certain organizational outcomes represent success or failure”. Those involved in running social enterprises are called to perform, “effectual logic, enhanced legitimacy through appropriate reporting metrics, and information technology,” (VanSandt et al, 2009, p.419). These performances could unfold contingently. Within hybridity, then, lie many performative texts that write out the definition of social enterprise across reality, as Parkinson and Howorth (2008, p.285) write, “people
‘doing’ social enterprise appropriate or re-write the discourse to articulate their own realities”. The performative nature of doing social enterprises explains the “mission drift” among non-profit enterprises (Jones, 2007). Performance is open and can spin away from original goals. But performance has been shown to be controlled, for example franchisors have sought to control the performances of their outlet managers (Tracey & Jarvis, 2007). In a more spatial approach Kerlin (2010, p.162) writes that, “variations in socioeconomic contexts appear to account for international differences in social enterprise”. Performances may also therefore be influenced by geography. This helps specify how hybridity, through performance, could possibly take so many forms.

This performative context questions the assumption (Townsend & Hart, 2008) that the structures in social enterprises are hierarchical. “Hierarchies may provide us with distorted lenses through which to analyze economic change,” Powell (1987, p.67). Some literature has placed importance on the social enterprise head as a controller of the organisation (Townsend & Hart, 2008). This is supported by Thompson (et al, 2000) who sees the locus of enterprise control at the level of the entrepreneur running it. Kratz & Block (2008, p.267) advise SE leaders to strive for, “justice, achieve diverse purposes, act responsibly, and realize the common good within their organization”. This mirrors a hierarchical approach seen in parts of the private sector to organisation management. However, leadership structures are themselves hybrid, for example social cooperatives (SCs) in Italy

SCs contain three main categories of members (or share/stakeholders): lending or funding members (generally, 65% of all members... beneficiary/user members... volunteer members (20%) (Thomas, 2004, p.248).

These examples deal with leadership within, but not between, social enterprises. Lasprogata (2003, p.95) suggests social enterprises could act together as part of a single group:

collaboration can provide two social service nonprofit organizations an opportunity to take advantage of economies of scale or economies of integration, or both. It may assist the organizations in accessing new resources, integrating services, reaching new clients and developing new programs. In other words, a combined entity can do better than what each organization would have achieved on its own.
This suggests that social enterprises can combine together to form “social alliances” (Sakarya et al, 2012). There is evidence that suggests collaboration between social enterprises would unfold glocally (Membretti, 2007) across space with the collaborative entity acting as “a bridge which can connect local and extra-local dimensions,” (Membretti, 2007, p.256). Therefore governance structures both within and between social enterprises can represent attempts to hybridise power relations between multiple stakeholders.

To conclude, this part of the literature review has shown the many conceptual variations that sometimes lie between “social” and “enterprise” within the literature. Hybridity defines social enterprises but at times in messy, constructed, contestable and spatially ambiguous discourses within and across studies that draw from different epistemologies. Hybrid entities like social enterprises operate in the place where their local communities are and spread across space using networks. This spatial element along with hybridity is engaged across the literature, while further avenues of research in more than one area have been identified.

1.4. Defining Heterotopia

In Greek heterotopia means “different place”. Foucault (1967, p.3) defines heterotopia as a place that acts as an “effectively enacted utopia” because many Cartesian sites are simultaneously juxtaposed within it. Utopias on the other hand “are sites with no real place” and are “fundamentally unreal” (Foucault, 1967, p.3). For geographers heterotopias are significant because they are tangible places (Johnson, 2013) whereas utopias are not. The material place that exhibits “difference”, a heterotopia, is explored as a “site” within heterotopic literature; “site” and “place” are used interchangeably. There is also a temporal dimension to heterotopias. Heterotopias are defined as sites that order sections of time, for example the cemetery is an ordering of records of past lives that breaks with present time (Johnson, 2013). This provides an etymological-based definition.

_Heterotopia_ can be refined according to what Foucault (1967) wrote originally. Foucault (1967) used the example of the ship to ground the concept of heterotopia and wrote that the ship is the best possible example of a heterotopia. The ship is a “floating
piece of space" (Foucault, 1967, p.9) and ‘a place without a place that exists by itself, that is closed in on itself,” (Foucault, 1967, p.9). This focuses on the peculiarity of a material place existing completely outside other land-based places and removes all Cartesian spaces on land being considered a heterotopia par excellence. Most Cartesian spaces on land exist within a Russian doll structure because they exist within a larger place that itself exists within a larger place and so on. Foucault (1967, p.9) writes that a heterotopia, “at the same time is given over to the infinity of the sea”. No equivalent situation on land exists. It would be tempting to specify the island as a heterotopia, but islands do not float. The ship heterotopia is the “greatest reserve of the imagination” (Foucault, p.9, 1967). Foucault (1967) states three elements to ships: dreams (aspiration), adventure and pirating. These are qualifications that only the ship could meet in Foucault’s (1967) time.

Though Foucault cannot be resurrected in our time, his ideas can. There is a new sea in our age, a sea of encoded light, with pixelated floating (web) sites. Each definitional qualification of the ship as heterotopia has a metaphorical counterpart when applied to web sites (ships) on the Internet (the sea). The sea and the Internet (in its electronic light form spread across wires and machine components) are the only real possible mediums that can be said to harness heterotopias in the modern world. Foucault died before the birth of the Internet, but his ideas on heterotopia as defined through his exploration of the ship can be fully resurrected within the context of the Internet. Web sites concentrate the very large Cartesian spaces they reference into the tiny frame of a web site. The Internet is made up of (web) sites, which serve as the equivalent of ships, touching the Cartesian places they link back to.

This defining link between the ship and the (web) site is not mentioned in most grounded examples that explore cyber spaces as heterotopias in previous studies. That said, the link between heterotopias and cyberspace has been made. Liff (2003) suggests cybercafes are heterotopias, overlooking the problem that cybercafes are Cartesian places. However, Liff’s (2003, p.319) analysis is useful because it introduces the idea that the internet links back to and juxtaposes Cartesian workplaces together, “the internet’s symbolic isomorphism brings together previously disparate sites of work, education and leisure. Its asynchrony enables communication and interaction across the normal constraints of real time”. The problem with this is that “the Internet” is not a discernable
site and therefore not a heterotopia. Rather, an individual (web) site, like a ship, constitutes the appropriate scale for a heterotopia. For Liff (2003) to then say that the heterotopia lies within a café in Cartesian space misses Foucault’s (1967) original definition *par excellence* of a heterotopia. It would be more fitting to reorient the analysis to show how web sites linked to cybercafes function as heterotopias.

Bury (2005) describes the David Duchovny Estrogen Brigades, a web site where women can communicate about their favorite male actors, as a heterotopia. There is ambiguity in that “cyberspace” and “the office” are also at times labelled heterotopias, however in Bury’s (2005) study a clear idea that a web site can be a heterotopia emerges. This study is significant because Bury (2005) positions the web site as a heterotopic space that women can go to relieve stress during their working day, and this ends up blurring public/private boundaries according to Bury (2005). Therefore Bury (2005) introduces the idea that a web site can be a gendered heterotopic space used during times of crisis in the workplace, and can also be a site where public/private boundaries are blurred. These are ideas that match the findings in this study.

A more recent study explores an online site as part of a heteroptopia (Davis, 2010). However, Davis (2010) writes that the online site is a location and that the heterotopia itself is made up of migrant users who constitute a heterotopia through their relations. This is a subtle divorcing of site and relation that does not fit with Foucault’s (1967) original focus. It would be like saying that the people on board a ship constitute a heterotopia rather having the ship be the heterotopia and in this sense any set of social relations fits the definition of a heterotopia. The divorce between relation and site, or space and place, is also seen in an earlier study exploring pornography web sites as part of consumer-generated heterotopias. Jacobs (2005) drawing on Michel de Certeau (1998) argues that place and space are separate, with place being an identifiable container and space being a bundle of moving relations. This is problematic. Foucault (1967) describes the ship as a “piece” of space, implying a contained entity much like the definition of place put forward by Jacobs (2005). Foucault (1967) writes that the ship is also a place completely isolated from any other Cartesian place, which hints at Jacobs’ (2005) definition of space as outside identifiable places. Jacobs (2005) writes that Foucault (1967) defined heterotopia as chaos manifest across space and time. In the end Jacobs
(2005) specifies online consumers as the main constituents of pornography heterotopias through a chaotic ensemble of relations in “small” Cartesian spaces, relations that extend online. Web sites themselves are not specified as heterotopias. In this accounting Jacobs’ (2005) definition of a heterotopia not only seems to match the definition of unbounded relational space, but ignores Foucault’s (1967) interchangeable use of both space and place to define a bounded material entity floating outside Cartesian space.

Haider and Sundin (2010) successfully theorize an online web site, *Wikipedia*, as a heterotopia. They note that *Wikipedia* is a tangible place with definable borders. However they also try and equate a heterotopia with a network, but the two are very different theoretically with the latter exhibiting unstable, unbounded rhizome-like qualities (Deleuze & Guattari, 1997). Haider and Sundin (2010) successfully theorize space as simultaneously place; space is a contained unfolding (think the ship) within which unbounded relations enter, unfold and leave. This matches Foucault’s (1967) equation of space with place within the example of the ship. Note, however, that in this theorization place functions as the boundary of space and also as place in and of itself, but space cannot be thought of as a function of place. Haider and Sundin (2010) also specify juxtaposition as the primary medium through which relations unfold in a heterotopia, and do not retreat into the comfort of chaos and disorder (Jacobs, 2005) as a means of explaining relations within space. The only pitfall of Haider and Sundin’s (2010) study is to admit that Cartesian equivalents of *Wikipedia* are also heterotopias.

Rymarczuk and Derksen (2014) successfully theorize *Facebook* as a heterotopia. However their study is also valuable because it reveals some of the buried history of cyberspace being theorized as a heterotopia. Sherman (1998) writes that not only can the Internet itself be thought of as a heterotopia, but individual websites can also be thought of as heterotopias. Wark (1993, n.p.), before the onset of modern Internet communication, elegantly summed up the link between the ship and cyber heterotopia, even if he didn’t specify the web site as the scalar equivalent of the ship:

This idea of the placeless space as a heterotopia is interesting because that is precisely what cyberspace is, though in a different manner to the ship. If the continuous motion between points on an empty sea is what defines the ship, then relational difference in a logical, inaccessible space
is what defines cyberspace, particularly when it is a network, linking terminals in different places and times into a unified environment.

It is curious that these early parallels between cyberspaces and heterotopias in the 1990s were not picked up on until 2014. Wark (1993, n.p.) was ahead of his time, correctly foreseeing the ontological consequences of resurrecting novel theoretical terms such as heterotopia:

perhaps our understanding of present cultural technologies and practices would be enhanced by a change of language, by a move from one metaphorical tool box to others: from analog to digital; from photospace to cyberspace; from mapping to modelling; from image surface to image structure; from engineering to imagineering; from intervention to access; from utopia and dystopia to atopia and heterotopia.

Rymarczuk and Derksen (2014) use these insights to build on the theorization of Facebook as a heterotopia *par excellence*. One pitfall, however, of Rymarczuk and Derksen’s (2014) study is that they position Facebook as simultaneously both a medium for a heterotopia and as a heterotopia in and of itself whereas it may be more accurate to specify the Internet in its electronic wave-length form as the medium. There is also scalar confusion. Profile pages are explored as part of the Facebook heterotopia, however, it may be more accurate to say that profile pages are the heterotopias (discernable sites) and that Facebook is part of the wider medium which is the Internet. After all, it is difficult to pin down “Facebook” as a discernable site when thinking about individual usage, but this is not the case for an individual profile page.

Other studies have explicitly used the idea of a ship as a heterotopia to drive analysis of spaces. Hetherington (1997) explores Foucault’s (1988) “Ship of Fools” in *Madness and Civilization* as a heterotopic ship and this is useful as a grounded explication of Foucault’s (1967) definition of the ship as a heterotopia. Crane (2012) uses the ship as heterotopia to theorize the dumpster. Crane (2012) recognizes the importance of the ship as a standard definition of heterotopia, however, like many other studies, applies heterotopic criteria to a Cartesian entity, in this case a dumpster used by dumpster divers. In a footnote (Casarino, 1995, p.19) clearly connects heterotopia as defined through the
example of the ship with emerging technology, though this is vague and referred to as “virtual reality” rather than a discernable site:

One could argue that in the twentieth century the ship was displaced by the spaceship in occupying the cultural site of the heterotopia par excellence, and that now, in the twenty-first century, it is the cyberpunk heterotopia of virtual reality that is invested with an analogous role.

Therefore while some studies link heterotopia to cyberspace, they do not tend to use the definition of a heterotopia as a ship to explore space, and for those that do use the ship as a definitional standard, the link to sites in cyberspace is not always present or is vague.

This has led to criticisms around the definition of heterotopia. Saldhana (2008) quotes Harvey (2000) who questions the “liberartory” value of analysing the cruise ship. However, Salshana (2008, p. 2092) puts Harvery’s criticism to one side calling it “willfully hasty” and introduces some more apt questioning of heterotopia as defined by the ship:

Did these ships moor only in American and European ports? Where the ships not equally ‘other’ to cities, trade routes, economic systems, political regimes, and women’s bodies outside of Euro-American modernity? What is the site of a ship counter to?

These are pertinent spatial questions and the answers require methods that incorporate realist epistemologies. Saldhana (2008) validly requests a more rigorous realist engagement with space if a site is to be explored as a heterotopia as defined through the example of a ship.

That concludes the specific definition of a heterotopia as a tangible site on the Internet that mirrors Foucault’s (1967) example of the ship. Both examples of heterotopia are outside of but constituted by Cartesian space. The danger has been to ignore specificity of scale when thinking about heterotopias, even in cyberspace. The example of the ship used by Foucault (1967) was overlooked in favor of explorations of Cartesian examples of heterotopias that spanned the decades, and this includes Soja’s (1996) account of Third Space, though Foucault (1967) did see the merits of imperfect Cartesian heterotopias for reflecting on space. Examples of sites on the Internet as heterotopias are in the literature but scalar specificity and the recognition that cyber sites are a heterototopia *par excellence*
because of their similarity to Foucault's (1967) ship example are difficult to find. Foucault specifies other qualities, such as the simultaneous opening and closing of access to a site and varying assemblages of time periods, as important parts of a heterotopia, but all these additional qualities are found in online heterotopias related to social media as Rymarczuk and Derksen (2014) and Haider and Sundin (2010) outline.
1.5. Existing Literature on Crisis Heterotopias

“Heterotopia” was a term used by Foucault (1967), borrowed from medical literature (Sohn, 2008), to denote a place that is constituted by, but absolutely different to all other places around it. This “non-place” has an experience of crisis or deviation attached to it. Heterotopias have been conceptually explored through the works of notable theorists such as Soja (1996), Lefebvre (2003) and de Certeau (1998). These works fetishize the role of tactical resistance and deviance in crafting “other places” within the context of the everyday, and usually within physical space (Cenzatti, 2008). As a conceptual tool to drive analysis of deviant spaces the term has been criticized by Soja (1996) as ambiguous and also by Harvey (2000) as misguided (Cenzatti, 2008). The aim of this chapter is not to re-theorize or reconcile heterotopias as concepts. Rather the aim is to, “not attempt the impossible (and not even necessarily desirable) task of finally rationalizing heterotopology into a coherent, explicit system of thought, but rather use the idea of heterotopia to explore specific spatial configurations,” (Palladino & Miller, 2015, np). This is in the context of exploring the second of two types of heterotopic spatial configurations Foucault specifies: crisis-based, and not deviance-based heterotopias.

Setting aside crisis for the moment, theorizations around heterotopias invite the frequent use of “space” and “place” regardless of the qualitative experience. After Massey (1991), a place is an identifiable glocal container within which social relations unfold in space, “there is the specificity of place which derives from the fact that each place is the focus of a distinct mixture of wider and more local social relations, (Massey, 1991, p. 232 - 240). It is Massey’s idea of a place (a social media site) as juxtaposed alongside a locality (a social enterprise), yet also simultaneously places across a region or even the globe, which is important in this study, and juxtaposition is a key way Foucault’s heterotopia functions structurally. This study theorizes an online social media profile page as a site, a place. Boellstorff (2011, p.215) writes, “the foundational feature of virtual worlds is that they are places…the fact that virtual worlds are places means that they can be constructed not just in terms of globalized online networks, but in terms of localities”. Online places operate at different scales. A social media profile page is an online place, like a town is a
place, but individual profile pages, like houses, also constitute places at smaller scales. It is at this local scale of the profile page, and the juxtaposition between profile pages and the physical sites they are link to, that the study focuses on.

While a LinkedIn profile page is a tangible place, it also contains a networked space inside itself, where individuals record their skills and allow other connected individuals to add to these records in a section called “skills & endorsements”. “Foucault was particularly interested in spaces that are linked to ‘other’ sites and which differ from the sites they reflect and speak about,” (Jacobs, 2004). In the context of a LinkedIn profile page and the ‘skills & endorsement’ section, this is a space that links to other work sites reflected on other user profile pages. But it is different to the work sites because it is not a physical place where labour is enacted, but rather it is a space where generic records of labour that could have come from various work sites are amassed, recorded and judged electronically. Skills are housed in a skill section, but this is spatialized by other users from other work sites, who can endorse a particular skill listed by an individual. When a user endorses a skill on a profile they are connected to, a link made from their profile picture serves as a record of the endorsement, like a stamp. Each profile page ends up being absolutely different from the other through different accumulations of recorded skills endorsed by different individuals.

This character of difference that a LinkedIn profile page, and the skill space within it, operates by in relation to all other places that surround and constitute it, both physical and virtual, positions it structurally as a “heterotopia”. Foucault (1967, p.3) defines a heterotopia as a structural entity in the following way:

there are also, probably in every culture, in every civilization, real places — places that do exist and that are formed in the very founding of society— which are something like counter-sites, a kind of effectively enacted utopia in which the real sites, all the other real sites that can be found within the culture, are simultaneously represented, contested, and inverted. Places of this kind are outside of all places, even though it may be possible to indicate their location in reality. Because these places are absolutely different from all the sites that they reflect and speak about, I shall call them, by way of contrast to utopias, heterotopias.

The focus on difference is important. Johnson (2013, p.790) writes, “heterotopias are most productively understood in the context of Foucault’s insistence on ‘making difference’ and
their adoption as a tool of analysis to illuminate the multifaceted features of cultural and social spaces”. Heterotopias are counter-sites that incorporate real sites within their composition and this both makes difference and reveals a structure to the social space Johnson (2013) cites as underlying heterotopias.

Returning to the qualitative experience within this place-based structure, Foucault (1967, p.4) defines heterotopias as either part of crisis, or as part of deviance, saying of the former:

there is a certain form of heterotopia that I would call heterotopias of crisis, that is to say that there are privileged, or sacred, or forbidden places, reserved for individuals who are, in relation to society and to the human environment in which they live, in a state of crisis (Foucault, 1967, p.4).

Foucault introduces three different structural variants of crisis heterotopias of which two are relevant in this study: privileged sites of control and forbidden sites where time and expertise become apparent in their lack. Qualitatively, and as explored in the definition section, the concept of heterotopia has recently been used to understand Facebook (Rymarczuk & Derksen, 2014), and less recently, Internet pornography websites (Jacobs, 2004), but both within the context of deviance, not crisis.

Crisis heterotopias are theorized much less often than deviance heterotopias. Foucault himself placed an emphasis on deviance heterotopias. However, this was in the context of de-colonization and before the Internet. Primitivization, a phenomena Foucault associated with crisis heterotopias, has seen a recent post-2008 resurgence with the rise of neoliberal regimes and the collapse of the welfare state. Within this section of the literature review I theorize crisis heterotopias through the work of Joseph Pugliese (2009) and Meyer (2010).

Two important points emerge from Pugliese’s (2009) discussion of crisis heterotopias, and both points define what is meant by “crisis”. Pugliese cites Stratton (2009), who explores Naomi Klein’s (2007) “disaster capitalism”. Stratton (2009) sums up how crisis is built into and manufactured by modern capitalist assemblages that disassemble the welfare state. The crisis works not suddenly, or abruptly, but slowly and structurally. Structural crises can emerge as vested interests change over a long period.
of time, and can be reacted to opportunistically rather than as part of a manufactured plan. For example neoliberalism was an opportunistic creation and a way for elites to continue their dominance over resources (Stratton, 2009). Crises born from the structure of capitalism, such as shortages in targeted information, time and expertise in an over-technologized and under-socialized society would fit into the reasoning Pugliese (2009) explores through the work of Stratton (2009) and Naomi Klein (2007). These shortages are uncovered through interviews in chapter four. Social media corporations offer sites locatable on profile pages that enable crises and the limits they imply to be experienced and understood. Therefore crisis can be defined as slow, structural and induced experientially by entering a heterotopic place that reveals limits.

The second point Pugliese (2009) puts forward is that crisis heterotopias are experienced qualitatively by individuals through the theme of lack at the location of a border. Pugliese (2009, p.677) talks of “crisis heterotopias of loss, death and mourning”. These are qualitative crisis-based experiences around death inside the heterotopia. In both cases the qualitative experience of crisis centers around a lack. For Pugliese life itself lacks, precipitating a crises around death, while in chapter four targeted information, time and expertise are lacking. Crucially this lack is experienced at a border. Pulieses’ (2009, p.663) crisis heterotopia is locatable at “the faultline of the border”. This specifies geographically where crisis takes place and the profile page itself is also at the border between multiple spaces of different scales.

Meyer (2010) provides an extra layer of detail about crisis heterotopias that relates to the findings in chapter three. Meyer (2010) specifies a site (the farm) as a heterotopic place where women can experience the healing power of nature. Interviewees in chapter three suggest that the Facebook profile page of their social enterprise is related to experiences of crisis while also serving as a resource to engage these crises. This helps theorise the profile page as a spatial entity in relation to the comments by these interviewees.
1.6. Euclidean and Cartesian Space

Space can be thought of in realist terms as a mathematically definable set of points with coordinates defining each point. This is still a dominant way of thinking about space in governments, scientific institutions and many sub-disciplines across the social sciences. However, this approach to space also still defines how we think about much of space in everyday places. Social media profile pages are one of these places. A profile page may list the city or workplace of a user. This city or workplace can then be typed into Google Maps and represented as a point with a set of coordinates or viewed in 3-D. In other words space is still thought of and represented as realist in everyday spaces.

The foundation of the ontological approach to space as a real and representable set of observable place objects has its roots in mathematics, not geography. Over 2,300 years ago Euclid created a system of representing points mathematically (University of Colorado Boulder, 2016). Decartes then refined this system 400 years ago, introducing a system of coordinates that could be represented as equations (University of Colorado Boulder, 2016). This new system was called Cartesian. This study refers to the cities and workplaces that are referred to as realist entities on social media profile pages and Hootsuite analytics as "Cartesian". A city is a Cartesian place and a workplace is a Cartesian place. This focus on "Cartesian" refers to the ontology that results from viewing cities and work places as real, concrete places that can be mapped on a GIS or a shown as set of Cartesian coordinates. This focus contrasts with profile pages, which are not positioned as Cartesian, but which are positioned as existing in cyberspace, a series of wires and machine components that uses light waves to manifest profile pages. The study demonstrates that what people think of as Cartesian places, and sites in cyberspace, are not separate, but are entwined and hybridised in the context of British Columbian social enterprises.

1.7. Importance of the Study and Outline of Chapters

Nothing is understood about the social networks of social enterprises in British Columbia apart from a crucial finding from Hall & Elson (2014) that 70% of social enterprises found social media in some way helpful to their operations. Social networks
and their geography are essential in understanding the transmission of information and resources across space. Understanding whether networks operate locally, regionally, globally and to what extent can help understand the impact of policies, can direct research and can assess if online strategies divorced from Cartesian space are realistic. A recent initiative launched online called “The Social Enterprise Institute” aims to “level the playing field for aspiring social entrepreneurs and organizations regardless of their location,” (ENP, 2016, np). However, as the following chapters suggest, it may be premature to rule out the role and influence physical geographies have on online social networks of social enterprises.

Another part of the study was a university-community partnership that sought to benefit social enterprises by funding access to annual Hootsuite Pro subscriptions. This was aimed making a real difference to the operations of social enterprises and it succeeded as documented in chapter 3. Encouraging studies of this nature among researchers can make a real difference to the communities they hail from but can also reveal the extent to which particular ways of helping work and also required to uncover new frontiers or gaps that can be addressed in future partnerships.

Chapter two hypothesizes that spatial factors affecting Cartesian workplaces shape an online professional network among senior staff members of social enterprises in British Columbia. Chapter three hypothesizes that the Facebook pages of select social enterprises reaches a specific female demographic and reaches localities within British Columbia that overlap with the endorser workplaces of its social enterprise head as uncovered in Chapter two. Chapter four reveals how social media profile pages are heterotopias that 1): allow larger social enterprises to experience a crisis in targeted communication in a networked non-place that offers control; 2) allow smaller social enterprises to experience a crisis in time and resources.
Chapter 2.

Social Enterprise Head Professional Network Profiles and their Regional Geography

2.1. Abstract

This chapter hypothesizes that spatial factors affecting Cartesian workplaces shape an online professional network among senior staff members of social enterprises in British Columbia. Of 745 social enterprises in British Columbia 348 had a senior member of staff or "head" with a professional network profile page. These profile pages were connected to other profile pages through a section on the profile page that lists skill keywords that can be endorsed by other users. Overall workplaces attached to endorsers were regionally concentrated in British Columbia. An exclusive network of social enterprises heads that endorsed each other was also uncovered. There tended to be statistically significantly more members of this network than expected in cultural social enterprises, workplaces in areas of very high material deprivation and workplaces inside Greater Vancouver. Profile pages in this context were theorized as locatable in cyberspace sites outside Cartesian workplaces yet intimately bound up and shaped by the spatial realities of Cartesian workplaces, matching the structural definition of a "heterotopia" by Michel Foucault.

2.2. Introduction

Social enterprises in British Columbia have been surveyed extensively (Hall & Elson, 2010; Hall & Elson, 2012; Hall & Elson, 2014). The most recent survey (Hall & Elson, 2014) reached 121 of the 745 social enterprises in British Columbia. The focus on the region of British Columbia builds on recent trends in human geography. Jonas (2013) hails the recent turn towards "alternative regionalisms" in academic geography and writes that, "social structures underpinning alternative economic practices are transposed to other places and regions, albeit often in contingent and messy ways. All of this affirms the value of generating new concrete abstractions about alternative economic practices,"
Recent research has called for a greater understanding of the geography of social enterprises. The use of socio-spatial theories (Muñoz, 2010) and quantitative data (Buckingham et al, 2012) were encouraged to produce reliable spatial data about the location of social enterprises. This chapter contributes an abstract GIS-based understanding of the professional social network beneath the alternative economic practices of social enterprises in British Columbia. The emphasis on social networks brings together the “areal tradition” with the “spatial interaction tradition” historically seen within geography (Smith, 1980) at a time when critical GIS is emerging alongside network analysis as key spatial methods. This triangulation of recent progressive approaches to spatial phenomena in geography provides a focused lens with which to explore social enterprises in British Columbia.

The introduction of cyber environments has caused complex debates to arise in the field of geography. Cartesian place and networks are no longer seen as separate and online networks diminish the influence of physical proximity in an increasingly global world of digital connections (Graham, 1998). In contrast, this chapter shows that online networks are partially produced by factors locatable in Cartesian places (defined as a workplace and its surrounding census dissemination area) and that these networks and places are concentrated regionally and locally, rather than globally. This runs against much recent progress in human geography aimed at erasing Cartesian places and physical locality from cyber-oriented debates. “We need to reject the extremely resilient ‘Euclidean’ notions, still implicitly underlying many treatments of the geographies of information technology, that treat spaces and places simply as bounded areas,” (Graham, 1998, p.181). To do this would not only fall into an ontic fallacy that sees everything as pure representation (Leszczynski, 2009), but it would deny the realist approaches of governments and census reports that provide useful information about the world. While there is room for theory in this chapter using Foucault’s idea of heterotopia, realist perspectives on the world are also allowed. Thrift (1998) is more sympathetic to the findings of this chapter writing, “cyberspaces do not replace geographic spaces, nor do they destroy space and time. Rather, cyberspaces coexist with geographic spaces providing a new layer of virtual sites superimposed over geographic spaces”. However, Thrift (1998) tends to focus on relational access places where cyber worlds are entered in the moment, as does much subsequent research, rather than Cartesian places that cyber
spaces reflect and are influenced by, and Thrift (1998) focuses on superimposition rather than connection.

The outputs of this chapter are two maps, one created using GIS and the other created using a JavaScript programming language called Leaflet that produces online interactive maps. The GIS-based map, in combination with Foucault's idea of heterotopia, contributes to the emergent sub-discipline of critical GIS, one that marries realist and constructivist approaches and which rose to prominence during the 1990s (Schuurman, 2015). The online interactive map builds on more recent trends in human geography. Monmonier (2007) writes of a new trend in cartography called “cybercartography” where interactive maps are created and displayed online. The map created from Leaflet in this chapter was displayed on QGIS, an online mapping interface similar to ArcGIS but open to public use. QGIS is part of a wider online mapping amalgamation that makes use of digital content, termed the “geoweb” in recent geographic research (Elwood, 2010; Leszczynski, 2014). This chapter contributes to this growth of interest in critical GIS and the geoweb through the exploration of the ArcGIS and QGIS maps included in this chapter.

The data for this GIS-based exploration is collected from a specific site, the online profile page. Within social enterprise head profile pages the collection of links to other personal profiles that reflect physical workplaces and which denote endorsements is housed within a single space on the profile page (skills and endorsements) and this gives it a unique structural character (see figure 2 below):
While the skills and endorsements section is fixed it, “is constantly disrupted by transience and ever-shifting relations between places,” (Jacobs, 2004, p.73). This is in terms of the addition of new endorsements related to new physical places and the addition or subtraction of skill keywords. Also, a social enterprise head is more likely to be better connected online when located in a very highly materially deprived area within Greater Vancouver based on the chapter three findings. These skill and endorsements sections of social enterprise head profile pages are therefore, “spaces that are linked to ‘other’ sites and which differ from the sites they reflect and speak about,” (Jacobs, 2004, p.73). Jacobs (2014, p.73) is talking about heterotopias, and concludes that structurally, “heterotopias are capable of taking several sites that are incompatible or ‘foreign to one another’ and juxtaposing them within a single space,” and this is the case for the skills and endorsement section that juxtaposes a wide range of profile links that reflect physical places. This juxtaposition is possible nowhere else.

---

**Skills & Endorsements**

<table>
<thead>
<tr>
<th>No. of endorsers</th>
<th>Skill</th>
<th>[pictures of endorsers with links to their profile]</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Sales</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Teamwork</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Research</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Account Management</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Management</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Online Advertising</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>SPSS</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Event Management</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2:  The Structure of the Skills and Endorsements Section on LinkedIn
Finally, this chapter makes use of a mode of network analysis that looks at how “central” an individual (node) is within the network. Linton Freeman (1979) was the first theoretician to give conceptual clarification to three of the four different types of centrality that could be used to uncover central nodes in a communications network (Carrington, 2012), and this includes the centrality measure used in this chapter, which is detailed below. Bonacich (1972; cited by Carrington 2012) proposed one of the four main measures of centrality. There are four main ways to work out how central an individual is in a network. The results of only one of these – betweenness centrality – is presented in this chapter because this was the only one statistically significantly related to location variables. This measure is called “betweenness centrality”. Freeman (1979, p.224) writes that, “betweenness is useful as an index of the potential of a point for control of communication”. Stated in simple terms, a node with a high betweenness score connects two disparate groups and sits at the “bottleneck” of communication, where communication across many nodes must pass through a single node. In the methods section below the specific equation for betweenness is provided.

2.3. Methodology and Methods

Geo-Social Visualization

Social network analysis was recently criticized as a realist methodology unaware of its own methodological power relations (Scott, 2015). While valid, this criticism overlooks the emerging methodological field of “geo-social visual analytics” (Luo & MacEachren, 2014) which combines geo-visualization, social network analysis and spatial theorization methods into a constructivist-realist synergy. This chapter uses such an approach and Schramski and Huang (2015) employ similar methods to this chapter. They were able to find that the use and access of natural resources in South African villages only slightly correlated with social exchange network patterns. Therefore they determined that the environment could drive social relations, but only to a small extent. This was new information. Schramski and Huang (2015) were limited to manually-gathered survey data and four small villages. Conversely Butler (2010) mapped global Facebook friendships of 500 million people, displaying the connections on a global map. This chapter combines the pragmatism seen in Schramski and Huang’s (2015) study with some of the ambition
of Butler’s (2010) visualization. Within the context of the “geo-social visual analytics” methodological paradigm Luo and MacEachren (2014) pose the research question, “how does information diffuse geographically and socially via social media?”. This is the methodological research question this chapter hopes to address in the context of social enterprises in British Columbia.
<table>
<thead>
<tr>
<th>Location</th>
<th>CAT0*</th>
<th>CAT1*</th>
<th>CAT2*</th>
<th>CAT3*</th>
<th>CAT4*</th>
<th>CAT5*</th>
<th>CAT6*</th>
<th>CAT7*</th>
<th>CAT8*</th>
<th>CAT9*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australasia</td>
<td>0.44%</td>
<td>0.85%</td>
<td>0.00%</td>
<td>0.88%</td>
<td>0.15%</td>
<td>0.29%</td>
<td>0.00%</td>
<td>0.47%</td>
<td>0.95%</td>
<td>0.51%</td>
</tr>
<tr>
<td>British Columbia</td>
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<td>88.56%</td>
<td>82.46%</td>
<td>70.61%</td>
<td>72.17%</td>
<td>76.70%</td>
<td>74.82%</td>
<td>65.45%</td>
<td>56.35%</td>
<td>66.19%</td>
</tr>
<tr>
<td>USA</td>
<td>6.79%</td>
<td>3.81%</td>
<td>2.34%</td>
<td>3.07%</td>
<td>6.70%</td>
<td>2.95%</td>
<td>2.62%</td>
<td>15.92%</td>
<td>7.30%</td>
<td>11.72%</td>
</tr>
<tr>
<td>Province Outside BC</td>
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<td>4.24%</td>
<td>8.77%</td>
<td>14.91%</td>
<td>15.33%</td>
<td>6.78%</td>
<td>15.14%</td>
<td>11.20%</td>
<td>22.57%</td>
<td>14.24%</td>
</tr>
<tr>
<td>Africa</td>
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<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.12%</td>
<td>0.81%</td>
<td>0.32%</td>
<td></td>
</tr>
<tr>
<td>Europe</td>
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<td>0.42%</td>
<td>2.34%</td>
<td>1.32%</td>
<td>0.60%</td>
<td>8.85%</td>
<td>3.06%</td>
<td>1.89%</td>
<td>4.73%</td>
<td>1.74%</td>
</tr>
<tr>
<td>Asia</td>
<td>0.51%</td>
<td>0.00%</td>
<td>0.58%</td>
<td>1.32%</td>
<td>0.60%</td>
<td>1.18%</td>
<td>0.44%</td>
<td>0.47%</td>
<td>1.76%</td>
<td>0.98%</td>
</tr>
<tr>
<td>Middle East</td>
<td>0.29%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>1.32%</td>
<td>0.00%</td>
<td>0.29%</td>
<td>0.00%</td>
<td>0.24%</td>
<td>1.08%</td>
<td>0.34%</td>
</tr>
<tr>
<td>South America</td>
<td>0.22%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.44%</td>
<td>0.60%</td>
<td>0.88%</td>
<td>0.29%</td>
<td>0.12%</td>
<td>0.54%</td>
<td>0.18%</td>
</tr>
<tr>
<td>Other</td>
<td>4.01%</td>
<td>2.12%</td>
<td>3.51%</td>
<td>6.14%</td>
<td>3.87%</td>
<td>2.06%</td>
<td>3.64%</td>
<td>4.13%</td>
<td>3.92%</td>
<td>3.79%</td>
</tr>
<tr>
<td>Category %:</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Overall %:</td>
<td>12.53%</td>
<td>2.16%</td>
<td>1.56%</td>
<td>2.09%</td>
<td>6.15%</td>
<td>3.10%</td>
<td>6.28%</td>
<td>7.76%</td>
<td>6.77%</td>
<td>51.60%</td>
</tr>
</tbody>
</table>

*CAT0    Miscellaneous  *CAT5    Agriculture  
*CAT1    Farmers Markets *CAT6    Museums/Art Galleries  
*CAT2    Thrift Stores   *CAT7    Employment  
*CAT3    Day Care        *CAT8    Environmental  
*CAT4    Housing         *CAT9    Cultural
Table 3: Endorsements in British Columbia for Heads in Different Category According to In/Outside Vancouver (%)

<table>
<thead>
<tr>
<th>Category</th>
<th>Vancouver</th>
<th>Outside (in BC)</th>
<th>Unknown</th>
<th>Total number of Heads</th>
<th>Heads Who Endorsed other Heads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miscellaneous</td>
<td>9.99%</td>
<td>17.00%</td>
<td>17.21%</td>
<td>15.13%</td>
<td>12.50%</td>
</tr>
<tr>
<td>Farmers Markets</td>
<td>1.36%</td>
<td>4.12%</td>
<td>4.55%</td>
<td>3.64%</td>
<td>1.79%</td>
</tr>
<tr>
<td>Thrift Stores</td>
<td>1.50%</td>
<td>2.27%</td>
<td>2.92%</td>
<td>3.36%</td>
<td>1.79%</td>
</tr>
<tr>
<td>Day Care</td>
<td>1.91%</td>
<td>2.54%</td>
<td>1.30%</td>
<td>3.36%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Housing</td>
<td>9.53%</td>
<td>3.41%</td>
<td>3.57%</td>
<td>6.44%</td>
<td>7.14%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>3.16%</td>
<td>3.61%</td>
<td>7.14%</td>
<td>2.52%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Museums/Art Galleries</td>
<td>5.06%</td>
<td>8.93%</td>
<td>6.82%</td>
<td>6.16%</td>
<td>5.36%</td>
</tr>
<tr>
<td>Employment</td>
<td>6.53%</td>
<td>8.33%</td>
<td>9.74%</td>
<td>7.84%</td>
<td>7.14%</td>
</tr>
<tr>
<td>Environmental</td>
<td>5.36%</td>
<td>5.70%</td>
<td>5.52%</td>
<td>6.44%</td>
<td>3.57%</td>
</tr>
<tr>
<td>Cultural</td>
<td>55.59%</td>
<td>44.09%</td>
<td>41.23%</td>
<td>45.10%</td>
<td>60.71%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

A GIS project run with the Department of Geography at SFU collected the above data, which was publically available on an online professional social network. This provided the database for the tables above and during the project the data was analyzed in Gephi, ArcGIS and SPSS. Table 2 shows the categories of social enterprises and the numbers of individuals endorsing heads in these categories and the location of these endorsers. Table 3 shows the categories of social enterprises and the numbers of individuals in BC either in or outside Vancouver endorsing them. Table 3 also shows the total number of heads in each category as well as the total number of heads from each category endorsing other heads. Specific street addresses and/or cities, obtained on open
source mapping software, were also provided for each endorser. This made up the basic dataset that could be spatially and statistically analyzed using Gephi, ArcGIS and SPSS.

The below section will describe how the data was collected and analyzed across four separate software programs, producing an output similar to that of Schramski and Huang (2015). The data collection and analysis in this chapter can be broken down into four stages that correspond to the four software programs used: Excel, Gephi, ArcGIS and SPSS. This section will then go on to consider the efficacy of this data collection method and what new information it can contribute. The section concludes that employing these methods yields new information about how the online networks of social enterprises in British Columbia are spread across the region of B.C. This new information is unobtainable through methods restricted to epistemological boundaries. The level of detail in this section aims to establish rigour. Figure 3 sums up the data collected and the sections afterward explain each individual stage:

Figure 3: Data Collected by the Department of Geography Team
Data Collection Phase 1: Aggregating in Excel

A census of the 745 known social enterprises revealed 357 had a member of senior staff termed a “head” with an online professional profile page. To determine who constituted a “head” the following basic criteria was used:

Figure 4: Criteria for the Head of a Social Enterprise

One member of the GIS project team viewed endorsements on the profile of a social enterprise head and clicked through to the profile of an endorser. Another person then viewed the public profile of the endorser on an adjacent computer and then typed the given name, job title, workplace and location on the endorser’s public profile into Excel. In this way it was possible to compile a database of social enterprise heads and their endorsers using public information. The city locations for 97% of all endorsers was obtained and street addresses for half the endorsements were found using online open source map searches. All these locations were then converted into latitude and longitude coordinates using ArcGIS and these were cross-referenced with an online open source tool. A total of 10,931 individual endorsers were found. These data collection efforts generated a master sheet, from which a new master sheet consisting of nodes (unique values) and a new master sheet of edges (duplicate) values needed to be constructed. The node sheet would show the location, whilst the edges would deliver SOURCE and
TARGET data. In order to uniquely identify each node a VBA macros had to be run on job titles (since these were more unique than names) and duplicate job titles were automatically modified using digits. Once these modifications were made, the digits had to be converted into string because Gephi does not recognise string modified by digits.

**Data Collection Phase 2: Visualizing and Analyzing in Gephi**

Each node in the Excel mastersheet was allocated a category based on an Excel formula that linked the head of a social enterprise the node endorsed to Dr. Peter Hall’s categorization scheme. Within this categorization scheme there were nine categories: agricultural, daycare, thrift stores, housing, environmental, social/cultural, farmers markets, museums/art galleries and social/cultural. The categorized node and edges master spreadsheets were then imported into Gephi’s data laboratory. Here, checks needed to be made to make sure that all nodes and edges were represented and that every single node had a connection. The first few importations flagged tweaks that needed to be made to the data to make sure this occurred. Within Gephi, heads of the social enterprise needed to have their node color modified, as did the endorsers, in order to be able to identify them. The layout then needed to be changed to reflect latitude and longitude. From here any one of the four centrality measures could be run and implemented by varying node size. These centrality measures are: degree (including in-degree and out-degree), eigenvector centrality, betweenness centrality and closeness centrality. Once this had been done then a SHP file was generated containing all centrality measures within the data structure. The relational data between endorsers and a social enterprise head was uploaded from Excel and visualized in Gephi, then analyzed using centrality equations built into Gephi. Four measures of centrality were tested for: degree, betweenness, eigenvector centrality and closeness centrality. Betweenness was the only statistically significant measure in SPSS. The betweenness equation, according to Otte & Rousseau (2002, p.443) is as follows for a given node, node i:

\[
b(i) = \sum_{j,k} \frac{g_{ijk}}{g_{jk}}
\]
This equation determines the shortest path between hypothetical node j and k as the shortest path passes through node i (Otte & Rousseau, 2002, p.443). This measure has to be calculated for every node, and this can be performed in Gephi and displayed in the data laboratory as a set of betweenness scores. These betweenness scores can then vary the size of each node in order to give a visual representation of each individual betweenness scores. This highlights the “bottlenecks” in the networks, and who has the power to enable the flow of communication between groups of connected nodes. Calculating centrality in Gephi gave scores for each endorser and each social enterprise head and these were added to the database, and this included a betweenness score. After the network map was plotted according to latitude and longitude it was exported into ArcGIS as a KMZ from where it was converted to a layer. Overall Gephi allowed us to visualize and measure the overlap between endorsers among social enterprise heads, as well as connections between social enterprise heads. While other social network analysis software tools were considered, the comparisons to other software (Combe et al, 2010) suggested Gephi was the most appropriate choice. Four of the most popular social network analysis tools were considered: Pajek, Gephi, NetworkX and igraph. Gephi has General Public License (GNU GPL), which means it is open to use by the public and the use of GEXF as a file format supports the unique visualization and data analysis capabilities of Gephi (Combe et al, 2010). Gephi performs at a similar level of functionality as alternative network software, but is a leader in terms of visualization and conversion, particularly for the purposes of this study.

Data Collection Phase 3: Overlaying in ArcGIS

The KMZ file was converted into layer data in ArcGIS, as mentioned above. This was overlaid onto a map of British Columbia. This map of British Columbia was shaded according to polygons that showed levels of material deprivation from the 2006 Canadian census provided by Pampalon & Raymond (2000). Data from the 2006 census was used because there are issues with the validity of data from the 2011 Canadian census and National Household Survey, which used limited data collection methods when compared to 2006. The joined KMZ data with the census data was exported as an Excel table, then imported into SPSS. Pampalon & Raymond (2000) created an index of material
deprivation and the breakdown of the measures used for the material component can be seen in Table 4:

**Table 4:** From Pampalon & Raymond (2000) A Table Showing the Material Deprivation Component and How it was Calculated

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Material</th>
<th>Social</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCHOLAR*</td>
<td>-0.83</td>
<td>0.00</td>
</tr>
<tr>
<td>EMPLOI†</td>
<td>0.71</td>
<td>-0.19</td>
</tr>
<tr>
<td>REVENU‡</td>
<td>0.82</td>
<td>-0.27</td>
</tr>
<tr>
<td>SEULES§</td>
<td>-0.01</td>
<td>0.84</td>
</tr>
<tr>
<td>S_D_V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F_MONO#</td>
<td>-0.34</td>
<td>0.65</td>
</tr>
<tr>
<td>Explained variance</td>
<td>34%</td>
<td>33%</td>
</tr>
</tbody>
</table>

*Ratio of individuals 15 years and older with no high school diploma to the population 15 years and older
†Ratio of individuals 15 years and older who are employed to the population 15 years and older
‡Average personal income for the population 15 years and older
§Ratio of individuals 15 years and older living alone to the population 15 years and older
||Ratio of individuals 15 years and older who are separated, divorced or widowed to the population 15 years and older
#Ratio of single-parent families to the total number of families

NOTE: The above values are saturations. They should be interpreted as correlation coefficients between the indicator and the component.

Source: 2001 Census of Canada.

This index was created by Robert Pampalon and Guy Raymond (2000) at the Quebec National Institute of Public Health and is referred to as the INSPQ index. In a study conducted by the Canadian Institute for Health Initiatives (2008) regarding health and socioeconomic status in urban Canada, a comparison of four indices used in Canada was completed. The results of this comparison can be seen in Table 5. The INSPQ index has been used in numerous studies in the field of healthcare (Pampalon, R., et al. 2009, Canadian Institute for Health Information, 2009; 2011). After reviewing these studies it was decided that the INSPQ index could also be used for the study. The INSPQ index has been designed to provide a measure of social and material deprivation that is associated with the dissemination areas of the Canadian Census (Quebec
National Institute of Public Health, 2008). Dissemination areas are the smallest unit that all census data are associated with and usually encompass 400-700 people (Statistics Canada, 2009). Due to the relatively small size of dissemination areas, they provide an insight into common characteristics of a neighborhood. The INSPQ index provides both social and material deprivation measures for each dissemination area in Canada with data provided from the 2006 census (Gouvernement du Québec, 2008) (see Table 5).

For this study, the deprivation measures were acquired from the publicly available equivalence tables found on the Quebec National Institute of Public Health’s website. The data provided here came in the form of an excel sheet. The excel sheet provided data for all Canadian dissemination areas. From this sheet, we took all information for British Columbia. This information for British Columbia was transferred to a new excel sheet. This excel sheet provided both material and social deprivation scores for all dissemination areas and they were already categorized separately into quintiles. This division into quintiles had been completed through a principle component analysis that assigned a factor score to each dissemination area. These factor scores had then been divided into 20% increments in order to classify them into quintiles. Quintile one corresponds to a high socio-economic status while quintile five represents low socio-economic status. This measurement is the same for both the social and material deprivation scores. ArcMap was used to complete the analysis. The data in our excel sheet included a column with dissemination area codes that we were able to join a shapefile of British Columbia dissemination areas. This shapefile was found on the SIS Drive at Simon Fraser University. In order to complete the join we first made sure that both the excel sheet and the attribute table of the shapefile had a column that the join could be validated with. This was done with the “DAID” column which corresponded to the dissemination area. Once the join was complete it was possible to display both the material and social deprivation scores for each dissemination area of British Columbia. This was done by accessing the properties of the shapefile and changing the symbology. Our next step was to import the KML files that contained the location data of the heads of the social enterprises. We had to convert the KML file to a shapefile in order to get it into ArcMap. Once the data for the social enterprises was in ArcMap we were able to complete two spatial joins. We joined the social enterprise heads to the material deprivation quintiles as well as the social deprivation quintiles. From here we were able
to associate both a social and material deprivation score to the location of the social enterprise. We exported this data from the attribute table in order to perform further statistical analysis in SPSS. Table 6 shows a comparison of different indexes and the section below details analysis in SPSS.

**Table 5: A Comparison of Different Indexes**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Index</strong></td>
<td>Composite</td>
<td>Separate variables</td>
<td>Factorial</td>
<td>Factorial</td>
</tr>
<tr>
<td><strong>Aim</strong></td>
<td>Health research (multiple health outcomes)</td>
<td>Changes in inner-city deprivation over time</td>
<td>Health research (multiple outcomes)</td>
<td>Health Research (body mass index)</td>
</tr>
<tr>
<td><strong>Level of Application of the Index</strong></td>
<td>Enumeration area aggregated at municipal level, grouped into eight regions, Manitoba</td>
<td>Census Tract, Canada’s 22 largest CMA’s</td>
<td>Dissemination are level, Quebec and subsequently Canada</td>
<td>Census Tract, urban Canada</td>
</tr>
<tr>
<td><strong>Variables Included in the Index</strong></td>
<td>-Percent unemployment (aged 15-24) -Percent unemployment (aged 45-54) -Percent single parent female headed households -Percent having graduated from high school (aged 25-34) -Percent female labour force participation -Average value of owner-occupied dwellings</td>
<td>-Percent unemployment -Percent persons aged 15 and over with less than a grade 9 education -Percent low-income families</td>
<td>-Percent without high school graduation -Employment ratio -Average income -Percent single-parent families -Percent persons living alone -Percent persons separated, divorced or widowed</td>
<td>-Percent 20 and over without high school graduation -Percent single-parent families -Percent families receiving government transfer payments -Percent 15 and over unemployed -Percent living below the low income cut-off -Percent homes needing major repairs</td>
</tr>
</tbody>
</table>
Data Collection Phase 4: Analysis in SPSS

The spatially joined data table was uploaded into SPSS and a chi-squared test was used to test for statistically significant relationships between any one centrality measure and category, urban deprivation or location. The results showed that betweenness was the centrality measure that had a statistically significant relationship with category, urban deprivation or location. An additional chi-squared test testing for a relationship between Greater Vancouver, material deprivation and betweenness was run in SPSS. Data tables summarizing this were exported from SPSS and saved in Microsoft Word. The distribution of nodes with a betweenness score in: 1) areas of very high material deprivation; 2) areas within versus areas outside Greater Vancouver; 3) cultural social enterprises versus social enterprises in other categories, and the layered chi-squared test were analyzed using a chi-squared test with the cross-tabs function in SPSS.

2.4. Findings

2.4.1. The Workplaces of Online Endorsers of Social Enterprise Heads are Concentrated Regionally in British Columbia

The QGIS map show endorsements from individuals in workplaces across the world, but these workplaces are visibly concentrated in British Columbia as Figures 5 – 7 demonstrate. Figures 8 – 17 demonstrate this concentration more clearly using bar charts.
Figure 5: Global Distribution of Endorsements Based on the Workplace Location of the Endorser
Figure 6: North American Distribution of Endorsements Based on the Workplace Location of the Endorser
Figure 7: Endorser Workplaces Concentrate in British Columbia
Figure 8: Locations of Endorser Workplaces by Region by Frequency for Heads of Environmental SEs

Figure 9: Locations of Endorser Workplaces by Region by Frequency for Heads of Cultural SEs
Figure 10: Locations of Endorser Workplaces by Region by Frequency for Heads of Employment/Training SEs

Figure 11: Locations of Endorser Workplaces by Region by Frequency for Heads of Museum/Art Gallery SEs
Figure 12: Locations of Endorser Workplaces by Region by Frequency for Heads of Agricultural SEs

Figure 13: Locations of Endorser Workplaces by Region by Frequency for Heads of Housing SEs
Figure 14: Locations of Endorser Workplaces by Region by Frequency for Heads of Child Day Care SEs

Figure 15: Locations of Endorser Workplaces by Region by Frequency for Heads of Thrift Store SEs
Figure 16: Locations of Endorser Workplaces by Region by Frequency for Heads of Farmers Market SEs

Figure 17: Locations of Endorser Workplaces by Region by Frequency for Heads of Miscellaneous SEs
The results show that across all categories of social enterprise workplace locations of online endorsers were concentrated in British Columbia. More than 50% of all endorsers worked within British Columbia. However, the frequencies mask some other trends that surface in the relative percentages of endorsements in each category. Farmers markets have the highest percent of endorsers in British Columbia with 89% of endorsers working inside British Columbia. Environmental social enterprises have the lowest percent of endorsements in British Columbia at 56%. Employment and training social enterprises have the highest percent of endorsers working in the USA at 16%. Environmental social enterprises have the highest percent of endorsers working in provinces outside BC at 23%. Agricultural social enterprises have the highest percent of endorsements in Europe at 9%. These relative trends show that the geographic spread of endorser workplaces across SE categories is varied. A final important point is that no endorsements in Asia, the Middle East, Australasia and South America made up more than 2% of overall endorsements for any given category. This shows online global technologies are being used by SE heads to shore up their regional networks.

There are also findings in terms of regions across the world and what category the workplaces in these regions are related to. In all regions of the globe except South America and Europe at least 50% of all workplaces housed endorsers of cultural social enterprises. Therefore the overall picture emerges of endorser workplaces concentrated regionally in British Columbia but all regions in the world are dominated by endorsers of cultural enterprises except in South America and Europe. This regional pattern remained unchanged by the City of Vancouver, which though often cited as a global city, did not house significant majorities of workplaces when compared to the rest of British Columbia, except in the case of housing SEs as Figure 18 shows:
Figure 18: Frequency of Endorser Workplaces Inside the City of Vancouver or Outside but within BC
“Vancouver” includes street addresses confirmed in the City of Vancouver and profiles tagged as “Vancouver”. “Outside” includes street addresses or towns confirmed outside the City of Vancouver. Of 3764 profiles tagged as “Vancouver” 335 were discovered to be outside the City of Vancouver, giving an error of 9% in favor of areas outside the City of Vancouver. The charts in general support the notion of regional connectedness across British Columbia because some profiles tagged as “Vancouver” will not always be in the City of Vancouver, whereas “outside” locations are all confirmed as outside the City of Vancouver, so were all street addresses to have been identified, a small portion in “Vancouver” would move “outside”. Cultural and housing social enterprises were the only SEs with more than 50% of endorsements originating in “Vancouver”. Miscellaneous, farmers markets, thrift stores, day cares, museums and art galleries and employment SEs all had over 50% of endorsements originating outside of “Vancouver”. Agricultural and environmental SEs had balanced numbers of endorsements from within and outside of “Vancouver”. Housing SEs had the largest percentage of endorsements within “Vancouver” - some 74%. Farmers markets had the largest numbers of endorsements outside Vancouver – some 68%. There were also findings about the share of endorser workplaces per category in and outside of the City of Vancouver as Figure 19 demonstrates:
Figure 19: Percentage of Endorser Workplaces in Each Category both in and outside of Vancouver
The main trend above shows cultural SEs had the largest numbers of endorsements originating both within and outside “Vancouver”. Cultural SEs had more than 50% of endorsements within Vancouver and less than 50% outside Vancouver. Housing, joint with miscellaneous, claimed the second largest share of endorsements within Vancouver at 10%. After miscellaneous SEs, museums and art galleries claimed the second most endorsements outside Vancouver at 9%. Thrift stores and farmers markets had the fewest percentage of endorsements within Vancouver. Thrift stores, housing and day care had the fewest percentage of endorsements outside Vancouver. Both in and outside Vancouver employment-based social enterprises had the third largest percentage of endorsements.

The data in sum shows that British Columbia is the only geographic region where endorsers consistently and overwhelmingly concentrate across every category of social enterprise. This same pattern and consistency is not repeated for endorsers across every category of social enterprise in Vancouver, though there are exceptions. Therefore endorsers, whatever the category, are overwhelmingly and consistently concentrated in British Columbia when compared to other areas of the world and Vancouver. However, the majority of endorsers endorse the heads of cultural social enterprises. The conclusion therefore is that in this online professional social network cultural social enterprise heads and the region of British Columbia possess the overwhelming share of endorsers. In other words this online professional network is a largely cultural and regional phenomenon. This stands in sharp contrast to both the diversity of social enterprises who all have access to low-barrier online networks and to the purported “global” nature of both online technologies and of the “global city” of Vancouver. The assumption, easily arrived at, that all categories of social enterprise are represented in online professional networks, that online networks tend to be largely global in nature and that the City of Vancouver is a globally connected network hub are all questioned in the context of social enterprise by these findings.
2.4.2. Social Enterprise Head Profile Pages with a Betweenness Score refer back to Cultural SEs and Specific Areas more than Expected

ArcGIS maps for the centrality scores (degree, closeness centrality, eigenvector centrality, betweenness) of all social enterprise heads that it was possible to generate a score for were made. However, only betweenness was statistically significantly correlated with category, location and level of material deprivation. Freeman (1979, p.224) writes that, “betweenness is useful as an index of the potential of a point for control of communication”. Stated in simple terms, a node with a high betweenness score connects two disparate groups (or individuals) and sits at the “bottleneck” of communication, where communication across many nodes must pass through a single node. Therefore a social enterprise head with a high betweenness score could, hypothetically, act as a go-between for information to travel between at least two different social enterprise heads, or more, if the score is higher. In this case, to make betweenness possible past a connection between two heads of a social enterprise, an endorser plays the role of connector to other social enterprise heads. The social enterprise heads it was possible to obtain both a betweenness score and a material deprivation score for based on 2006 census data categorized by Pampalon are represented by the location of their workplace in the below maps:
Figure 20: Map of British Columbia shaded by material deprivation and displaying the location of the workplaces of social enterprise heads size according to betweenness scores.
Figure 21: Inset map of British Columbia shaded by material deprivation and displaying the location of the workplaces of social enterprise heads size according to betweenness scores
These maps show a “switchboard” of key social enterprise heads, represented by their workplace, who could hypothetically serve as information bridges between other social enterprise heads in this online social network. However, this is also a switchboard of social enterprise heads who are actually directly connected, via an endorsement, to at least one other social enterprise head in the online professional network. The locations of the workplaces of these well-connected heads of social enterprises are located, more than expected, within Greater Vancouver. A chi-square test in SPSS confirms this with a p-value of 0.002:

Table 6: Betweenness versus Location Crosstabulation

<table>
<thead>
<tr>
<th></th>
<th>Location</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Outside</td>
<td>Greater V.</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>No Count</td>
<td>157</td>
<td>104</td>
<td>261</td>
</tr>
<tr>
<td></td>
<td>Between</td>
<td>146.8</td>
<td>114.2</td>
<td>261.0</td>
</tr>
<tr>
<td></td>
<td>-ness Expected Count</td>
<td>89.2%</td>
<td>75.9%</td>
<td>83.4%</td>
</tr>
<tr>
<td></td>
<td>Has Count</td>
<td>19</td>
<td>33</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Between</td>
<td>29.2</td>
<td>22.8</td>
<td>52.0</td>
</tr>
<tr>
<td></td>
<td>-ness Expected Count</td>
<td>10.8%</td>
<td>24.1%</td>
<td>16.6%</td>
</tr>
<tr>
<td></td>
<td>Total Count</td>
<td>176</td>
<td>137</td>
<td>313</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>176.0</td>
<td>137.0</td>
<td>313.0</td>
</tr>
<tr>
<td></td>
<td>% within Location</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>9.825</td>
<td>1</td>
<td>.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correctionb</td>
<td>8.889</td>
<td>1</td>
<td>.003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>9.782</td>
<td>1</td>
<td>.002</td>
<td></td>
<td>.002</td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.002</td>
</tr>
<tr>
<td>Linear-by-Linear Assoc.</td>
<td>9.793</td>
<td>1</td>
<td>.002</td>
<td></td>
<td>.001</td>
</tr>
</tbody>
</table>

N of Valid Cases 313

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 22.76.
b. Computed only for a 2x2 table
This shows that Greater Vancouver houses individuals that may be important in a complex online British Columbia-based network. This emphasizes Greater Vancouver’s role as an important regional hub in the context of social enterprises, in contrast to the assumed importance of Greater Vancouver as a global hub, which may apply in other contexts, but not in this one.

The map does not show those social enterprise heads with betweenness scores in either only areas of very high material deprivation or only areas of very low material deprivation. More individuals than expected with both betweenness scores and very high material deprivation scores were present when compared to individuals with no betweenness score but a score for very high material deprivation. The opposite pattern was present in areas of very low material deprivation. Fewer individuals than expected with both betweenness scores and very low material deprivation scores were present when compared to individuals with no betweenness score but a score for very low material deprivation. These relationships were significant with a p-value of 0.015. These findings are summarized in the following output from SPSS:
**Table 7:** Chi-squared output from SPSS showing more than expected numbers of social enterprise heads with betweenness scores in areas of very high material deprivation

<table>
<thead>
<tr>
<th>Material Deprivation</th>
<th>Betweenness Score</th>
<th>Has Betweenness Score</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very low/low material deprivation</td>
<td>Count 94</td>
<td>16</td>
<td>109</td>
</tr>
<tr>
<td></td>
<td>Expected Count 88.6</td>
<td>20.4</td>
<td>109.0</td>
</tr>
<tr>
<td></td>
<td>% within MaterialDep 86.2%</td>
<td>13.8%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>% within Between 74.6%</td>
<td>51.7%</td>
<td>70.3%</td>
</tr>
<tr>
<td></td>
<td>% of Total 60.6%</td>
<td>9.7%</td>
<td>70.3%</td>
</tr>
<tr>
<td>Very high material deprivation</td>
<td>Count 32</td>
<td>14</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>Expected Count 37.4</td>
<td>8.6</td>
<td>46.0</td>
</tr>
<tr>
<td></td>
<td>% within MaterialDep 69.6%</td>
<td>30.4%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>% within Between 25.4%</td>
<td>48.3%</td>
<td>29.7%</td>
</tr>
<tr>
<td></td>
<td>% of Total 20.6%</td>
<td>9.0%</td>
<td>29.7%</td>
</tr>
<tr>
<td>Total</td>
<td>Count 126</td>
<td>29</td>
<td>155</td>
</tr>
<tr>
<td></td>
<td>Expected Count 126.0</td>
<td>29.0</td>
<td>155.0</td>
</tr>
<tr>
<td></td>
<td>% within MaterialDep 81.3%</td>
<td>18.7%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>% within Between 100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>% of Total 81.3%</td>
<td>18.7%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

**Chi-Square Tests**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>5.913a</td>
<td>1</td>
<td>.015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correctionb</td>
<td>4.867</td>
<td>1</td>
<td>.027</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>5.548</td>
<td>1</td>
<td>.016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher’s Exact Test</td>
<td></td>
<td></td>
<td></td>
<td>.023</td>
<td>.016</td>
</tr>
<tr>
<td>Linear-by-Linear Assoc</td>
<td>5.875</td>
<td>1</td>
<td>.015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>155</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a* 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.61.

b. Computed only for a 2x2 table
Finally, a chi-squared test shows that social enterprise heads with a betweenness score are present more than expected in cultural social enterprises and this has a p-value of 0.004:

Table 8: Betweenness versus Category of Organization Crosstabulation

<table>
<thead>
<tr>
<th>Category</th>
<th>Cultural_SEs</th>
<th>Non_Cultural_SEs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>109</td>
<td>152</td>
<td>261</td>
</tr>
<tr>
<td>Count</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected Count</td>
<td>118.4</td>
<td>142.6</td>
<td>261.0</td>
</tr>
<tr>
<td>% within CATORG</td>
<td>76.8%</td>
<td>88.9%</td>
<td>83.4%</td>
</tr>
<tr>
<td>Has Between</td>
<td>33</td>
<td>19</td>
<td>52</td>
</tr>
<tr>
<td>Count</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected Count</td>
<td>23.6</td>
<td>28.4</td>
<td>52.0</td>
</tr>
<tr>
<td>% within CATORG</td>
<td>23.2%</td>
<td>11.1%</td>
<td>16.6%</td>
</tr>
<tr>
<td>Total</td>
<td>142</td>
<td>171</td>
<td>313</td>
</tr>
<tr>
<td>Count</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected Count</td>
<td>142.0</td>
<td>171.0</td>
<td>313.0</td>
</tr>
<tr>
<td>% within CATORG</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>8.237</td>
<td>1</td>
<td>.004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correction</td>
<td>7.385</td>
<td>1</td>
<td>.007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>8.242</td>
<td>1</td>
<td>.004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td></td>
<td></td>
<td></td>
<td>.006</td>
<td>.003</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>8.211</td>
<td>1</td>
<td>.004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>313</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 23.59.
b. Computed only for a 2x2 table
There are also fewer than expected social enterprise heads with a betweenness score in non-cultural social enterprises. Finally a layered chi-squared test revealed that betweenness among social enterprise heads occurred more than expected only in areas of very high material deprivation within Greater Vancouver, and not outside:

**Table 9: Layered Chi-Squared Test Comparing Greater Vancouver, Material Deprivation and Betweenness**

<table>
<thead>
<tr>
<th>Greater_Van</th>
<th>MaterialDep</th>
<th>LowDP</th>
<th>Count</th>
<th>Between</th>
<th>HasBT</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>NoBT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greater Vancouver</td>
<td>MaterialDep</td>
<td>LowDP</td>
<td>47</td>
<td>11</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>Count</td>
<td>42.6</td>
<td>15.4</td>
<td>58.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>% within</td>
<td>MaterialDep</td>
<td>81.0%</td>
<td>19.0%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>% within</td>
<td>Between</td>
<td>81.0%</td>
<td>52.4%</td>
<td>73.4%</td>
<td></td>
</tr>
<tr>
<td>VHighDP</td>
<td>Count</td>
<td>11</td>
<td>10</td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>Count</td>
<td>15.4</td>
<td>5.6</td>
<td>21.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>% within</td>
<td>MaterialDep</td>
<td>52.4%</td>
<td>47.6%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>% within</td>
<td>Between</td>
<td>19.0%</td>
<td>47.6%</td>
<td>26.6%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>58</td>
<td>21</td>
<td>79</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>Count</td>
<td>58.0</td>
<td>21.0</td>
<td>79.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>% within</td>
<td>MaterialDep</td>
<td>73.4%</td>
<td>26.6%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>% within</td>
<td>Between</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Outside Greater Vancouver</td>
<td>MaterialDep</td>
<td>LowDP</td>
<td>Count</td>
<td>47</td>
<td>4</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>Count</td>
<td>45.6</td>
<td>5.4</td>
<td>51.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>% within</td>
<td>MaterialDep</td>
<td>92.2%</td>
<td>7.8%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>% within</td>
<td>Between</td>
<td>69.1%</td>
<td>50.0%</td>
<td>67.1%</td>
<td></td>
</tr>
<tr>
<td>VHighDP</td>
<td>Count</td>
<td>21</td>
<td>4</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>Count</td>
<td>22.4</td>
<td>2.6</td>
<td>25.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>% within</td>
<td>MaterialDep</td>
<td>84.0%</td>
<td>16.0%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>% within</td>
<td>Between</td>
<td>30.9%</td>
<td>50.0%</td>
<td>32.9%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>68</td>
<td>8</td>
<td>76</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expected</td>
<td>Count</td>
<td>68.0</td>
<td>8.0</td>
<td>76.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>% within</td>
<td>MaterialDep</td>
<td>89.5%</td>
<td>10.5%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MaterialDep</td>
<td>LowDP</td>
<td>Count</td>
<td>Expected Count</td>
<td>% within MaterialDep</td>
<td>% within Between</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
<td>-------</td>
<td>-------</td>
<td>----------------</td>
<td>----------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100.0%</td>
</tr>
<tr>
<td>VHighDP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Chi-Square Tests

<table>
<thead>
<tr>
<th>Greater Van</th>
<th>Value</th>
<th>df</th>
<th>Asymptotic Significance (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater Vancouver</td>
<td>6.486(^c)</td>
<td>1</td>
<td>0.011</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.101</td>
<td>1</td>
<td>0.024</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.083</td>
<td>1</td>
<td>0.014</td>
<td>0.019</td>
<td>0.014</td>
</tr>
<tr>
<td></td>
<td>6.404</td>
<td>1</td>
<td>0.011</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>79</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outside Greater Vancouver</td>
<td>1.185(^d)</td>
<td>1</td>
<td>0.276</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.477</td>
<td>1</td>
<td>0.490</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.122</td>
<td>1</td>
<td>0.290</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.170</td>
<td>1</td>
<td>0.279</td>
<td>0.427</td>
<td>0.240</td>
</tr>
<tr>
<td></td>
<td>76</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The data shows three observable patterns, which are partly explained by the layered chi-squared test. These three patterns are that social enterprise heads that are between other social enterprise heads in the professional network tend to be found in: 1) Greater Vancouver; 2) cultural social enterprises; 3) areas of very high material deprivation, more than expected. The data does not provide reasons why an individual within Greater Vancouver, areas of very high material deprivation and cultural social enterprises may be better connected online in terms of betweenness. However, the

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Approximate Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater_Van</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal by Nominal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phi</td>
<td>0.287</td>
<td>0.011</td>
</tr>
<tr>
<td>Cramer's V</td>
<td>0.287</td>
<td>0.011</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>79</td>
<td></td>
</tr>
<tr>
<td>Outside Greater Van</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal by Nominal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phi</td>
<td>0.125</td>
<td>0.276</td>
</tr>
<tr>
<td>Cramer's V</td>
<td>0.125</td>
<td>0.276</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>76</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal by Nominal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phi</td>
<td>0.195</td>
<td>0.015</td>
</tr>
<tr>
<td>Cramer's V</td>
<td>0.195</td>
<td>0.015</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>155</td>
<td></td>
</tr>
</tbody>
</table>
layered chi-squared test shows that the concentration of very highly materially deprived social enterprise heads with betweenness scores occurs within Greater Vancouver and not outside. There is a statically significant relationship between the area of Greater Vancouver and the more than expected social enterprise heads in very materially deprived areas with betweenness scores. Therefore one finding relates to another.

The majority of endorser workplaces are not consistently located in the City of Vancouver, but the majority of high quality nodes in the network with a betweenness score are concentrated in Greater Vancouver, and the majority of locations within “Greater Vancouver” in the database are within the City of Vancouver. Therefore the quality, not the quantity, of the network, tends to concentrate in the City of Vancouver. Similarly, quality nodes in the network are concentrated in cultural social enterprises. Overall, sub-region (Greater Vancouver), cultural purpose and deprived economic conditions vary a mini online network of social enterprise heads among what at first appears to be a simple concentration of endorser networks in British Columbia and cultural SEs. This variation in the mini network of heads, in terms of very highly materially deprived areas with between heads, is partly explained by the social enterprise being located in Greater Vancouver. Chapters three and four provide further anecdotal evidence to support these findings.

2.4.3. Social Enterprise Head Profile Pages as Heterotopias

The profile pages of social enterprise heads in British Columbia exhibit a set of relations that refer back to the workplaces of endorsers, and these workplaces are concentrated in British Columbia. The endorsements section on the profile page is the online relational space where the set of relations are recorded. Each endorsement hyperlink refers back to the workplace of an endorser in, “an ensemble of relations that makes them [the workplaces] appear as juxtaposed,” (Foucault, 1967, p.1). Without these Cartesian workplaces it would not be possible to create the endorsement section on the profile page. Here, Johnson’s (2013, p.794 [sq. brackets added]) re-translation of Foucault’s phrase needs be mentioned:

Foucault’s text suggests that these spaces [heterotopias] are described as ‘utterly’ different ‘from all the emplacements that they reflect or refer to’ and not as Saldanha claims from ‘all the rest’ of space…Miskowiec, translates
découpages du temps as ‘temporal discontinuities’ rather than ‘slice of
time’, emphasising the variance of breaks or cuts in time

Two points need making here. The online profile page as a site ends up being “utterly”
different from all the Cartesian workplaces it refers back to. Secondly, the endorsements
are made at different times by different endorsers, which introduces “temporal
discontinuities”. Therefore the spatial and temporal behaviour of the social enterprise head
profile page fits Foucault’s (1967) basic definition of a heterotopia based on Johnson’s
(2013) re-translation. The first finding in this chapter suggests that social enterprise head
profile pages refer back to Cartesian workplaces inside British Columbia. As Foucault
(1967) writes a heterotopia, “is a space that is however connected with all the sites of the
city, state or society or village, etc.” The first finding of this chapter is that the social
enterprise head profile page as a relational space falls within the etc. of Foucault’s (1967)
specification, connecting with all the other “emplacements” (Johnson, 2013) it refers back
to in the region in terms of the overall pattern.

The second finding in this chapter describes how the reference of the social
enterprise head profile page to a Cartesian characteristic of the social enterprise the head
works for can influence the expectancy that the social enterprise head profile page will
refer to another social enterprise head profile page. A simpler metaphor would be of the
ship. The characteristics of the shipyard where a ship was built changes the expectancy
that the ship will connect two fleets of ships together in a network (betweenness). This is
a more complicated explication of Foucault’s theory that a heterotopia, “is a space that is
however connected with all the sites of the city, state or society or village, etc.” Foucault
(1967) here means connection to all the sites that the heterotopia refers to (Johnson, 2013) and not literally every single site within a bounded area. Social enterprises that are
cultural or inside areas of very high material deprivation or inside Greater Vancouver are
more likely to be better connected to other social enterprise heads online. This shows how
profile pages as ships sail differently online according to the Cartesian characteristics of
the shipyards (cultural/materially deprived/inside Greater Vancouver sites) where they
were built. The reason for this in the context of British Columbian social enterprise is
unknown.
Foucault (1967) states six qualifications for the definition of a heterotopia: variety, multi-functionality, juxtaposition of Cartesian sites outside Cartesian space, “temporal discontinuities” (Johnson, 2013), simultaneous opening and closing mechanisms and a site that is meticulously well-arranged. Log-in mechanisms and gated access to certain content makes up the “opening and closing mechanisms” on social network sites. The profile pages of social enterprises heads match Foucault’s (1967) six-point criteria, and the finer, more complicated points of this have been explained in this section.

2.5. Limitations

The main limitations are two-fold. Firstly, the findings arrived at are simple and without demonstrable cause. It has taken large amounts of time and data to demonstrate the concentration of endorsers, represented by their place of work, in British Columbia and cultural social enterprises. It has taken still further effort to demonstrate that this finding varies according to the betweenness of select nodes that tend to concentrate in Greater Vancouver, cultural social enterprises and areas of very high material deprivation. Further in-depth research is required to find out why these patterns exist. Part of this has been accomplished in chapter three by conducting interviews but this only reveals the tip of the iceberg.

Secondly, the map shows endorsers, not in terms of where they endorsed “in the moment”, as this was impossible, but in terms of where they work. Workplaces change so this study is a snapshot in a dynamic, changing networked world, where people frequently change jobs, and where new endorsements are added. Therefore the maps are highly representational, and though they reveal much, are to be interpreted as representations of a network based certainly in cyber space, but also possibly in physical space too. This is only a possibility though but to be able to uncover such a large and demonstrable network is tantalizing especially since it would take many years and hours to do the same work face-to-face. Though the introduction of uncertainty via the possibility that online networks do not fully translate into face-to-face networks, for the internet researcher, the role of data collection has been transferred to the machine, and while this in itself sets
limits, it transcends many others and is a “cyborg” moment in the research methodologies of internet-based researchers.

2.6. Conclusion

This study required a high degree of triangulation both between empirics and theory, as well as between different types of software that are traditionally reserved for individual methodologies. The “geo-social visual analytics” approach produced outputs that fit in well with Foucault’s concept of heterotopia. There are three main findings related to the outputs of the chapter. The first is that the online professional social networks of social enterprise heads, represented by the workplace location of individuals that endorsed them, are primarily located within British Columbia and in cultural social enterprises. The second finding elaborated on this general pattern. Analysis in ArcGIS and SPSS showed that social enterprise heads with a betweenness score were concentrated in Greater Vancouver, cultural social enterprises and areas of very high material deprivation more than would be expected otherwise. These were places and categories in British Columbia that tended to concentrate “higher quality” nodes within the network and these between individuals were better possible conduits for information moving online and possibly offline. Moreover, the layered chi-squared analysis shows that more than expected heads with betweenness in very highly materially deprived areas is an urban phenomenon, occurring in Greater Vancouver, but not outside. The individual profile pages of social enterprise heads juxtaposed many links to profile pages representative of workplaces largely concentrated in British Columbia and cultural social enterprises in an archival-like way, spread differentially across space, that fits well the notion of “heterotopia” by Michel Foucault. This notion has a qualitative element of crisis that is explored in subsequent chapters.
Chapter 3.

Social Enterprise Facebook Pages and their Local and Demographic Reaches

3.1. Abstract

This chapter hypothesizes that the Facebook pages of select social enterprises reach a specific demographic and reaches localities within British Columbia that overlap with the endorser workplaces of its social enterprise head as uncovered in chapter two. 10 social enterprises participated in a university community partnership to that provided access to Hootsuite Pro for the social enterprises. All social enterprise Facebook Pages reached an overwhelmingly female audience. The geographic reach of the Facebook pages were all concentrated in localities within British Columbia. Overlap between the geographic reach of the Facebook pages and the workplace locations of the head of the social enterprise was observed particularly for social enterprise heads with a betweenness score. These Facebook pages are theorized as structurally heterotopic, while anecdotal evidence from interviews with the social enterprises suggests possible reasons for the observed patterns in the statistical data.

3.2. Introduction

University-community partnerships have been successful with social enterprises in British Columbia in the recent past (Hall & MacPherson, 2012). A partnership is defined as a collaboration between at least one member from the university with at least one member from the community, and research is generated through a joint effort (Hall & MacPherson, 2012). The partnership between universities and community members is an essential progressive moment for human geography since it potentially provides a means to create productive alliances that potentially undermine the corporatization of universities and refocuses priorities internally within university departments (Harney et al, 2016). This chapter details a partnership between Simon Fraser University and ten social enterprises.
spread across British Columbia. The partnership was funded by Radical Ideas Useful to Society (RADIUS) and contributed towards increasing the community impact of the Department of Geography, Simon Fraser University, within British Columbia. The funds were used to purchase Hootsuite Pro for the social enterprises, and this enabled SFU to view the gender and city location of the users that accessed the social enterprise Facebook pages. The data on users spanned the period of a year and was divided into months.

The use of Hootsuite as a research tool fitted with recent debates in geography. Engaging with the complexities of digital technologies enmeshed within social assemblages is emerging as a crucial task for human geographers (Gillian, 2015). This chapter did this through a partnership with social enterprises. There had been a growth in external pressure on academics to engage with local communities (Harkavy, 1998). Now community partnerships are increasingly encouraged within universities and funding has accompanied this drive (Hall & MacPherson, 2012). At the same time, funding has been freed up to research the social economy, which includes social enterprises, and this has been prioritized as a research area within Canada (Hall & MacPherson, 2012). This institutional context provided the justification for the university-community partnership engaged in within this chapter.

No studies to date have used triangulated methods, including interviews and geo-visual social analytics, to approach the use of social media among social enterprises. The outputs of this chapter are one table and one graph that demonstrates the geographic and demographic reach of the 10 social enterprises involved in the research partnership. These are based on analytic data on the reach of Facebook pages generated by Hootsuite Pro. Positioning these Facebook pages as heterotopias builds on recent work in the discipline of psychology by Rymarczuk & Derksen (2014). They introduce the idea that a page in Facebook can seamlessly merge spaces together within a single world, but choose to focus instead on experiences of attraction and discomfort, which does not directly fit with Foucault’s original focus on crisis and deviation. Internet sites are also positioned by Jacobs (2004) as heterotopias but this focuses on individuals watching pornography in the moment. Therefore while this chapter does build on demonstrable recent research linking networked Internet sites, including Facebook, to the idea of a
heterotopia, the demonstration of how an organization reaches out to community through an online page is different when compared with a previous focus on individual consumers of social media or Internet content.

One of the main non-research goals of the partnership was to provide access to spatial and demographic information about the reach of a social enterprise’s Facebook page for the benefit of the social enterprises. In the absence of this spatial data a profile page is situated in a void, theoretically observable from any place in the world with access to Facebook at any time, and this does not help social enterprises, who need to target users according to business goals. Hootsuite Pro allows the Cartesian places the Facebook profile touches to be delimited, defined and unveiled using paid access to Hootsuite Pro analytics. Therefore funds were being used to change the environment outside the heterotopian profile page to prevent it being a crisis heterotopia defined by a lack of time or expertise, which is a theme that emerges in chapter four. The Facebook profile is also related to the Cartesian sites of the social enterprises. The map below sums up the locations of the social enterprise across British Columbia and Table 10 gives a brief profile of each:
Figure 22: Locations of Partner Social Enterprises in British Columbia
Table 10: General Profiles of Partner Social Enterprises

<table>
<thead>
<tr>
<th>Social Enterprise (SE)</th>
<th>Location</th>
<th>Mission/Purpose</th>
<th>Level of Material Deprivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE1</td>
<td>Vancouver</td>
<td>Family-based</td>
<td>Low</td>
</tr>
<tr>
<td>SE2</td>
<td>Vancouver</td>
<td>Employment-based</td>
<td>High</td>
</tr>
<tr>
<td>SE3</td>
<td>Vancouver</td>
<td>Theatre</td>
<td>High</td>
</tr>
<tr>
<td>SE4</td>
<td>Victoria</td>
<td>Co-op</td>
<td>Low</td>
</tr>
<tr>
<td>SE5</td>
<td>Victoria</td>
<td>Suicide Prevention</td>
<td>High</td>
</tr>
<tr>
<td>SE6</td>
<td>Victoria</td>
<td>Art Gallery</td>
<td>Low</td>
</tr>
<tr>
<td>SE7</td>
<td>Nanaimo</td>
<td>Museum</td>
<td>Low</td>
</tr>
<tr>
<td>SE8</td>
<td>Princeton</td>
<td>Museum</td>
<td>High</td>
</tr>
<tr>
<td>SE9</td>
<td>Kelowna</td>
<td>Elderly Care</td>
<td>Low</td>
</tr>
<tr>
<td>SE10</td>
<td>Kootney Bay</td>
<td>Mind/Body Development</td>
<td>High</td>
</tr>
</tbody>
</table>

3.3. Methodology & Methods

This chapter uses a similar methodology to Williams (et al, 2008, p.112) who combined a “quantitative and qualitative analysis, together with GIS technology” (aimed at in chapter two) with a “participatory action research approach”. However, there are some important differences. The methodology for this chapter puts value on non-intervention in the community during the data collection phase to ensure the rigour of the data based research results. This is why only data before the community partnership started is used. Conversely the “action” and “participation” part of the SEN project occurs after the data for the research has been gathered. The provision of Hootsuite Pro and the subsequent interviews are the participatory action part of this chapter. This falls in line with Williams’ (et al, 2008, p.122) methodological justification of participatory action as a method that, “ensures the values of the outputs to stakeholders”. The interviews used in this chapter were analysed and coded as part of chapter four (see methodology and methods section). Therefore this chapter is a methodological bridge between the quantitative approach in chapter two and the qualitative approach in chapter four.
Online Environments and Collaboration

Online environments are increasingly proving to be rich resources for data collection. However, the collection of empirical data from online sources is nascent within the field of human geography (Dwyer & Davis, 2010). Surveys and interviews have been conducted on the Internet and interviews about internet usage have been conducted face-to-face bringing more traditional methodological approaches online (Dwyer & Davis, 2010). Relatedly Crooks (2006) found that women experiencing a crisis due to chronic illness accessed internet sites in order to find information, support and resources. Recent studies have leverage tools like Hootsuite to gather data which can help online resource providers better understand their impact on vulnerable populations, but greater understandings were mired by cost prohibitive upgrades (Jayaram et al, 2015). Funding for this project was provided to overcome cost barriers that could prevent social enterprises from using the full range of tools on Hootsuite. Allowing the full range of tools meant that they could better understand the impact of their content and improve best practices around social media.

The approach to data collection was novel in that it worked with the 10 partnered social enterprises to collect data over the period of a year (November 2014 – November 2015) and monthly reports about the geographic and demographic reach of their Facebook page were accessible on each social enterprise account for each month in the yearly period in the form of a CSV file. This was a “cyborg” moment in that the machine did the observation, data collection and packaging, whereas the task for researchers was to analyze the data and understand some of the patterns based on semi-structured interviews. Collaboration with the social enterprises began with a year’s worth of data already being collected off the machine records, so this was a unique way to observe the behaviour of the social enterprises’ Facebook pages without outside interference. In keeping with the broader partnership intent collaboration began on a monthly basis after November 2015 and included a training session at Hootsuite headquarters as well as the submission of a training report to all participants in the partnership.

The university-community partnership was set up through the recruitment of social enterprises and the formation of an advisory committee. An application form was
crafted and distributed after each social enterprise was approached in line with the ethical guidelines. The advisory committee was formed by two members of Simon Fraser University, one owner of an existing social enterprise, one representative from Enterprising Non-Profits and one employee of Hootsuite. This collaboration between the non-profit, public and for-profit sectors was an effective way of attracting the initial funding but it was also particularly necessary for social enterprises which often cross organizational boundaries in pursuit of dual social and business priorities. 17 social enterprises returned an application but only 10 signed on to receive a free annual subscription to Hootsuite worth $120 in the for-profit arena. Once the CSV files were obtained from the social enterprises off their Hootsuite Pro analytics then they could be aggregated into Excel from where line graphs were generated. A fusion of data from Chapter Two, for instance the betweenness values and the location of the endorsers for the heads of the social enterprises participating in the partnership enabled a table to be created that showed the relationship between betweenness and high numbers of endorser workplaces in the main city that the social enterprise Facebook page reaches on a yearly basis.

3.4. Findings

3.4.1. Women were the majority of users accessing Partner Social Enterprise Facebook Pages throughout the Year

The demographic findings reveal that for all 10 social enterprises, women were accessing the Facebook Pages in a consistently large majority. Figure 23 shows that the age groups within this female audience vary significantly. This age variation is also seen in Figure 23 across male audience percentages for the partner social enterprise but the main finding to note is the comparatively low reach rates of males across the board when compared to women.
Figure 23: Men and Women Audiences for the Social Enterprise Facebook Page per Social Enterprise: Annual Averages

Within this main finding that women are reached most consistently is a secondary finding that for most partner social enterprises the 25 – 44 or middle age bracket tends to dominate while the 13 -17 age range is consistently not reached. This is a problem for some social enterprises, particularly for instance SE5, the suicide prevention social
enterprise that specifically targets the 13 – 17 age range online in suicide prevention chat rooms. SE9 also encounters problems with dominance of the 65+ age range because while they service this demographic they seek to target the children of this generation which provides some of the funding. These findings will be explored further in the section 3.4.3., which looks at interview data and some of reasons put forward by the social enterprises themselves for these patterns.

3.4.2. High Numbers of Endorser Workplaces in the City Most Reached by the SE Facebook Page Positively Related to Betweenness

Another main finding was an overlap between Facebook pages of social enterprises that reached many people in their primary city of reach and the existence of a betweenness score for the social enterprise head. This is not a statistical conclusion and a general pattern cannot be said to exist. However, it was interesting that this arose among the partners and the pattern is visible in Table 11 below:

**Table 11: Overlap in Primary City that the Facebook Page Reached Over a Year and the Endorser Workplace Locations for the Respective Social Enterprise Head**

<p>| SE1 | Vancouver | 36 | 29.80% | Low | Yes |
| SE2 | Vancouver | 5 | 100% | High | No |
| SE3 | Vancouver | 20 | 58.80% | Low | Yes |
| SE4 | Winnipeg | 0 | 0% | Low | No |
| SE5 | Victoria | 1 | 100% | High | No |
| SE6 | Victoria | 1 | 10% | Low | No |
| SE7 | Nanaimo | 27 | 54% | Low | Yes |
| SE8 | Princeton | 0 | 0% | High | No |</p>
<table>
<thead>
<tr>
<th>SE9</th>
<th>Kelowna</th>
<th>8</th>
<th>34.80%</th>
<th>Low</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE10</td>
<td>Calgary/Vancouver</td>
<td>0</td>
<td>0%</td>
<td>High</td>
<td>No</td>
</tr>
</tbody>
</table>

While existing only in a small dataset, the pattern has a few interesting features. Firstly the number of endorsers in the primary city of reach for the Facebook page as a percentage of all endorsers was not a decisive factor. While two social enterprise heads had 100% of their endorsers’ workplaces in the primary city of reach for their social enterprises’ Facebook page these were in very low numbers: 1 and 5 respectively. This suggests that having high numbers of endorsers or professional relationships in the city that the social enterprise targets in general could associate with an improved quality of professional network for a social enterprise head for instance through greater betweenness. This finding is peculiar, geographically, because it suggests localization of social networks in an online space, a space often thought of as globalized, could improve the quality of professional networks. Thirdly the percentage of endorsers in the primary city for the heads with a betweenness score is more balanced, sitting between 30% – 60%, which could suggest that a balance between the local intensification of a network within a city and connections to other parts of British Columbia, or the world, could associate with a better quality professional network. However, while demonstrated, these patterns are not conclusive and could even be coincidental, so further research is needed here.

3.4.3. The Facebook Pages of Social Enterprises could be Crisis Heterotopias and Flag Politicisations of Gender

The Facebook pages of social enterprises can be theorised as crisis heterotopias, but only in the narrow context of limited interview data and no access to the users. The professional network page in phase one referred back to workplaces in Cartesian space, and similarly the Facebook page referred back to gendered users in specific cities inside B.C. For the social enterprises that were interviewed in the study a qualitative experience of crisis was attached to the profile page. However, it was not possible to interview the users, so it was not possible to theorise the Facebook profile page as a crisis heterotopia as it related to the users. This chapter flags small, anecdotal interview data that hint at a possible qualitative expression of crisis, but only in the narrow context of the social
enterprises who were interviewed. Therefore a considerable amount of further research, ideally among users, is required to comprehensively theorise the Facebook pages of social enterprises as crisis heterotopias. What follows below is an incomplete map, but one that seeks to provoke further debate.

The first social enterprise that was interviewed about the demographics of their users on Facebook was SE1. SE1 is focused on maintaining the well-being of families in British Columbia and offered the below comment about the finding that the majority of their Facebook page audience was female:

this is something that we’ve found quite frequently I think it was about two years ago we did a fairly extensive poll of our constituents and found that a huge percentage of them are female probably about 70%...a lot of times the role of and I do not necessarily agree with this but it’s kind of the way it is in our culture right now is that females are taking on a lot of the researching what’s happening with families and what’s important for families and how do we deal with this issue and kind of just the work of parenting a lot of that stuff tends to fall in the woman’s domain so I think that’s why we find that a lot of our engagement is coming from females – SE1

For the specific context of SE1 – families in B.C. - the role of women in society, in the opinion of the interviewee, was put forward as a cause for the large numbers of female users on their Facebook page. While further research would be required to confirm this assertion, the above interview quote expresses the interviewee’s awareness of a wider crisis related to the role women play in families and how this could help explain the demographic profile of the Facebook page. Therefore while an experience of crisis ends up being related to the profile page through the opinion of the social enterprise staff member, I did not examine whether this is indeed the case among users.

The next social enterprise available for interview also related their Facebook profile page to a gendered experience of crisis, namely suicide. SE5 reported that:

It is predominantly females we come in to see chat in our online chat rooms for whatever reason and that’s consistent with many support services they tend to see more females than males there are then questions about whether that has to do with the stigma of males reaching out for support versus females – SE5
It is not clear from this quote what these other support services are, and whether they are also non-profits or SEs. Further, the interviewee speculates about stigma as a factor in keeping men away from the chat rooms, but not the Facebook pages. The interviewee does state that the possible reason for the gender bias towards women on their Facebook page is due to female volunteers accessing the page for resources later in the interview. However, the link is not conclusive and the users could not be interviewed. That said, here we again have a social enterprise staff member relating a gendered experience of crisis to a profile page providing a limited, but valid, reason to use “crisis heterotopia” as a theorisation.

The “crisis heterotopia” helps position what the Facebook profiles pages are doing among these social enterprises. The Facebook pages of social enterprises continually connected to other places (Cartesian cities) over the year, yet were not in-and-of-themselves Cartesian entities, and juxtaposed and archived social enterprises’ messages across different orderings of time. As in phase one, the profile pages therefore met the structural requirements of Foucault’s (1967) heterotopia. Qualitatively, the social enterprises that were interviewed projected experiences of crisis on to the profile page in order to explain the gendered nature of their user profile. Therefore the social enterprise staff that were interviewed leaned towards Meyer’s (2010) parallel description of a heterotopic site (the farm) that can exist to shelter and nourish women experiencing a form of crisis, but this link between the Facebook profile and crisis is speculative at best. Further research among social enterprise Facebook users is required.

A consideration of such further research is that feminist theory(ies) could help explore the findings in this chapter and elsewhere. SE5 opined that men were being held back from seeking help when they became suicidal. SE5’s interview data can be read as a characterisation of masculinity. Inckle (2014, p.1) writes:

The invisibility of male self-injury results from the structures of normative gender that define “mental illness,” vulnerability, and distress behaviors through traditional masculinity and femininity. These structures impede the recognition of male self-injury and mitigate against the provision of appropriate support and male help-seeking.
SE5 tracks the logic within Inckle’s (2014) comments. Conversely SE1 opines that men may not do as much research about family life on Facebook as women. It is important to note that in both cases empirical evidence for both speculations is missing. However, further empirical work could lend itself to dialectical resolution through Harraway’s (2006) proposition that masculinity and femininity need to exist on a balanced plane rather than as opposed, for both genders to benefit. These political angles could be useful to consider in further research on and amongst the gendered users of Facebook social enterprise profiles pages.

3.4.4. The University Community Partnership Successfully Benefitted Social Enterprises

A main goal of the partnership with the social enterprises was to benefit them by providing support, training and data analytics. Evidence was collected from interviews that showed the partnership had made a significant impact. Rather than assuming access to Hootsuite Pro would confer benefits, it was more scientific to find out how Hootsuite Pro would benefit a social enterprise in reality. SE7 saw a real positive difference with the introduction of Hootsuite Pro, but not in the way expected, for instance through access to analytics. SE7 commented:

we like Hootsuite Pro a lot what I really like about it is that it allows you to use the actual calendar part in the Pro version you can do that and it’s really helpful...the calendar function is handy for me because I like to be able to see it a month at a time and lay them out a little more normally I had a paper calendar that I try and plot everything on but this works a lot better so then I can just see how we’re doing and where things are going...and we can see on the calendar everything that’s planned so it’s nice to be able see and I’m not the only one putting things up there now we’ve got multiple people putting things on – SE7

Whereas it had been assumed that the analytics would be of most benefit SE7 shows that social enterprises are highly adaptable and will utilize any parts of a software package to upgrade their existing systems. This is similar to how to towns such as Cobalt use the neoliberal grant model to address pressing issues outside the explicit remit of grants (Hall & Stern, 2015). In this case an upgrade from a paper to digital calendar was made possible, and now team access to the calendar in real time is possible. The calendar itself serves as a part of the Facebook page, a bit like the lighting set behind a stage and it too
is part of the function of the heterotopia. Therefore the ability of the heterotopia not just to connect out to other cyber sites connected to physical places, but also to marshal, record and order time, what Foucault (1967, p.6) calls “heterochronies” is also an essential outcome for some social enterprises.

Other evidence of the success of the intervention centred on the ability of Hootsuite to connect together multiple profile pages:

we use Hootsuite Pro all the time…it helps us because we have a number of social media channels and so it’s great we have our Twitter account in there we have our main Facebook page and then a number of our programs have their own Facebook pages so it allows us to have all of that in one space and schedule stuff to go on Twitter and stuff to go on Facebook and stuff goes in to all the different level places where we’re participating in social media – SE1

For SE1 the most successful outcome was that Hootsuite itself was acting as a heterotopia connected to and recording the different social media accounts they had to manage. This returns to a gap, identified in this study, which is that Foucault’s theory does not consider the possibility of a network of heterotopias even though the examples Foucault uses, for example of ships, naturally lends itself to expanding the concept out into analysis of networks. SE1 juxtaposed social media page heterotopias within the non-place of their Hootsuite account, itself a heterotopia. This is an invitation to more complex theorizations around the connection between heterotopias and networks that present study does not engage but which could be explored in further research.

Apart from the obvious benefit that access itself implies, data from the interviews reveals that opening the door to software will benefit a social enterprise according to the way it is deemed best used by organizational actors, and that assumptions about likely benefits may not always be correct. In this chapter evidence showed that increasing control over “heterochronies” and forming disparate heterotopias into a “grand” heterotopia were important benefits for social enterprises. In both cases the networked efficiency of the organization became denser, and this crucial link between networks and heterotopias requires further research, especially since Foucault wrote before the prevalence of the internet.
3.5. Limitations

Only 10 social enterprises could be engaged and this is small when compared to the 358 that were accessible on the Internet in chapter 2. The limitation in sample size means that the 10 social enterprises serve as case studies and the data cannot be used to make conclusive statements but rather can only be used to explicate a handful of possible reasons for trends in the partner social enterprises. This again points to the efficiency of online research compared with human endeavors. Moreover the project demanded a high level of time and involvement on the part of actors within partner organizations and as the findings on the benefits show, time and organization are precious resources within today’s non-profit sector. This translated into a barrier at times and it was important to be mindful of the commitments of social enterprise staff and not to inundate them.

3.6. Conclusions

The university-partnership did benefit partner social enterprises but sometimes in unexpected ways. Though analytics were assumed to be of most benefit the social enterprises used features of Hootsuite Pro that best suited them for instance the calendar function, scheduling and greater teamwork, which revealed a more pragmatic approach to new software acquisitions. Three main findings came out of the partnership. The first was that the audiences of the Facebook pages of social enterprises were predominantly female. This was explained by a second finding that the Facebook pages were associated with crisis by some social enterprise staff in interviews though empirical data to support this was not available. Potential politicisations of gender in the interview data were also explored. Significant further research into the users of the Facebook pages is required to arrive at more meaningful theorisations. A more surprising but as yet inconclusive finding was that social enterprise heads with large numbers of endorser workplaces in the city the social enterprise Facebook page was primarily reaching had a betweenness score whereas other heads did not. This could suggest that greater connectivity to users in a local club may positively associate with greater connectivity to professional contacts.
Chapter 4.

Cyber Heterotopias and Crises of Targeted Communication, Time and Resources

4.1. Abstract

Thirteen semi-structured interviews with social enterprise staff sought to explicate the findings in chapters two and three. Four clear findings emerged from the interviews: 1) professional social networks are not separate personal assemblages 2) SEs are using social media to deliver messages to localities within BC; 3) SEs are using targeted paid social media advertisements to deliver key messages to audiences; 4) smaller SEs are short on time and technical know-how when on social media profile pages. These findings reveal how social media profile pages are heterotopias that 1): allow social enterprises to experience a crisis in targeted communication in a networked non-place that offers control; 2) allow smaller social enterprises to experience a crisis in time and resources. No empirical evidence was found to support the original theoretical hypothesis which stated that the main crisis was that social media labouring did not fit well with the moral model of physical community based labour.

4.2. Introduction

Heterotopias are extraordinarily small or large bordered containers that hold sets of relations that are part of everyday life (Johnson, 2013, p.799). Johnson (2013, p.799) writes, “When we enter, we step into a world that mirrors, condenses and transforms the space outside, offering opportunities and dangers”. This mirrors Foucault’s (1967) characterisation of heterotopias as forbidden sites or control-enabling sites. A lot of work has been conducted on sites, or sets of relations, that can be represented in Cartesian space, which Table 12 lists below from Johnson (2013, p.796 – 797):
### Table 12: List of Cartesian Places Theorised as Heterotopias

| 1) Arab-Islamic architecture (Tonna 1990) |
| 2) An environmental installation (Genocchio 1995) |
| 3) The Museum of Pacific Island Culture (Kahn 1995) |
| 4) The Citadel LA – the civic centre of Los Angeles (Soja 1995) |
| 5) Gardens in Vienna (Rotenberg 1995) |
| 6) The Palais Royal, masonic lodges and early factories (Hetherington 1997) |
| 7) Vancouver’s New Public Library (Lees 1997) |
| 8) A performance prototype (Birringer 1998) |
| 9) Local exchange trading schemes (North 1999) |
| 10) Women’s colleges at the turn of the nineteenth century (Tamboukou 2000) |
| 11) Sites in Fascist Italy (Burdett 2000) |
| 12) Landscapes (Guarrasi 2001) |
| 13) Gated communities in South African security parks (Hook and Vrdoljak 2002) |
| 14) Buddhist Site of Swayambhu in Kathmandu Valley (Owens 2002) |
| 15) Underground band rooms in Hong Kong (Kit-Wai Ma 2002) |
| 16) The Nineteenth century ship narrative (Casarino 2002) |
| 17) British parks in the late nineteenth century (Joyce 2003, p. 223) |
| 18) Pornographic sites on the Internet (Jacobs 2004) |
| 19) The cybercafé (Liff 2003) |
| 20) The museum (Lord 2006) |
| 21) Chinatown in Washington DC (Lou 2007) |
| 22) The vampire (Davies 2008) |
| 23) Norwegian and English prisons (Baer and Ravneberg 2008) |
| 24) Patterns of disclosure among heterosexuals living with HIV (Persson and Richards 2008) |
| 25) The shopping mall (Kern 2008; Muzzio and Muzzio-Rentas 2008) |
| 26) Masculinity practices along the Tel Aviv shoreline (Allweil and Kallus 2008) |
| 27) Burial sites in Kinshasa, Congo (De Boeck 2008) |
| 28) The group dynamics of a climate camp (Saunders and Price 2009) |
| 29) The public nude beach (Andriotis 2010) |
| 30) Off-shore pirate radio station (Soffer 2010) |
| 31) The syringe and the shooting gallery (Vitellone 2010) |
| 32) Derek Jarman’s garden (Steyaert 2010) |
| 33) Hospitals (Coleman and Street 2012) |
| 34) Abney Park Cemetery in London (Gandy 2012) |
| 35) The Persian Garden (Kive 2012) |
| 36) The Lunar Cemetery (Damjanov 2013) |
Many of these papers follow Foucault’s (1967) original train of thought, which was to theorise heterotopias as deviant places. Deviance and crisis, however, are not the only experiences that have come to be attached to heterotopias as this corpus developed. This chapter departs from theorizations of heterotopias that privilege the role of deviance. This is partly due to the status of social enterprises as existing in the mainstream, but largely due to the interview data, which suggested experiences of crisis in these sites.

Before interviews were conducted, the original hypothesis was that by labouring on social media profiles pages, social enterprise staff may change their moral perception of their labour. This was based on Foucault’s (1988) idea that labour came to signify morality in the growing industrialised societies particularly when it was used as a tool against social problems. In the formulation of the hypothesis it was taken for granted that this same relation persists today and among social enterprises on a different continent to Foucault’s original archival analysis. The hypothesis rested on the assumption that on the profile page it is unclear whether the labour of social enterprise staff would clearly target social problems and that the moral relation could be reversed if users are given the chance to “like” or “endorse” the products of social enterprise labour. The interview data suggested that social enterprise staff do not view the morality of online labour differently. The interviews suggested that a more appropriate theorisation using Foucault’s (1967) “crisis heterotopia” would help demonstrate how the profile pages of social enterprises behave in relation to certain crises and places.

4.3. Methodology and Methods

This chapter used semi-structured interviews conducted in the workplaces of social enterprise communications managers and executive directors. Thirteen interviews were conducted. Rigour was an important consideration when using this method, and rigour in socio-scientific endeavours that use qualitative data has been of rising importance (Baxter & Eyles, 1997). Interviewees were selected according a strict criteria. They needed to work in a social enterprise that was relevant to other parts of the study which meant that they either: 1) work in a social enterprise in an area of very high or very low deprivation; 2) work in a social enterprise that took part in the university-community partnership; 3) work in a social enterprise that was a part of the professional network examined in chapter.
1; 4) work with a social enterprise outside the study data, but affiliated with Enterprising Non Profits. This ensured that social enterprises were already part of the patterns seen in the study or affiliated with an organization that contributed to the study and that they had been qualified as legitimate social enterprises.

The semi-structured interviews were conducted according to guidelines laid out by Valentine (1997) who provides a justification for semi-structured interviews as a socially oriented methodological lens. This meant taking a nuanced approach to conducting the interviews by thinking through questions and drawing up a set of basic questions before the interview, but also flowing with the conversation during the interview and probing appropriately (Valentine, 1997). The questions were centered on four themes based on findings in chapters two and three: 1) the strategic use of Facebook and LinkedIn; 2) the role of geographic targeting and analytics in social media usage; 3) the fit between online activity and activity in the local community; 4) specific experiences on social media profile pages. After transcribing the interviews they were hand reviewed and then auto coded into nodes in NVivo 11 according to guidelines set out by QSR International (2016), the creators of NVivo 11. The interviews were auto coded into nodes based on paragraph style, removing questions from the interview data. These nodes were then auto coded into themes. A lengthy process of checking and exploring the auto coded themes then followed to ensure the themes were apt and this is recommended by QSR International (2016). Cluster analysis based on word similarities was then run on the themed nodes to reveal possible areas of topical overlap. This revealed colour-coded sets of related nodes with a positive Pearson correlation coefficient score. These node sets were used as markers to re-explore the interview data and come up with hand reviewed themes, achieving a balance between manual and electronic qualitative data coding (Basit, 2003). The grouped themes, centred around the four findings listed in abstract, were laid out and then driven through analysis using Foucault` s concept of heterotopia and are presented in the findings below. After the themes were delineated they were compared with the theoretical hypothesis, which was found to be inconsistent with the findings. Interviewees that were part of chapter two are explicitly flagged in the findings below.
4.4. Findings

4.4.1. Professional Social Networks of Social Enterprise Heads
Matter and are not Separate Personal Assemblages

The assumption drawn from the division of chapter two and three is that the professional social network of a social enterprise head exists in the private sphere, whereas the Facebook page of a social enterprise exists in the public sphere. This public/private assumption is easy to make. However, the interview data shows that there is no such public/private distinction within the social enterprises. The communications manager for a large employment social enterprise in a very materially deprived part of the Downtown Eastside, who has a head with a betweenness score, revealed that:

I manage [the social enterprise head’s] LinkedIn as well... if something really big happens I make sure I post it on LinkedIn in the [social enterprises’] one and the organization ones but also on the personal ones because they do they may have especially at like the director/CEO level they reach a level of people that might not follow us on Facebook or Twitter so it’s always good to let the higher echelons of our supporters know as well and so that’s how we do that... [the social enterprise head’s] page fundamentally it is hers but she is the founder and CEO of [the social enterprise] so her sort of LinkedIn and professional identity is tied to [the social enterprise] and the social enterprises’ sort of being because she is not just the CEO she also founded it so it’s really it’s very linked that

The social enterprise head for this organization had a high betweenness score. It’s possible that having staff members look after and develop a professional network may contribute to the presence of high quality network features such as betweenness. Furthermore, this data confirms that the professional network is used to transmit information to an upper echelon that may not be present on LinkedIn and Facebook.

Another way the interviews revealed that social enterprises get involved with their heads’ online professional network was revealed in an interview with the operations manager of a cultural social enterprise in a very materially deprived part of the Downtown Eastside, also with a head that has a betweenness score, “so we had someone come in as a consultant I’m not sure if we paid him or not but he just helped us with our LinkedIn profiles so we all have our own individual LinkedIn profiles”. This shows that there’s a
possibility some social enterprises are paying consultants to enhance the personal professional profiles of their staff members. Therefore the interview data has uncovered practices in well-connected online social enterprises that blur the division between public and private profile pages. This is either to improve the online profile page using a consultant or to access valuable contacts using the labour of a member of staff in the social enterprise. The prevalence of these practices among all social enterprises in British Columbia is unknown.

The above patterns suggest a complementary relationship between Facebook, where consumers go, and LinkedIn, where senior professionals reside. However, one social enterprise communications manager in New Westminster saw greater value in having a founder broadcast messages on a professional network, rather than by broadcasting general messages on a Facebook page:

by utilizing the executive director’s page people maybe won’t care about [our social enterprises’] page but what they might be more in-tuned with is [the social enterprise head] like who is an authority on this subject and who founded this organization so they can get it from the source if you will.

In all three cases, the profile page of a social enterprise head performs the role of a Trojan horse, able to open access to high level contacts. This privileging of the professional social network confirms its importance, but not for the individual head, as seemed to be the assumption throughout chapter two, but rather for social enterprises as a whole. This insight means that the network maps in chapter two may more accurately reflect the networks of social enterprises as a whole than previously thought.

4.4.2. Localities within British Columbia are the Primary Target for Social Media Campaigns

The interviews uncovered no evidence that social enterprises were seeking to connect with individuals outside British Columbia. This lends weight to the finding in chapter two that social enterprise head networks are concentrated in British Columbia. A senior communications manager of a large housing social enterprise in a very materially
deprived part of the Downtown Eastside with a head that has a betweenness score put it simply:

with our social media we do not operate outside of British Columbia....what we do it's a very very local and a very sort of centralized organization...97% of our social media viewership is concentrated in Canada and specifically BC.

This piece of data also introduces the idea that localities and centralization are also important to social enterprises, even online.

Continuing the theme of localities, the social media planning of one executive director, outside Greater Vancouver, with a very low material deprivation score and a head with no betweenness, was highly localized, and also tied into a major transportation route:

our first goal for expansion is up and down the highway 97 corridor so that is Vernon....Salmon Arm in the north and Osoyoos which is at the Canadian-American border and it is a distance of about I would say 2 and a half hours driving along one highway and there are likely to be I would say between 10 and 15 towns ranging in size from a few thousand obviously Kelowna would be the largest the next one is Vernon then there are really smaller communities in the thousands...if we could explore a chapter we would do a pilot chapter somewhere on the 97th corridor

Notable here is the level of scalar detail in the identification of individual towns as well the marriage of online targeting with a popular transportation highway. This evidence shows that the targeting of social media messages is in no way divorced from Cartesian space. In this case it depends on it. This evidence suggests that Hootsuite analytics, which shows the cities a Facebook page reached, would be a useful way of measuring targets along a transportation route. The interview data also shows how and why the workplaces of endorsers across British Columbia would vary, due in this instance to a strategy that stretches the length of a major provincial highway.

This focus on transportation routes as a guide for targeting social media outputs was seen in another social enterprise based in Vancouver:

if I say target an ad for the thrift store I’m targeting people who live in Vancouver I will actually target along the Canada Line because if you
get on the Canada line you can access our store Broadway and Main so you can kind of access that so looking at people who might be able to potentially get to the store so you might get people from Richmond who come and work with us so if they go down Main to the shop then they’ll get access to us.

This data suggests that train lines could “drag” online social media targeting outside the City of Vancouver and into areas within Greater Vancouver, and this provides a possible reason why endorser workplaces do not concentrate within Greater Vancouver in the findings of chapter two.

So far this analysis has tied online targeting to characteristics of the Cartesian environment. However, for one communications manager in the Downtown Eastside the mission of the social enterprise was important in determining the geographic reach of their social media:

we are touching lives and showing the worth and the value of [our social enterprise] not only in our community but right across British Columbia so people know if they’re going to choose to migrate here they know that we’re here to help and they also know that their dollars their funding or their desire to help their expertise whatever they’re going to donate with if it’s done at [our social enterprise] it’s going to touch a lot a people

Rather than physical characteristics, the positive role the social enterprise plays in providing help and assistance for intra-British Columbia migrants is being broadcast on social media channels to assure funders that their money is being put to good use. This positions the online labour of the social enterprise as “redemptive” of unreasonable social problems, and in Foucault’s analysis (1988) this makes the social enterprise a problematic tool of reason.

Overall the interviews demonstrate how and why endorser workplaces might vary across British Columbia. Surprisingly the Cartesian environment manifest through the location of rail and road networks influenced the online behavior of social media networks and where messages were targeted, and this finding was not anticipated. Lastly the mission of a social enterprise needs to reach people across British Columbia to reassure funders and again, while this is problematic, it serves to show the reasons why a social
enterprise would decide to target social media users across British Columbia, but not outside.

4.4.3. **Paid Social Media Advertisements Targeted at Localities are Essential to Social Enterprises’ Social Media Campaigns**

The finding that social media usage among social enterprises had become significantly commodified was a surprise. It was not anticipated that given the methods of analyzing and refining content for free social enterprises would rather do it the other way round and pay to ensure messages reached geographic targets. However these forays into paid social media advertising are not without rewards and incentives as one operations manager from a very materially deprived part of the Downtown Eastside, also with a head that has a betweenness score revealed:

> we did do one ad campaign on Facebook that definitely led to some donations, that was a Facebook ad campaign it wasn’t just from our normal posts and stuff like that I do not think from our normal posts there’s definitely correlation but I haven’t done the exact analysis you know I do not know if people have donated based on that but from the ad it definitely got response yeh and then er is it Youtube no Google Google does a thing where they’ll give you a certain amount of ad words as well $10,000 worth of ad words per [month] to non-profits yeh so we tapped into that program

On one level social enterprises are receiving ad word grants from Google, which allows them to engage in paid advertising practices for free. $10,000 per month is a significant amount of money to be granted for advertising on social media. It was revealed across multiple interviews that many social enterprises are taking advantage of Google’s ad word grants.

However, the data above also raises a potential problem regarding Facebook. “Normal posts” do not seem to be generating donations whereas paid advertising on Facebook does generate donations. The reason for this is not made explicit, however, a separate interview with an executive director of a social enterprise in the Downtown eastside revealed why this might be the case, “it’s got a point where the algorithms on Facebook, it’s a real threat because unless we use the paid ads we see a sudden drop in our audience numbers on the Facebook page”. What seems to be suggested is that
Facebook has found a way of fixing algorithms in such a way that regular posts are far less successful compared to Facebook ads. These algorithms are a threat for the social enterprise in question because they demand money if the Facebook page is to remain visible.

One social enterprise in a very materially deprived part of Greater Vancouver, also with a head that has a betweenness score, had become skilled at combining the functioning of social media advertising structures with Cartesian places:

for Facebook you start by the geographic area and then you go by topic so you’re going to say I’ll show my ad to anyone in BC or anyone within 10 km of Vancouver who has an interest in disability or wheelchair sports or something like that Google is mostly by location they have some demographic information as well but that’s I find that less useful depending on how many people sign in and click their google account when searching a lot of people do but normally if I’m going to run some Kamloops ads to me if I’m only paying per click the only thing that matters to me is if they are around Kamloops because I’m on pay per click

This communications manager explained that impressions or views on Facebook were meaningless and that the entire strategy depended on a pay per click approach tied to localities. This was the only way of guaranteeing a person had seen the advertisement, was a qualified buyer and was interested enough to click through to a site. In this game, demographics were not important, since if it was pay per click the main thing that needs specifying is the location you want to know about a campaign. In this way it is possible to reach the greatest amount of potentially interested people contained within a geographic area.

However it would be misleading to say that all social enterprises found that they needed to pay to generate views or donations. One social enterprise has found a way to use free social media as a supplementary way of boosting sales of Christmas trees:

we just sold out of trees which is amazing we’re going to gross for sure just over $300,000 in 3 weeks just selling trees...we have three weeks to operate and so what we are doing on social media we are constantly pushing out ‘go buy a tree go buy a tree.”
Encouraging people to post and chat about their tree purchases appeared to be an effective way of whipping up hype and generating sales from the perspective of this communication manager.

This section reveals data that suggests social media use among social enterprises has already reached a significant stage of commodification. This is due to the provision of $10,000 ad word grants from Google, but also due to algorithmic and pay per click set ups that allow specific geographic targeting which do generate buyers, donations and interest. This increased commodification is a threat to some and an opportunity for others. However, free forms of social media can still play an indirect role in drumming up interest around sales campaigns.

These findings do call into question the notion of the university-community partnership in chapter three as the most effective way to provide capital around social media usage for social enterprises. It does appear that for key messages paying for targeting, rather than expending time and running against algorithms to try and reach targets for free with the aid of analytics, makes sense. However, the very need to even provide capital at this stage is questionable when Google offers $10,000 worth of targeted geographically targeted ads for social enterprises. This was an unexpected finding. However within the next section it does become clear that a shortage of time and resources may further increase the need to pay for highly targeted social media messages rather than trying to guess at how to do it for free. Analytics also work in retrospect whereas pre-targeted paid messages ensure a high probability of success beforehand and this is perhaps most important for crucial messages.

Finally, this interview data is a window in to the way social enterprises operate as hybrid entities. Capital and paid advertising are not foreign to social enterprises. Increasingly, paid-for messages that serve business oriented goals are competing with value-based messaging usages among social enterprises within local communities. Social enterprises are competitive as well as caring and are willing to pay for visibility on premium social media sites.
4.4.4. Limits on Time and Expertise Reduce Social Media Usage in Smaller Social Enterprises

It was less surprising to find that social media placed a strain on time commitments and levels of expertise within smaller social enterprises. The executive director of social enterprise outside Greater Vancouver, with a very low material deprivation score and a head with no betweenness, said, "I enjoy doing it but there are times you know like for our event I do not have the time to deal with it". The event being referred to here is a dinner-dance event that was successful precisely because of the publicity it received on social media. Yet the executive director struggled precisely because his time went into other aspects of organizing the event. This positions social media as a 'surplus' that needs to be dealt with in addition to more traditional ways of event organizing.

Beneath this struggle to devote enough time to the profile page, the same executive director revealed there were issues with expertise also at play:

there are a couple of small communities along this highway that have committed to being more age friendly they want to build in more services so if I am in touch with them by email or verbally by telephone is there any sort of I mean obviously I can say hey like us on Facebook and what-have-you and like them as well are there some other tricks of the trade to get that connection more wholesome

The focus on 'tricks of the trade' and wholesomeness suggests a desire for quick fixes from somebody who is far better at face-to-face connections and this was supported by additional data in the interview. In combination it appears that there just isn't enough time to deal with highly complex technology for this busy executive director, who sees far greater returns verbally or through the telephone.

Difficulties with expertise were also seen in another social enterprise who refused to use social media to any large extent, "social media the answer is kind of easy we do not really use it I've used it in the past but I haven't found we haven't had a lot traction on it". Whereas some social enterprises, particularly the large and well established ones, are using social media to make money and make noise, this manager of this small social enterprise refused to go the same way:
I do not have a lot of time to dedicate to it and it takes a considerable amount of time and a mindset to formulate and process and to be generating content and sharing content and finding pieces it seems to take more time to dedicate than I can really do effectively...we will be all over social media when the app comes out that says ‘wash me’ so yeh for us it’s just the reality of where our business lies

This is important because it highlights the border where hybridity is defined for this social enterprise. Reaching out to the community online through social media does not make business sense for this social enterprise. Social benefits are realized through monetary contributions to a parent organization and also through the employment of disadvantaged individuals. This relates back to the discussion on hybridity in the literature review and is a case study in how a social enterprise can become “caught” between business practice and social activities within the local (online) community.

4.4.5. Evidence of a Crisis of Morality around the Shifting Role of Labour was not a Prominent Theme

The key assumption about a crisis or “disturbance” in the implicit morality of labour tracings on social media is that social media is viewed as a separate way of laboring within social enterprises. The evidence from interviews found the opposite; there is no such binary distinction. The alternative theoretical hypothesis therefore became a null hypothesis that was questioned by the findings. A large social enterprise in the Downtown Eastside put it this way:

social media plays a big part in what we do here and I kind of look at it as just telling our story...we were founded by people that came down here from a Church and started handing out sandwiches and they did Bible studies and all that kind of stuff for a long time but our primary purpose and I think you can still say it’s a Christian purpose is to help people grow and transform their lives and just you know do better as human beings

Helping humans to “grow and transform” is as easily achieved through social media messages as it is done face to face for this social enterprise and does not contradict the underlying Christian premise of the larger organization. The same distinct Christian morality was on show in another social enterprise, but again, this did not mean that social media had become a barrier to moral labourings:
as a Christian organization we have a mission to provide help without discrimination... transforming lives overcoming poverty one life at a time has this tremendous power to impact and inspire positivity in our community in our community physically and in our community online so if we’re able to inspire people give them hope a little bit of hope for humanity a little bit of hope for those who may appear vulnerable or downtrodden or without opportunity if we’re able to that online it’s just a furthering continuation of our mission

This is a more direct statement of the same idea that moral labourings do not undergo a qualitative crisis when they shift into social media even though the way the labour functions does change significantly. Laboring on social media is, simply put, an “extension” of the moral mission of a social enterprise. Therefore no evidence of a moral crisis around laboring on social media profile pages among social enterprises was present in the interview data.

4.5. Discussion

Some of the social enterprises that were interviewed were controlling the personal profiles of their heads. This introduces the idea of a public/private hybrid online experience for some social enterprise staff. Some social enterprise staff in better connected social enterprises from phase one also paid to increase control over ads that led back to Facebook pages and websites. This created a hybrid experience of business versus social service spending, and depended on Cartesian coordinates in the targeting of ads. These factors serve as anecdotal reasons for the pattern of materially deprived, urban Cartesian places relating to betweenness seen in chapter two. Social enterprises that were in materially deprived areas but which had a well-connected head encountered a spatially ambiguous experience online. This led to social media becoming a business priority worth spending money on. The profile page as a site therefore became a site of control, where hybrid spending was necessitated. This reaction was necessary as before the social enterprise communications managers stepped into the profile page they did not know where users were located in Cartesian place.
Foucault (1967, p.5) clarifies that a crisis heterotopia is not the cause of a crisis, but is a special place that allows an external crisis to be engaged and come to terms with in a place without “geographical markers”:

the young woman’s deflowering could take place “nowhere” and, at the moment of its occurrence the train or honeymoon hotel was indeed the place of this nowhere, this heterotopia without geographical markers.

Similarly, profile pages do not cause a crisis. They are places where crises can be better understood, acknowledged or tackled. A crisis in spatial knowledge or technical know-how is a slow crisis born from the wider structure of modern neoliberal technologized capitalisms that Stratton (2009) talks about. For social enterprises that spatially targeted their social media campaigns crisis emerged structurally rather than as a specific word within the interview data.

The crisis of targeting seen in some interview responses relates to the hybrid status of social enterprises. Social enterprises are highly local with a presence in their local area. With the introduction of social media profiles they are now simultaneously connected to Cartesian sites across British Columbia through an online heterotopia, their profile page. Social enterprises are therefore caught between scales, and their functioning takes place at a hybridised scale. The spatiality of social enterprises changes across scales in the technologized workplace. It is becoming harder, through the introduction of algorithms in the case of one interviewee, to ask the question “where?” and receive a meaningful answer.

Knowledge of the location of Cartesian containers of social media users was an important business goal for the larger social enterprises. These larger SEs tended to be within Greater Vancouver, in a very highly materially deprived area and had a head with a betweenness score in the phase one data. These social enterprises served vulnerable populations in extremely materially deprived areas. However, spatial targeting online was such a challenge that the social enterprises interviewed were using funds that could have been spent on social services to pay Google or Facebook for targeted messages. This suggests one reason why it could be important to understand online spatiality among social enterprises. If funds are being directed away from social services for business
needs researchers and policy makers may need to understand this to formulate research or policy goals. This again relates back to the challenges of social enterprises being hybrid organisations that sit between social and business needs.

Some smaller social enterprises did not have enough time and expertise within their environment and so the profile page served as a place where a crisis in time and resources was acknowledged and understood. A lack of expertise was expressed by these individuals, however their experiences within social media profile pages was less controlled. These profile pages were more “forbidden sites” (Foucault, 1967), whereas in the more targeted social enterprises, profile pages tended to be “privileged sites” of control. Both types of site were positioned by Foucault as “crisis heterotopias”. Those in smaller social enterprises were not in a position of having never entered these forbidden sites. It was because they had entered and in some cases continued to enter time-intensive and technologically complex forbidden sites that they understood their own limits. Most of the anecdotal evidence in this case came from social enterprises in areas of very low material deprivation, outside Greater Vancouver with a head that had no betweenness score. This provided potential reasons for patterns seen in chapter two among less well connected social enterprise heads.

The interviews give a possible image of what social media profile pages look like structurally as heterotopias. These profile pages are linked together across public and private divides and to cyber sites across British Columbia, which are connected to Cartesian sites such as workplaces, cities or roads. Facebook ads connected back to Facebook pages and were paid for due to their highly targeted spatial reach. Relatedly Google ad words were used in the same way to draw users to the website of a social enterprise. This structural reality is a symptom of a crisis related to being unable to properly target communications easily. Algorithms threatened an executive director with increased silence, fewer views on Facebook pages as well as fewer donations. Roads and rail lines were marshalled to guide social media strategies that were otherwise difficult to target. These are real spatial pressures and are responses to a `target crisis`, rooted in geography, that social media employees face every day.
Those that did not have the time nor the expertise experienced a heterotopia that was less formally structured in the absence of messages paid for and targeted in particular areas. The profile page’s links to other sites, cyber and Cartesian were not as well-known and there was a degree of confusion. Part of the aim of the university-community partnership was to overcome this type of heterotopic experience, but as the interviews showed, funneling capital towards social media ads or providing training on Google ad words may be more effective at engaging the online spatial targeting crisis.

Geography is at the centre of the profile pages of social enterprises and their experiences on social media. Foucault’s concept of heterotopia does not explain everything, but it does uncover hybrid cyber-Cartesian place-based linkages and site-specific understandings of crises. Foucault (1967, p.9) leaves a final image of the heterotopia that seems apt in the age of the social media profile page:

a floating piece of space, a place without a place, that exists by itself, that is closed in on itself and at the same time is given over to the infinity of the sea and that, from port to port, from tack to tack, from brothel to brothel, it goes as far as the colonies in search of the most precious treasures

This is the fragment of space that social enterprise staff encounter when they go online and on to their social media profile page to understand and engage experiences of crisis each day.

4.6. Limitations

It was difficult to determine which themes to use and which questions to focus on in the crafting of the interviews and the subsequent analysis. While efforts were made to ensure the correct focus and exploration of themes there is not a large corpus to test this against and this should be acknowledged.

The recruitment practices of the interviews were complicated by two previous phases having already taken place in the study. While it was important to interview participants in the university-community partnership those that did not participate but who were still relevant to the professional network or who were affiliated with Enterprising Non-
Profits were also included. Ultimately the recruitment could never be representative of both phases of the study. Anecdotal evidence emerged of potential reasons why heads in Greater Vancouver were more likely to have a betweenness score but not all interviews were with social enterprise heads from the chapter two data set. However, overall the chapter did shed some light on both sets of findings and so this was a compromise that had to be made.

The theoretical hypothesis turned out to be limited and what it assumed proved to be the opposite of what was uncovered in reality. Theories themselves imply and apply distinct limits even before data has been gathered. This is why it was important to keep an open mind and to discuss unexpected findings, as well as to report the actual themes existing in the interview data of social enterprise staff.

4.7. Conclusion

The interviews unveiled the hybrid and crisis-related qualitative experiences of social enterprise employees and their social media practices. The distinction between public and private implied in the contrast between personal professional profile pages and public Facebook pages was not made in some of the social enterprises interviewed. Some staff members controlled the personal profile pages of heads, and this could be a reason why some heads were better connected online. This was also used to access an upper echelon of contacts that may not otherwise have been present through other social media channels. Localities within British Columbia were the primary target for social media campaigns among some social enterprises and the interviews showed how and why this may have been the case for instance through the targeting of transportation routes or funder priorities. Interviews uncovered the significant role paid spatially targeted social media messages played among some social enterprises that were well-connected online but in highly materially deprived areas. This commodification of social media practice allowed a highly targeted spatial focus, which was associated with increased donations or support. In these relations, social enterprises are caught between functioning as a business and being a social actor and this is another facet of their hybrid status. Smaller social enterprises were less likely to engage with social media profile pages because of constraints on time and resources. The crisis that being unable to easily target
communications implies, and the crisis a lack of time and resources provokes, were both experienced in the unique setting of social media profile pages that connected to Cartesian places in British Columbia. The hypothesis that the change in laboring that social media demands may disturb the implicit morality of labour lacked evidence. This was not seen in the interview data and staff did not see a difference in the morality of working offline versus working on social media. These findings do provide some reasons for the patterns seen in chapter two.
Chapter 5.

Conclusion

The previous three chapters have answered three significant questions: 1) How do the online professional networks of social enterprises behave spatially and categorically?; 2) How do social enterprise Facebook pages reveal spatial and demographic patterns?; 3) How are the experiences of social enterprise staff bound up in a heterotopic crisis? In addition, lessons have been learnt about intervening with social enterprises and helping them gain access to software resources through funding. This final chapter summarizes the areas of knowledge contributed to the wider study of social enterprises, assesses the outcomes of the study, suggests avenues for further research, delineates some of the main limitations encountered and concludes with final thoughts on the findings of the study.

5.1. Summary and Contribution to Knowledge on Social Enterprises

Chapter two has revealed three important clusters of findings. The first is that the workplaces of online endorsers of social enterprise heads are concentrated regionally in British Columbia. This is a reality in the context of technology that used by individuals to connect globally, but which is being used by social enterprises to connect regionally, and locally. Steinfield (et al, 2009) found that “an interest in connecting globally” was related to more use of a social networking site, however this trend is bucked by social enterprises who display a regional and local concentration of online connections, represented by the Cartesian workplaces of online endorsers. To arrive at this finding meant conducting “geo-visual social analytics” a complex multi-method methodological approach that flits across software programs to access patterns that are often difficult to find any using any other single methodological approach. The second finding was that concentrations of quality “between” social enterprise heads occurred in Greater Vancouver, cultural social enterprises and areas of very high material deprivation, and this was partly explained by a statistically significant relationship between these patterns and Greater Vancouver. These
findings build on previous research (Hall & Elson, 2014) and flag three areas of further study around cultural social enterprises, urbanity and material deprivation in relation to the connectedness of social enterprises. Finally this study is the first to position social enterprises as existing in heterotopias. While studies have been done on linking sites such as online pornography Internet sites (Jacobs, 2004) and Facebook sites to the concept of heterotopias (Rymarczuk, & Derksen, 2014) this has not been accompanied by a quantitative approach. Therefore this study holds relevance for social enterprise studies but also for the wider study of heterotopias that tends to shy away from incorporating quantitative analyses.

Chapter three arrived at four findings. Women consistently accessed partner social enterprise Facebook pages over a period of one year and this was associated with crisis by social enterprise staff during interviews with them. Facebook pages were partly theorised in this role as crisis heterotopias, though other politicised gender perspectives also help drive analysis of the interview data, and could be useful as a consideration in further research. Large surveys, for instance one carried out by the Pew Institute (2009) on 2,253 respondents found gender parity in the usage of social media profile pages. This pattern does not fit with the case studies of partner social enterprises or the interview data. The third finding was that an additional factor may play into a social enterprise head becoming “between” in online professional networks, and this was having high numbers of endorsers who work in the same primary city the social enterprise Facebook pages reaches. While not conclusive, uncovering quantitative patterns this complex around the social networks of social enterprises is rarely seen in the literature. Finally it was revealed that the university-community partnership had been successful but not as expected through analytics, rather it succeeded by servicing needs identified by the social enterprises themselves.

Chapter four focused on the role social media profile pages play and how they operate as a crisis heterotopia as defined by Michel Foucault (1967). The findings ran contrary to the theoretical hypothesis. Rather than the morality of labour being thrown into crisis by the shift to online social media labourings, a wider crisis around geographic targeting, time and expertise was uncovered, and social media profile pages allow social enterprise staff to experience these crises in distinct ways. These ways, for larger more
experienced social enterprises centered largely on paying for highly geographically specific ads that run on social media and link back to the profile page. This allows a privileged experience of control. Conversely for smaller social enterprises a lack in time and expertise translates to profile pages fulfilling the role of forbidden places that when experienced flag deficits in time and expertise. These deficits were precisely the target of the university-community partnership, however with the advent of $10,000 Google ad word grants and a real need for pre-targeted social media advertising, future interventions could focus on these areas. In all cases the heterotopic functioning of profile pages is aimed within localities in British Columbia, supporting the patterns seen in chapter two. Finally, the exploration of heterotopias in terms of crisis and not in terms of deviance is a novel approach not seen consistently throughout the literature on heterotopia, which tends to focus on deviance.

Together, chapters 2, 3 and 4 uncover a new regional geography related to the social networks of social enterprises in British Columbia. This is a rich, complex and networked geography that spans the Cartesian and cyber realms and which isn’t reducible to binary constructs such as spatial/virtual, public/private, moral/immoral, global/local and gender parity. Each time these binary constructs have fallen down as assemblages, extensions, regional-local clusters and femininity have risen to fill in the black and white with grey. The causes for all the findings in this study are not readily discernible precisely because this new regional universe of social enterprises that has been uncovered in British Columbia so rich. For now, social enterprises in British Columbia are positioned as functioning with and through crisis heterotopias that both connect and juxtapose place within the non-Cartesian cyber place of a profile page. Finally, it is important to acknowledge the crises that social enterprise workers face daily in their confrontation with the heterotopic profile page.
5.2. Assessing Outcomes

5.2.1. Achieving a Comprehensive Map of British Columbia’s Social Network of Social Enterprises

A full understanding of a comprehensive manifestation of the social networks of all of British Columbia’s social enterprises within a single online context was a central. This section argues that this aim was achieved. Chapter 2 gave a clear visual representation of what a census of all social enterprise heads from British Columbia and on a professional network looked like geographically, along with the workplace locations of their endorsers, which is more difficult to obtain than uncovering what the network looks like as a bundle of non-spatialized connections. Chapter 3 demonstrated that nodes in this online network may become more “between” if the workplaces of their endorsers are found in significant numbers in the primary city of reach for the Facebook page of the social enterprise. Finally Chapter 4 confirmed how and why the concentration of endorser workplaces seen in visually in chapter 2 might unfold. Each chapter therefore is an interlocking piece of a jigsaw that provides a never before seen picture of a regional networked geography among social enterprises.

Across all three pieces of this puzzle the role of being “between” emerged as a key theme. In chapter 2 other measures such as closeness centrality and eigenvector centrality did not align statistically with urbanity, material deprivation or category. In chapter 3 betweenness was associated with being well-connected in the primary city that the Facebook page of a social enterprise reached. This suggests that it is beneficial to concentrate a professional network in the same locality as the social enterprise itself serves, but in a balanced way, as the findings hinted. The interviews revealed that online ads were being paid for to sit “between” the Facebook page of the social enterprise and the Facebook page of a targeted user. In this sense social enterprises are paying to get between, to create ads that facilitate the sharing of information between geographically clustered networks of users. If one measure of importance in how social enterprise networks are said to function online can be specified from this study then it would be betweenness.
The three puzzle pieces all reveal the central role of Cartesian space to the understanding of an online professional network among social enterprises. The British Columbian region contained the most endorser workplaces. Greater Vancouver housed high quality between nodes, as did areas of very high material deprivation. These links, all rooted in Cartesian space, are all supported by statistical, though not causal, relationships. Chapter 2 shows how a primary city, a Cartesian container, which coincides with both a professional and Facebook page network, could associate with a social enterprise head having a betweenness score. This positions place alongside region as important factors in the findings on online networks in this study. Finally chapter 3 shows that roads between cities and ads between pages both influence online networks. The former is a feature of Cartesian space. Across all pieces of evidence Cartesian space is not divorceable from the behaviour of an online network. This incorporation of Cartesian space into cyber space is part of the structural morphology of profile page heterotopias.

The social enterprises interviewed in chapter four came largely from within Greater Vancouver. Therefore the findings on paid, local and personal targeting among larger social enterprises could serve as possible reasons for the better connected heads in very materially deprived urban areas of Greater Vancouver.

5.2.2. Understanding How Funding and Support with Online Technologies can Help Social Enterprises

A second key aim of this study was to highlight the way social enterprises can be supported in their networking on social media profile pages. As was mentioned in the introduction to chapter 3 a university-community partnership is defined as a collaboration between at least one member from the university with at least one member from the community, and research is generated through a joint effort (Hall & MacPherson, 2012). This was achieved since it was built into the structure of the project, but more valuable were the findings on how future collaboration with social enterprises around social media might unfold.
Hootsuite Pro was a tool focused on posting content and analysing who this reached. The analytics did offer a chance to improve best practices and increase audiences, donations and reach in the social enterprises. However, Chapter 4 revealed that analytics may not be the best way. Social enterprises already have access to $10,000 Google ad word grants that enables them to attract geographically specific and qualified buyers to their site through pay per click. However some of them do not have the correct training to be able to use up all the ad words effectively within a year. Therefore future interventions could centre on starting up a Google ad words training program or providing access to a Google ad words expert to social enterprises. The same goes for capital interventions. Funding could be provided for Facebook ad campaigns which seem to play a central role in keeping Facebook profiles visible because of the way the algorithms on Facebook are set up. Finally, though the provision of Hootsuite Pro was a useful and effective intervention, some social enterprises found it most useful through unexpected functions such as the calendar and scheduling functions which really enabled them to plug holes. This suggests future interventions should be open minded about outcomes and the best possible features of software that social enterprises may find useful.

5.2.3. Revealing and Conceptualizing Responses to Crises

Three clear crises were demonstrated in the interview data. These were: 1) a crisis of targeting; 2) a crisis of time and expertise. Chapter 3 also demonstrated crisis in a heterotopic environment through the finding that the Facebook pages of partner social enterprises were positioned by the social enterprise staff interviewed as crisis heterotopias for women. Further research is required into these claims about the Facebook page users. In all cases the crises are long, in the background and not as explicitly addressed as the profile pages themselves. The profile pages enable a qualitative reflection on experiences related to a crisis of not knowing how to reach audiences, and at uncertainties born out of a lack of time an expertise.

The interviews revealed the faces of these crises and this is potentially valuable information when considering future partnerships with social enterprises. However, the interviews also revealed what wasn’t a crisis. With their strong focus on morality, in some cases Christian, the use of online labour for what traditionally were moral projects
manifested through face-to-face relations is called into question. No literature talks about this and so an important part of this research is to demonstrate and how and why a crisis of morality is not made manifest through social media practices. Social media does cater for missions, moralities and ideologies in the eyes of social enterprises as much as it ever did face-to-face in the physical community.

5.3. Avenues for Future Research

Further research is required to examine the set of findings from this study. It is unclear why only 357 social enterprise heads out of 745 have a profile on a professional network. For those that do, it is not clear why the workplaces of their endorsers would concentrate predominantly within British Columbia when there is the chance to connect globally. It is also not clear why the City of Vancouver does not play a role of “global connector”. Further research is needed to look at why material deprivation, Greater Vancouver and cultural social enterprises concentrate quality “between” nodes in the mini-network of social enterprise heads. Finally, the statistics suggest that well-connected social enterprise heads in very highly materially deprived areas turn up more than expected in urban areas such as Greater Vancouver, but not outside. This represents a key area for further research.

A closer look needs to be given at why women are turning to the Facebook pages of some social enterprises in a majority, and why men visit as a minority. Understanding this will determine the correct theorisation which could be Foucault’s (1967) crisis heterotopia, feminist approaches or another set of theoretical approaches altogether. This is an arguably urgent research priority since these gendered trends relate to a social enterprise that deals with suicide, while interviewees said that the gendered trends are widespread.

Finally, closer attention is merited towards paid-for social media messages and the commodification of the social media process in social enterprises. This ties in to uncovering algorithmic bias, since the findings suggest that algorithms could be manipulating some organizations in the non-profit sector into paying for content.
5.4. **Overall Limits Encountered**

The largest limit was the scope of the project. In chapter two it was only possible, given time and resources, to extend one layer deep into the online social network. This meant that while it was possible to perform social network analysis this was done on an “ego-network with overlap” and not on a traditional social network data set. Even so, there was such a large amount of data that it meant chapters 3 and 4 appeared quite narrow in scope and focus even though qualitatively speaking they were quite comprehensive. Chapter 3 met with the constraint of dealing in-depth with people face-to-face even though the actual data was itself quantitative in the large part. Chapter 4 encountered the same limits with the interviews. However in the end all parts of the project were able to elaborate on the other and this is a key strength born out of the weaknesses finite capacity inevitably brings.

A key limit in relation to the university-community partnership was precisely the shortage of time and resources and chapter 4 uncovered. From telephone calls, emails and through to the applications it was important to remain mindful of the fact that social enterprise employees do not have a lot of time given the demands of the technologized workplace. At one stage a participant considered withdrawing because of too many automatic emails from Hootsuite once she had signed up to Hootsuite Pro. This is a reminder that time itself is a precious resource and a balance needs to be struck between reaching out and providing support and staying quiet.

5.5. **Conclusion**

This study has made a large stride forward in understanding how and why social enterprises connect across online profile pages and the ways this phenomenon links back to Cartesian space. The region has emerged as an important spatial marker when thinking about the networking activities of social enterprises in British Columbia, and this follows from the initial ENP focus on British Columbia. The emergence of the British Columbian region fits with the recent turn in geography towards “alternative regionalisms” (Jonas, 2013). The region of British Columbia is a container for an online network explored in this study. This network is influenced by the status of the Cartesian places it relates back to.
The stitching together of Cartesian places with cyberspaces demonstrates hybridity between the scales that social enterprises labour across. The local area of Greater Vancouver, local areas of very high material deprivation and local buildings that house cultural social enterprises concentrate social enterprise heads with a betweenness score across an online network. Workplaces inside Greater Vancouver, a large urban area, have a statistically significant relationship with the concentration of heads with online betweenness in Cartesian workplaces in areas of very high material deprivation. In the next phase the Facebook profile pages of 10 partnered social enterprises reached a majority of women across a year. Interviews revealed that new frontiers within the realm of paid social media advertising have emerged as a way to reach geographically specific audiences for social enterprises. The business-oriented mindset this engenders highlights the hybrid status of social enterprises in British Columbia, caught between spending money online or on social services. Social enterprise staff that were interviewed also revealed that entering the site of the online profile page manifests crises related to targeting online messages at Cartesian places and possessing enough time and expertise to use social media.
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