Agency and social capital: characteristics and dynamics

Chris Ling* and Ann Dale

Abstract This research project explores the concept of 'agency' in the context of sustainable community development and the involvement of citizens in achieving social change and social innovation in their communities around community development issues. The concept of agency is normally understood as a noun - a team or structure of people performing specific tasks for a specific purpose Barber, 2001. However, according to Bhaskar (1994) it can also be a verb, describing an action or process that results in a new 'state of affairs'. This notion of agency can be held either by individuals or groups. Agency in this context, therefore, refers to an individual, an organization, networks or a community that can enact a process that drives change - either in the context of an individual who effects change within a community or a group that collectively does the same. It is our assumption that the presence or absence of agency is the key indicator of a group's ability to respond and identify cohesive solutions to sustainable development challenges (Newman and Dale, 2005).

Introduction

Different people and communities react to stimuli for action with the varying degrees of urgency and types of response. Marginal communities particularly differ significantly in their capacity for action; individual agency may be more fungible, and investment is needed in building longterm, stable relationships and networks, as communities achieve agency through a dynamic mix of bonding, bridging and linking ties (Newman and Dale, 2005). There can be no agency without power (Dietz and Burns, 1992); agency is the force behind social action, and actors must be

^{*}Address for correspondence: Chris Ling, School of Environment and Sustainability, Faculty of Applied Social Sciences, Royal Roads University, Victoria, British Columbia, Canada; email: chris.ling@royalroads.ca

aware they possess agency and believe they can make a difference through exercising it.

This article builds on previous case study research where there appeared to be an a priori reason for acting, identified as agency, before the mobilization of social capital and networks. We also present a potential heuristic 'equation' that explains the various components of agency at two scales – the individual and collective.

Characteristics of agency and social capital dynamics

Agency can manifest at both individual and collective levels, but the impact of an individual acting alone limits the influence they may have. If agency is manifested in the action that an individual, their networks and communities take, then it can be said that:

an individual is sufficiently connected to other individuals in their community, including communities of interest, in order to stimulate a response; or, a community is sufficiently connected to hierarchies of power in order to inform and/or influence decision-making affecting their local actions.

This, in essence, reflects the presence of linking (Newman and Dale, 2005), bridging and vertical social capital. An individual needs linking capital to create the networks that facilitate collective action; a community needs vertical capital to have a voice at the locus of power where decisions are made.

However, simply being connected or a state of openness (Dale and Sparkes, 2010) is insufficient to effect change – there must be a degree of will or intent within the community for the individual to act upon their ideas to effect change. Action occurs if:

individuals have the intent or will, time, skills and self-efficacy (Bandura, 1998; Dale and Sparkes, 2010) that enable them to see problems, identify solutions and motivate themselves and others to pursue change. In a community context, the capacity needed is essentially the same, only enhanced by the capacity to mobilize social capital and amplify the response of individuals.

What is uncertain is the relative importance of individual versus social capacity – and to what extent social capacity is greater (or lesser?) than the sum of its parts. Social capital would certainly be a modifier in this respect.

Social capital as first defined by Bourdieu (1980, 1985, p. 248) is 'the aggregate of the actual or potential resources which are linked to possession of a durable network of more of less institutionalized relationships of

mutual acquaintance or recognition'. He argued that social networks are not a given and must be constructed through investment strategies oriented to the institutionalization of group relations, usable as a reliable source of benefits (Portes, 1998). Putnam (1993, p. 167) defines social capital as 'those features of social organization, such as trust, norms and networks that can improve the efficiency of society by facilitating coordinated actions'. Onyx and Bullen (2000) argue that social capital consists of networks, reciprocity, trust, social norms, the commons and social agency. Consensus is growing that social capital stands for the ability of actors to secure benefits by virtue of membership in social networks or other social structures (Portes, 1998); social capital involves bridging 'structural holes' within society (Burt, 1992). For the purposes of this research, social capital is defined as the norms and networks that facilitate collective action (Woolcock 2001a,b), focusing on the relationships within and between them (Schuller, 2001).

Research has also distinguished between 'bonding', 'bridging', 'vertical' (Narayan, 1999; Onyx and Bullen, 2000; Putnam, 2000; Woolcock, 2001b) and 'linkage' social capital. Bonding capital refers to relations among family members, close friends and neighbours in closed networks often lacking diversity and characterized by dense, multifunctional ties and strong but localized trust. Bridging social capital connects people (or bonded groups) and may facilitate access to resources and opportunities that exist in one network to a member of another and is characterized by weak ties (Granovetter, 1973). Vertical social capital pertains to connections with people in power, whether they are in politically or financially influential positions (Woolcock, 2001a). Linking social capital connects the civic community to political decision-making and financial resources and relates 'to the capacity to lever resources, ideas and information from formal institutions beyond the community' (Woolcock, 2001b, p. 13).

Agency is then the ability to affect events outside of one's immediate sphere of influence. It is the intentional causality and process that brings about a novel state of affairs which would not have occurred otherwise (Bhaskar, 1994, p. 100). While networks can build social capital (Newman and Dale, 2007; Dale and Newman, 2008; Dale and Sparkes, 2008), agency at the individual and community levels is needed to mobilize this social capital (Dale and Onyx, 2005; Dale and Sparkes, 2010). Bandura argues that 'perceived collective agency is not simply the sum of the efficacy beliefs of individual members...it is an emergent property' (2000, p. 75). Both agency and social capital must be available in a community in order to affect meaningful change (Krishna, 2001; Newman and Dale, 2007), and respond to impacts that are often beyond the control of the community to predict.

The capacity for creative action is a function of ability to obtain non-redundant information from one's social networks, to not be bound by the pressure to conform, to be able to afford taking risks and to sustain a trust in innovative behaviour (Reuf, 2002). With both social capital and agency, further agency and social capital can be created (Harvey, 2002), resulting in a 'virtuous' cycle for change. Network formation as encouraged through the accumulation of bridging social capital can increase collective agency, allowing further bridging capital to be gathered and facilitating access to vertical social capital. According to Krishna (2001), social capital is a potential, agency activates it. Collective agency can be defined as 'a group's shared belief in its conjoint capabilities to organize and execute the courses of action required to produce given levels of attainment' (Bandura, 1997, p. 477).

The presence or absence of 'connectors'; the degree of openness to new ideas and individuals; the structural resilience of networks; capacity to resolve power and conflict issues and evidence of bridging and linking social capital are critical to agency being enacted at the community level (Dale and Sparkes, 2010). Groups that are strong in bonding capital but weak in bridging capital can be maladaptive as they can be resistant but not resilient to change (Borgatti and Foster, 2003; Larsen et al., 2004) as strong social norms can discourage innovations and the willingness to adapt solutions from outside the group. Social capital alone does not always encourage diversity (Onyx and Bullen, 2000; Newman and Dale, 2007). Agency can be negatively impacted by bonding capital, leading to networks that have dense interpersonal relations, but are incapable of developing linking social capital in the face of change dependent on forces external to the community. The extent to which network memberships overlap, or bridge, affects the ability of persons in one context to call for assistance from another (Dale and Onyx, 2005).

Even sufficient capacity and social capital exists that would enable agency, this is still a latent characteristic unless there is trigger – a reason to act. Arguably, this component is the most variable of the parameters that would lead to agency being enacted. Reasons to act will be different for different people; some will be more motivated by environmental concerns, others by notions of social justice and some by personal survival or quality of life, or all of these or other more personal reasons. At the individual scale, in-depth semi-structured interviews revealed that a strong sense of social justice is almost unanimous in people with high levels of agency, even in very young individuals (Dale, forthcoming). Reasons for a community to act are more likely to be 'close to home' (whether home related to place or interest).

For the purposes of this research, the following heuristic equation was developed at two scales: the community scale and the individual scale.

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Agency = (capacity + reason to act (perceived need or threat)
+ social capital) - barriers at the community level

Agency = (will/intent + reason to act (worldview + cause)
+ access to networks) - barriers at the individual level.
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When Agency is >0, action occurs, and where Agency is <0, action does not occur. Inaction at the community scale could result from a shortage of social capital, a lack of capacity or skill, a lack of pressing concern or institutional, geo-political or other barriers that stifle action or prevent communities realizing action is required or desirable or other obstacles to 'getting-things-done'. At the individual scale, inaction comes from personal isolation or lack of interest in the 'cause' or a perception of inability leading to a lack of will or desire to act - a lack of self-efficacy (Bandura, 1998).

So, where Agency is <0, action does not occur. This could be because, at the community scale:

- (i) there is a shortage of social capital, necessary connections between people do not exist and networks are too weak or loosely connected;
- (ii) there is not the requisite leadership to motivate the process;
- (iii) there is a lack of necessary skills (capacity);
- (iv) there is no pressing and common concern to rally around; and
- (v) barriers that stifle action are present.

At the individual scale:

- (i) there is a lack of interest or concern in the issue;
- (ii) there is a belief that no one individual can make a difference;
- (iii) there is an inability to access resources (either through lack of connection or lack of confidence); and
- (iv) there are financial, psychological or physical barriers.

Methodology

From earlier research, agency emerged as an important but unexplored dynamic of sustainable community development (Dale and Newman, 2005). Findings suggested that social capital in and of itself was not a necessary and sufficient condition for sustainable community development, that there appeared to be a priori condition of 'agency' in the difference between

an individual being able to transform or transcend a negative situation, and equally, a community making the difference between 'getting by' to 'getting ahead' (Dale and Onyx, 2005).

The three research objectives were to:

- (i) analyse the role of social capital and network formation in the creation of agency and in turn investigate how agency can lead to the creation of novel network formation capable of responding to and anticipating unexpected change;
- (ii) examine the degree to which bridging and linking social capital that reaches beyond local groups (in the presence and absence of bonding social capital that operates within local groups) determines a community's capacity to respond to sustainable development imperatives; and
- (iii) explore the ability of communities of practice and communities of choice to provide critical agency to communities of place.

The project used an illustrative case study approach as described by Yin (2003), with cases selected on the basis of expected information content (Flyvbjerg, 2001). It has been argued that case study research methodology is appropriate when a holistic, in-depth investigation is needed (Feagin, Orum and Sjoberg, 1991). The study does not place emphasis on manipulation of variables but focuses on a group of cases in order to provide in-depth discussion of relationships and processes (Denscombe, 1998) associated with a particular place. This is a useful research strategy as it allows an examination of the contemporary phenomenon that occurs in real-life context (Yin, 2003). The research used a mixed method procedure for data collection and analysis (Creswell, 2003), employing a sequential exploratory strategy, iterating between on-line focus groups, researchers and community practitioners, in-depth semi-structured interviews with individuals and using the NVIVO software to determine themes and patterns in the data. The process of on-line focus groups, known as e-dialogues, is described in Dale, Newman and Ling (2008). Individuals with high agency were selected on the basis of involvement in community actions, and interviewed to discover insights into the various aspects of the agency equation. For the most part, the individuals were identified by members of their communities or by external sources such as media stories.

The case studies described in this article are from three very diverse communities in British Columbia, Canada:

- (i) United We Can, Downtown Eastside, Vancouver;
- (ii) Nicola Watershed Management Plan Roundtable, Merritt; and
- (iii) Community Action on Salt Spring Island.

United We Can illustrates a low-capacity, high-need community. Merritt is an example of a typical case of rural towns in British Columbia where 'reasons to act' are there, but are not extreme, and capacity is modest. Salt Spring Island was selected to highlight the importance of social capital and networks. A brief description of each of the three case study communities follows. More detailed case information can be found at http://www.crcresearch.org/community-research-connections/crc-case-studies/.

United We Can, Downtown Eastside, Vancouver

Despite the millions of dollars poured into the Downtown Eastside of Vancouver in the last two decades, addiction rates have continued to increase, as well as the absolute level of destitution (GVRD, 2000). The area continues to be the centre of the injection drug use epidemic in Vancouver, and disparities of health status of residents compared with Vancouver and the rest of British Columbia persist (Buxton, 2003). Compared with the province of British Columbia as a whole, and taking into account the age of the population, this neighbourhood has significantly more observed than expected deaths from all causes (Buxton, 2003).

United We Can is a socially responsible enterprise, founded in 1995, that evolved from a loose ad hoc network of disadvantaged community members (mostly street people), to a thriving business engaged in providing an essential service to the broader community. This recycling business, owned and operated by the Downtown Eastside dumpster divers (binners), employs thirty-three people full-time, most of whom had not been previously employable, with annual revenues of 1.6 million dollars, and processing over 20 million previously non-recoverable cans and bottles a year. There are now currently four other business streams in development: 'Collection Services' offers container collection from larger volume commercial and residential consumers in the downtown area; 'Bike Works' provides bicycle instruction, sales and repair tools for low-income residents and depot users. The Works also maintains a fleet of bicycles for small-scale local pickups. The 'Bintek Computer Lab' recycles computer equipment by acquiring computer parts salvaged out of dumpsters and outdated components received by donation; the Lab currently rebuilds consumer-ready systems which are then sold at affordable prices to low-income residents. 'Happy Plants' removes plant cuttings from garbage streams and grows them for sale to the wider public. 'Crossroads & Lanes Community Clean Up' is a public space environmental clean-up campaign designed to reclaim city lanes and make them vital links in the urban landscape.

United We Can illustrates a community where a small number of people with great reason to act and an individual with high agency and a strong

sense of social justice built diverse and critical social capital and collective agency in a community where such active intervention was historically lacking. This is directly related to their marginalization and perceived helplessness, primarily due to high levels of mental illness and/or addiction. This case study, therefore, was an example where individual agency (critical leadership) led, in time, to enhanced community agency and increased community capacity and social capital in a way that augmented the positive part of the equation sufficiently to override the large and multiple individual barriers within the community.

Merritt, Nicola Watershed Management Plan

With the construction in 1980s and 1990s of 'freeways' through the Cascade Mountains, Merritt, located in the Nicola Valley in south-central British Columbia, has become closer to major urban centres – such as Vancouver. The economy was based on timber, mining and cattle ranching, and while the importance of these sectors has diminished, they remain part of the community's social identity.

The Nicola Water Use Management Plan (NWUMP) is a community-led planning process. The process began in 2004 and involved the community, government and stakeholders. A draft plan was completed in March 2009 and has been submitted to the provincial government. The NWUMP was developed by a diverse group of people seeking solutions to long-standing water issues. The planning process came about in response to a desire to ensure that the future water supply would be divided equitably among all water users balancing the watershed's social, economic, traditional and ecological values. The NWUMP presents an example where individual agency does not have such a great impact on a community response, but social capital and capacity along with a collective, but rather vague, sense of community direction around environmental protection has stimulated a more community scale positioning of agency. Individual agency is less important than the contribution of social capital and community capacity.

Salt Spring Island

Salt Spring Island is a small (10,000 people) rural community close to dense urbanization. Tourism relies on ecological and recreational resources, as well as magnificent views of forests, mountains, ocean and farmland. Ninety percent of the island contains sensitive, rare or endangered ecosystems. Any development or logging on the islands is regarded as a serious threat to the islands' ecosystems and community's economic base.

In November 1999, the community of Salt Spring Island discovered that approximately 2025 ha (10 percent of the island) had been sold to Texada Land Corporation (Texada). The developer planned to remove 60 percent of the marketable timber through clear cutting, and then sell the land for development. Texada's holdings dominate the southwest portion of Salt Spring. Texada was within its 'legal' rights to log and develop the lands it had purchased.

While Texada espoused the values of community sensitivity and green development, they ignored the community's repeated requests to slow the rate of logging, and to use sustainable logging practices. By the end of 2000, over 400 ha had disappeared. In response, the island community came together to conserve the remaining land proposed for logging and development.

On 30 November 2001, an agreement was reached between the Land Conservancy, CRD Parks and the province of British Columbia to purchase 665 ha for \$15.9 million. Additional land acquisitions from Texada included 127 ha of watershed by the North Salt Spring Water District for \$1.14 million; and 282 ha purchased by The Nature Trust of British Columbia. The 282 ha area of prime Garry oak meadow was purchased by the Nature Trust with funding from Forest Renewal BC's private forest biodiversity programme. Of the 2025 ha, acres that were acquired by Texada, all but about 100 ha, have been 'rescued' in one fashion or another as a result of the community's efforts. The remaining 100 ha have been subdivided into lots and sold on the open market to private owners.

In this case, there is a much more heterogeneous group of agents, and social capital is paramount in understanding the development of agency – but the real story of this case is that the reason to act was seen as so pressing, that it in itself forged social capital and thus moved individual agents that may or may not have had sufficient impact on their own in to a position of stronger collective agency.

We next explore how these three cases illustrate how the components of the equation interact to create individual or collective agency, followed by an examination of the nature of those interactions and demonstrating that while each case may be very different, there are common characteristics and dynamics.

Discussion

Based on the heuristic equation and the field data obtained from interviews, a number of common elements for the mobilization of agency at both levels emerged – reasons to act, capacity and social capital focusing on network formation and barriers to action.

Reasons to act

Reasons to act can be perceived or actual, as well as internal or external to the community. The construction of a coal-fired power station adjacent to your property would clearly generate an actual reason to act, ranging from the more personal impacts on property value and amenity, to more altruistic motives concerned with global climate change. The importance of the identification to place has been previously observed as another determinant for action (Dale, Newman and Ling, 2008).

Social injustice may also be wide ranging and complex driver of action; the notion of environmental justice, for example, is very much dependent on the worldview of individuals. The case of the protection of the spotted owl in the United States, for example, created activism on both sides, agents at the individual and community scale were stimulated to protect the owl on the one hand and protect forestry jobs on the other – both with a strong sense of justice and injustice – perceived and real. All of the in-depth interviews with high agency individuals revealed a strong commitment to social justice; their rationale for action was founded in an innate sense of justice, writ large (Dale, forthcoming). It is interesting to note from this research that the scale of injustice varied greatly from the global to the national to the local, but again, all of the interviewees were very aware of the connections between these scales and their interdependencies.

The Downtown Eastside is an example of marginalized economic circumstance, social injustice, extreme deprivation, addiction and mental illness and, consequently, economic isolation. The reason to act is manifest, but there is incapacity to act independent of the dominant social paradigms. Additionally, there are many agents from outside the neighbourhood acting in various ways, and yet these interfere with existing bonding and bridging social capital (Dale and Newman, 2007). In the case of United We Can, the initial reason to act was based on an individual sense of injustice which caused its founder to build a network that facilitated access to linking social capital, not usually seen in marginalized communities.

In Merritt, British Columbia, the reasons to act are more subtle. There has been no sudden trigger that has stimulated action, just a generally perceived decline and increased threat to the region's landscape and environmental resources. Those engaged with the NWUMP are motivated by general concerns related to environmental justice, and service to the community. In addition, many of those engaged are also involved in a variety of other social groups, both connected with social and environmental action, and others such as community sports and development groups. The reason to act for many members of the group is simply a sense of civic engagement. In this specific context, individuals considered the im-

portance of the environment, but this was a less important motivation than simply being involved.

The reason to act on Salt Spring Island was the clear cutting of locally valued forest by an external corporation, threatening critical watersheds and valued landscape. This provoked common action by diverse sectors of the community, resulting in a collective network formation. This case reflects the presence of a feedback loop between the reason to act and social capital – the nature of the reason stimulated the creation of bridging capital through the individual agents – significantly increasing the overall capacity of the community to effect change.

Capacity

In the Downtown Eastside, capacity in general is low. Many individuals have both a lack of actor skills and being emotional and spiritually damaged through addiction, mental illness and homelessness. United We Can started in response to a reason to act, but that reason to act was present in the long term. The change occurred through the increase in emotional and spiritual capacity of a small number of individuals that already possessed skills. This enabled the development of social capital: an individual increase in capacity leading to personal agency, leading to an increase in community capacity, social capital and social agency.

In Merritt, there are individuals who have the time and skills to become agents of change and these are the types of people who are engaged in the NWUMP process. As a community, however, there are significant pockets where capacity is lacking. Merritt is one of the most poorly performing communities in British Columbia based on socio-economic indices (Hanna, Dale and Ling, 2009). It is moot therefore to what extent the membership of the NWUMP is reflective of the community at large. This is not a criticism of the process and does perhaps help to illustrate one of the problems associated with community participation in planning processes in general. The community could be described as having too few individuals with sufficient agency and capacity to translate this into linking social capital and thereby attracting the resources needed to transform the economic situation.

On Salt Spring, there is an abundance of capacity. What led to actions in this context was the harnessing of multiple modes of capacity, and agents facilitated this process from within their own networks of social capital. One of the major reasons to act identified through interviews was the greed of the development company which enraged individuals from many sectors of the Island to come together. Each individual agent would have had a limited effect; without agents in each network, the critical

mass that made change possible would not have resulted in one of the most effective environmental campaigns in Canada.

Merritt and Salt Spring Island also illustrate some of the capacity barriers to agency. Both cases indicate that the characteristics of the agents involved are retired, or self employed and relatively free of financial barriers – the data do not exit to say for sure, but it could be expected that lack of children or other dependants could also exist. Capacity in this context is having a degree of free time. The case of United We Can, to some degree, supports this – although the age profile is not the same, in a very crude way the timerich characteristic does also exist. This reflects only those situations where volunteer agents are the instigators of action, where the agent acts from within an institutional or private sector role, then presumably the profile would not be the same.

Social capital

While social capital and its influence on activism have been written about at length elsewhere, its relationship to agency way is less well conceptualized. The default position would be that the existence of social capital creates the enabling conditions necessary for the individual to be able to exercise their individual agency for the benefit of social action in their community. Without the existence of a network, individuals would be unable to scale up their influence or innovation. Agency at the individual level may not be as dependent on this scaling effect, although networks increase its efficacy. Social capital can be magnified or reduced, depending upon how capable agency is in any particular community (Krishna, 2001) and agency can help overcome or eliminate barriers to action, especially when coupled with high levels of self-efficacy (Bandura, 2000).

In the case of United We Can, the Downtown Eastside is characterized by conditions of low trust and high isolation leading to low social capital, although bonding social capital may be overly strong, leading to closed and destructive personal networks (Newman and Dale, 2007). The community prior to the establishment of United We Can essentially had no linking, bridging or vertical capital. The founder of United We Can was especially skilled at building networks and linking capital, critical to attracting financial resources, political decision-makers and researchers to the enterprise that were not then present in the community.

On Salt Spring Island, there existed a high degree of social capital prior to the community response to watershed logging, but key nodes (connectors) or social innovators were 'activated' by the reason to act. This linked existing networks, increasing centrality and density and increasing capacity. In turn, creating new bridging and vertical social capital. This demonstrates a different form of agency: individuals who were exceptionally skilled at bridging across networks around a common cause.

Merritt is different; the lack of strong agency means that the change brought about is less obvious, less dramatic. The individuals involved in the process have access to strong social capital and generally describe themselves as well connected to other members of the community. In the community at large, social capital is certainly stronger than initially found at United We Can, and still for the majority of the Downtown Eastside community. It is individual agency that is key difference. The self-perception in the case of the membership of the NWUMP is that the group is key – individuals play a part but change is delivered through the strength of the group. The social capital of the community as a whole is somewhat weak (Hanna, Dale and Ling, 2009) but is sufficient to form agency at the community level lacking at the individual scale. This case appears to illustrate that agency may be needed at both the individual and collective levels for meaningful social change.

Barriers

There are a number of (real or perceived) barriers and enabling conditions, at both the individual and collective levels that inhibit or enhance an individual's ability to manifest their agency:

- (i) time constraints;
- (ii) self-efficacy; a lack of perseverance;
- (iii) feelings of powerlessness or inadequacy;
- (iv) lack of leadership or a champion, which particularly is important for network formation and linking social capital;
- (v) inability to develop a common vision: while individuals may be civically engaged, the changes stimulated counteract each other;
- (vi) acceptance of status quo;
- (vii) past failures of action;
- (viii) freeloading or the free rider factor; and
 - (ix) complacency.

All of these also impact the effectiveness and the creation of social capital, and social capital can be mobilized to alleviate many of these – cause and effect is, of course, difficult to determine. It is likely, however, that if a reason to act becomes sufficiently strong, it helps to generate the social capital necessary, as it makes the common vision needed to form collective agency more likely.

Conclusions

Agency for social change comes first from the presence of individuals; these individuals can be motivated by different things for diverse reasons, but their effectiveness also relies on the capacity they can draw on both internally (at least to start with) and also externally through networks and social capital. Perhaps, the simplest reason to act may be the enjoyment of the intrinsic rewards of being an agent, of being engaged and acting. Individuals who have developed the capacity and ability to build networks mobilize the requisite social capital that increases the probability of social change. These individuals sense the need for pervasive and sustained change in a broad and general way, and are committed to making a difference. Interviews with individual social change leaders revealed agency as multi-faceted and iterative, and is related to the capacity to stimulate novel network formations and social innovation (Dale, forthcoming).

Individuals have capacity that reflects their skills and past experiences, and also their personality and their emotional/spiritual state. A highly skilled person can, through insecurity or personality, lack the internal capacity to manifest agency unlike a passionate and engaged person although with no skills. There are clear links between the components of the equation here. Emotional and spiritual capacity can be stimulated by the reason to act, and reasons will be interpreted differently by different people; skills and technical capacity of the individual can be enhanced by social capital and the shared capacity of a community. The three cases illustrate the various states of capacity.

Barriers to agency will operate in different ways depending on community and individual characteristics, and always exist. What is critical for overcoming barriers is the presence of sufficient agency at the individual level prior to the mobilization of social capital. Effective social change, particularly sustainable community development, is highly dependent upon novel methods of collaboration, social innovation, interdisciplinary research and new models of governance (Dale, 2001). Since social innovation is inherently collaborative, as is interdisciplinary research, they require individuals who have high levels of agency both independently and collectively.

Communities which enhance the opportunities for individuals to develop personal security, confidence, skills and technical capacity on the one hand, networks and social capital on the other, will be better able to develop resiliency and adaptability, ensuring the community maintains vitality and develops in a sustainable way. Reponses to change will be triggered earlier, action will occur quicker and the skills in the community will allow that response to be more effective. There will be a greater chance of

the types of individuals described earlier to be present in the population with the community capacity and support needed to make a difference.

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Chris Ling is an Assistant Professor at the Faculty of Applied Social Sciences, School of Environment and Sustainability, Royal Roads University, Victoria, Canada.

Ann Dale holds the Canada Research Chair in Sustainable Community Development, Faculty of Applied Social Sciences, School of Environment and Sustainability, Royal Roads University, Victoria, Canada.

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