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Exploring Dimensions of Place-Power and Culture in the Social Resilience of Forest-dependent Communities

by

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Abstract

Over the last decade, the forest industry in Canada has been severely impacted by post-Fordist shifts in economic, political and land-tenure regimes, as well as ecological impacts related to climate change. Because of these impacts, many forest-based communities have lost mills and jobs and have faced difficult challenges about the future of their communities and livelihoods. Drawing on social ecological resilience theory and case study insights from two forest-based communities in British Columbia (Fort St. James and Youbou), this thesis explores community responses to forest industry mill closure. In contributing to a social ecological resilience theory, I explore the way place interacts with power to influence community response to change. I also identify agency, structure, and culture as important elements of collective action and community adaptation. These theoretical discussions are illustrated through case study material to give greater emphasis and understanding to the social dimensions of social ecological resilience in communities that are facing dramatic change.

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Finally and perhaps most importantly, I extend my deep appreciation to the residents and participants of Youbou, Fort St. James and the Nak'azdli First Nation in British Columbia who so graciously accommodated me in their remarkable communities.

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Chapter 1 Introduction

This thesis develops theoretical contributions to social ecological resilience with a focus on concepts of place, power and culture to understand the social dynamics of communities in transition. To illustrate and strengthen these contributions, I draw on empirical evidence from two forest-based communities that are navigating the loss of their mills. Fort St. James is located in the northern part of British Columbia near the regional centre of Prince George, and Youbou is located near Duncan on Vancouver Island. Fort St. James lost two of its three major mills in 2007. Youbou lost its only mill in 2001.

As I explain later in more detail, the forest industry in Canada has been severely impacted by post-Fordist shifts in economic, political, and land-tenure regimes, as well as the ecological impacts related to climate change (e.g. Mountain Pine Beetle). What was considered to be a stable Fordist system of production in the better part of the 20th Century is now subject to myriad and powerful forces such as competition from overseas mills, depressed timber prices, and movements to newer land tenure regimes that emphasize alternative industrial structures and more diverse forest uses. This new reality poses challenges to the very existence of these communities, representing a potentially terminal bust in a longstanding boom-and-bust history. These challenges are evidenced by the past decade of community mill closures that have reduced the number of forest-dependent communities from 300 in 2001 to under 200 in 2010, representing 50 000 layoffs in the forest sector over the past decade (Natural Resources Canada 2010).

Discussion around these broad structural issues may distract from the very real impacts these changes have had on the small communities of people living within Canada's forests. These places, like their mining siblings, have evolved around their mills and forest workers. Generations upon generations of people have been raised, worked, retired, and expired in the three hundred or so timber towns spread across virtually every province. In many ways, the loss of the industry involves the loss of community and the demise of lifelong home and trade. This vacuum causes difficult questions to emerge. When the saws stop, where do the lifelong sawyers go? How do they cope? How do their children, spouses, and friends cope? What happens to their communities, their schools, places of worship, diners, pubs, clinics, Legions, Rotary clubs, and all of these things which make place out of space? If they survive, do they thrive? How does this happen? Do they rise-up in protest? Do they find ways of making do with what they have left in their communities?

These are questions of social resilience and adaptation. They are about finding lenses for observing and understanding how groups of people, communities rooted to place, manage in the face of critical change. Using two of these communities as a setting, I endeavour to plant another seedling in the growing forest of research on this topic; to understand how humans adapt to this era of complex ecological, political, economic, and social change from a social-ecological resilience perspective. Toward this end, I hope that my findings find

broader purchase and help policy makers, academics, and most importantly people and their communities cope with the seemingly more frequent emergencies of climate change, economic depression, and other calamities.

Organisation of the Thesis

In the remainder of this introduction I elaborate first on the critical realism that informs the ontological and epistemological grounding for this work. This includes brief descriptions of both the state of the forest-product mill industry in Canada and current insights into resilience theory as the organizing framework for this work. Next, I specify the key research question and study parameters. Lastly, the introduction concludes with a summary of content in the remaining chapters of the thesis.

Philosophical Anchors: Critical Realism and Process-Relational Theory

The philosophical approach to this research fits within the critical realist tradition. The critical realism on which I build this thesis is credited to the philosopher Roy Bhaskar (2008). This approach embraces dialectic between the ontological and epistemological worlds (Carolan 2005:2):

> Toward this end, critical realism makes an important distinction between the way things are (intransitive dimension) and our knowledge claims about those objects of knowledge (transitive dimension). To conflate the two – by way of confusing statements of what we *think* (epistemology) for what *is* (ontology) – is…an "epistemic fallacy."

In my research, the ontological realm is the forestry community in transition. It can be said with confidence that the mills have closed in many forest-based communities and certain tangible impacts have occurred. What those impacts mean, and how they might be interpreted causally and relationally are epistemological questions. Thus, the theoretical approach taken by this thesis is fundamentally an epistemological exploration, a way of knowing a real event. The empirical evidence I have provided for my claims, therefore, can and should be open to critical appraisal and interpretation.

My critical realist approach, I believe, is in turn situated within Ivakhiv's (2010) process-relational theory. In Ivakhiv's (2010) words,

> Process-relational thought, by contrast, focuses on the dynamism by which things are perpetually moving forward, interacting, and creating new conditions in the world. Process-relational thought rejects the Cartesian idea that there are *minds*, or things that think, and *bodies*, or matter that only acts according to strict causal laws. Rather, the two are considered one and the same, or two aspects of the same evolving, processual

> reality…At the core of process-relational thought is a focus on the world-making creativity of things: on how things *become* rather than what they are, on emergence rather than structure. According to this understanding, the world is dynamic and always in process.

My study is a study of becoming. Beyond the technical aspects of context such as forests, mills, people, and closure, I am examining community in an accelerated state of becoming something else, something other, something that is in a state of emergence. This is a place where old stabilities are shed and new ones emerge as the community develops into something other than what it was; which in turn is a process of becoming something else again at long and short time scales.

Reality: Transitioning Forest-dependent Communities in Canada

Natural-resource dependent communities are highly vulnerable to significant market boom and bust periods. They are dependent on both the market price for their product as well as the continued availability of raw material. The Canadian forest economy employs more than 300 000 people in close to two hundred mill locations in nearly all parts of the country. However, the past decade has witnessed a significant decline in the industry (Natural Resources Canada 2010). Socio-economic regimes shift over time, and sometimes are suddenly thrust into an unfamiliar period of dynamic change (Kimmins 1995). Forestry dependent communities are no exception, and in Canada are in the midst of a long transitional period (Parkins and White 2007). Figure 1-1 shows the breakdown of direct employment loss by forest industry sector.

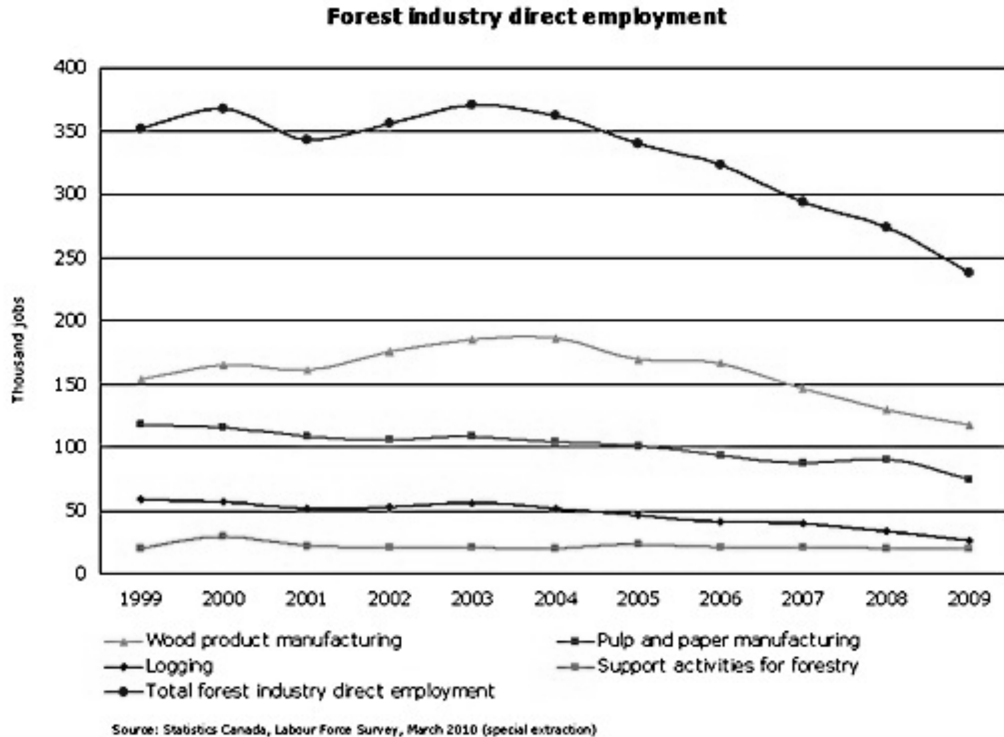

Figure 1-1. Decline in forest industry direct employment (Government of Canada, Natural Resources Canada 2011)[1]

These communities, like all human dwelling spaces, are locations of place meaning and social life. Although they may be similar, no two communities are alike in physical and social form and function; closer examination routinely reveals substantial differences in social context (McFarlane et al. 2011). This reality forms the ontological context of my study.

Interpretation: Social Ecological Resilience Theory

To anchor my investigation into the meaning and interpretation of mill closures in forest-based communities, I build on insights from social ecological resilience theory. Social ecological resilience theory (SERT) has grown in recent years to be ubiquitous in the discourse around environmental change and society. In some ways it has come to replace or complement *sustainability* as a concept for exploring problems of humans and the environment. It acknowledges perpetual change, the inherent dynamism of all systems, as well as scale, complexity and uncertainty. Through the adaptive cycle and panarchy meta-models – explained in later chapters – resilience theory gives us the conceptual tools that allow us to understand the basic behaviour of interconnected and dynamic social and ecological systems (Gunderson and Holling 2002). This makes it a powerful tool

[1] This image has been reproduced and included in this research paper for the purpose of review under the s.29 Fair Dealing provision in the Canadian Copyright Act.

for understanding processes of human and ecological responses not only to climate and other environmental changes, but also to economic, political and other societal shifts (Holling 2004).

However, SERT is deficient in some respects. It makes claims on the social world, but has largely failed so far to engage vigorously with social theory. There are great mountains of resilience literature, but much of it, as I argue in this work, appears functionalist, technical, and heavily empirical. Current literature often caters toward an approach rooted in hard causal deductive relationships. This literature often seeks indicator-based descriptions of resilient and non-resilient social systems, without a clear social theory about the relationship between indicators or processes of social change. These are not fatal flaws, however, as the absence of a major contribution from social theory invites serious questions, explorations, and constructive contributions from social scientists.

Briefly, SERT theory views complex systems as uniquely vulnerable as they rely on a fine balance of interconnections with other systems to function. A disruption in one of these external phenomena may reverberate through the system in question, testing its limits and even breaking them. The broken system then must reorganise itself. In this way, a mill town is a social-economic system paralleling socio-ecological systems. The mill, the primary economic driver of the community, is reliant on a complex interplay of regimes for survival. This includes, but is not limited to global trade, domestic government policy, land tenure, resource quantity and quality, and community social cohesion. A disruption in one of these systems can force the community, the social system, into a period of major transition. This period, sometimes called the "back loop" on the SERT adaptive cycle, is the epistemological location of my research. This is the timeframe where the community is tasked with reorganising itself in the wake of closure. SERT, therefore, forms the core epistemological approach of my work.

Key Research Aims and Question

This thesis began with the intention of using resilience theory to understand the presence or absence of collective action and linkages to place in forestry mill closure communities. Resilience theory is often used to understand processes of social adaptation, and thus constituted a suitable research vehicle at the beginning of this study. As research and data analysis progressed, however, these problems of collective action and place brought up deeper questions of community culture and power-in-place that are not effectively addressed or understood within the resilience literature. This thesis thus evolved to become a theory-building project much more than it did an empirical exploration of collective action in forestry towns.

The resulting document consists of two complementary chapters (two and three), which together sketch a preliminary framework for the operational understanding of culture, collective action, and place in contexts of social resilience. Although this thesis is focused on linkages between several theoretical

traditions, it draws on the contemporary context of mill closures in two forest-based towns, with insights into the patterns of community response that are observed in these locales. Ultimately I hope this work will benefit communities, policy makers, and scholars in further understanding the phenomenon of community resilience in the face of change.

Delimitations

This thesis is fundamentally a study of two communities and the people that comprise them within a post crisis-event transition. It is not a thesis on forestry communities per se. The formerly mill-dependent communities involved, Fort St. James and Youbou, British Columbia, are in the process of negotiating the loss of their mills and therefore provide a good setting to explore ways of enhancing the social component of SERT. In a way, I could have applied a similar approach to any community that is facing a major challenge -- be it economic, ecological, or institutional. This thesis is therefore broadly applicable to communities in economic crisis as opposed to a study of forestry towns in particular.

I, subject…

My fascination with resilience theory and place is no accident. I suspect both concepts originate in deep personal experiences during my twenties. I began my twenties employed as a soldier. After becoming disillusioned with the organisation I left the Canadian Army at 22. This marked a threshold point in my life. I had gone into the armed forces with high ideals and motivation as a somewhat naïve teenager thinking this would be what I would do for my life and career. Four years later, whatever rationale I had at 18 seemed a distant memory and I wanted to discover what else life offered. I knew that I could not sustain my interest in a military life, but I did not know what I would do next. I faced a vacuum where purpose ought to have been and entered my own back-loop process of reorganisation.

What followed was a five-year long period of personal instability and uncertainty. I travelled Canada and the world alone, through places as diverse as Bosnia-Herzegovina, Laos, Australia, and New Zealand. During this period I held a diversity of jobs in numerous small, rural locations. These included construction in Norman Wells, Northwest Territories, as a hotel clerk in New Zealand, a fruit and vegetable harvest labourer in Australia, New Zealand, and British Columbia. In Southeast Asia, I endured Dengue fever and a bloody robbery at the hands of corrupt soldiers.

This was a period with many small thresholds and adaptations nested like a panarchy within the larger process of looking for direct and purpose. Eventually I ran out of work permits and money returning to Canada to begin an undergraduate degree in International Development Studies at Winnipeg.

When I first encountered SERT as an undergraduate, I was immediately struck by its resonance with my own life experiences. The pattern of adaptive change recognised by the adaptive cycle was organic to the dominant pattern of my life up to that point. A fortunate opportunity soon thereafter allowed me to be able to complete an honours thesis (Lyon 2008) where I could apply this theme and since that time I have maintained a strong personal and intellectual interest in SERT.

As I note earlier, the theme of rurality permeated this period. From the Far North, to small bamboo villages surrounded by rice, pastoral Australia, and alpine Aotearoa, the small place stood large. Yet, to the small place I was an itinerant without tenure, and my time was measured in days and months, not by familial generations. Even to this day, I do not have a long history anywhere. I spent most of my childhood and adolescence in three different places, the last of which I left permanently as soon as I found the means. Remaining in that place as I saw it then, would have condemned me to an existence of a parochial and material poverty given the poorer socio-economic status quo that surrounded me. I do not have a positive sense of, and attachment to, that place beyond remaining members of my immediate family and a very small number of close friends. This is not to say that I am not attached to any place; there are many of which I am fond. I just have no experience in long-term positive place attachment.

Hence, I note with some irony that my interest in place and how it affects people in crisis is the analytic obverse of my personal experience. Even though, as I found, my experience of place differs from that of my study participants, I am left with an acute awareness of the role of place within my own life. My frequent moves and transient twenties and now thirties have ingrained a conscious interest in the ways in which people are affected by place.

Thus, I believe that the research presented in this thesis is a consequence of these acutely personal, subjective, issues of resilience and place. The remainder of this introduction is devoted to descriptions of the two manuscripts that comprise the substantive content of this document.

Structure of the thesis

The first substantive chapter (Chapter 2), explores the place dimensions of the problem of community response to mill closure. It comprises a three-part conceptualisation of how power operates within place. I draw on the idea of place as agent as a conceptual tool for giving life to place and use this as an explanatory device for understanding the way place interacts with power in a framework developed from Lukes (2005) and Gaventa (1980, 2005, 2006). This framework, consisting of three dimensions (discarnate, chimerical, and incarnate elements of place), is then applied to the case-study communities in order to show how place operates to influence community responses to change.

The second substantive chapter (Chapter 3), offers a theoretical exploration of culture as a component of social ecological resilience. It uses the lens of culture, and Margaret Archer's (1996) notion of cultural morphogenesis in

particular, to explore differential forms of collective action in the two case study communities. This paper thus presents a normative claim about how to include cultural analysis within a framework of social ecological resilience.

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Chapter 2 Place, Power and Social Resilience in Transitioning Forest Communities

Introduction

Emerging research on social response to change in rural contexts focuses on phenomena related to social capital, resilience, vulnerability and adaptive capacity (Parkins and White 2007). These concepts are thought to be descriptors of social sustainability and have been examined through socio-economic criteria such education, income distribution, migration, and economic stability (Adger 2000; Adger et al. 2004). They are in keeping with social-ecological resilience theory (SERT) (Gunderson and Holling 2002; Adger 2000; Adger et al. 2004;) yet they are limited in their capacity to capture a nuanced understanding of social change processes within a particular place. As an example, SERT provides a recognised tool for understanding adaptive change in social-natural systems[2] but it provides limited insight into the dynamics of place and place making activities as a key dimension of resilience. This deficiency is significant because the connection between people and place is a recognised factor in the adaptive responses of resource communities (Stedman 1999; den Otter and Beckley 2002; Marshall et al. 2007). den Otter and Beckley (2002:30) illuminate the problem well by asking whether "people are attached to their cultural traditions, social networks…physical environment, or something else?"

Given this opportunity for greater interaction between different facets of the resilience literature I propose a theoretical framework for understanding the ways people adaptively engage with place during periods of place-upheaval. My theoretical framework utilises Lukes' (2005) and Gaventa's (1980, 2005, 2006) three-dimensional model of power that is combined with notions of place as an agent of change; a perspective that is gaining recognition within some fields of scholarship (Cruikshank 2005; Latour 2005; Neumann 2005; Zimmerer and

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[2] SERT is empirically well established, beginning with work by CS Holling nearly forty years ago (Holling 1973) and culminating in the present with a benchmark text (Gunderson and Holling 2002) and open access flagship journal, Ecology and Society (Resilience Alliance n.d.). In a nutshell the theory argues that social and ecological systems conform generally to a heuristic model of dynamic adaptive change, the adaptive cycle (Adger 2000; Holling and Gunderson 2002; Davidson 2010). Over time systems are thought to grow in complexity both internally and in connection to other systems. The nested overlay of interacting systems at varying scale is called a panarchy (Holling et al. 2002). Systems reach a point of complexity where their functioning is honed to operate within a rigid set of parameters, be it climate, ecological functions, economy or otherwise. Changes at this point force the system into collapse and reorganisation. The process of collapse and reorganisation is vernacularly referred to as the "back-loop" (Abel, Cumming, and Anderies 2006; Davidson 2010). Social resilience is this framework applied to social systems (Davidson 2010). For a community or social group, this model defines the "back loop" process whereby the group reorganises itself following crisis,asking, "how societies generate, acknowledge, are impacted by, and endure…crisis" (Davidson 2010:2).

Bassett 2003; Scoones 1999). From this merging of place theory and power theory I develop a novel three dimensional model of place-power (incarnate, chimerical, and discarnate), and situate this model within SERT. In doing this, I reorient den Otter and Beckley's (2002) original question by asking how place informs and interacts with community in response to upheaval? The examples of two forest-based communities that have lost their mills (Fort St. James and Youbou BC), offer further empirical insight into the utility of this theoretical framework.

I build my argument in several stages. The first section introduces place research, moving into a discussion of place in resilience theory and place as agent within social theory. Next, I bring in power and describe the three-dimensional place-power framework that is the focus of this paper. Finally, I apply this framework to the mill-town case studies and conclude with a discussion of the implications of this model for social resilience theory and analysis.

Place Theory

Lewicka (2010:1), in her comprehensive examination of the existing place literature notes that "place attachment, place identity and related terms, has resulted in almost 400 papers published within the last 40 years in more than 120 different journals." Analysing this large number of papers, Lewicka (2010) laments that many do little to contribute to new theory development and instead rely on citing the same few early approaches.

Lewicka (2010) describes place research as taking three general approaches. The first approach deals with social relationships (e.g., social capital research). The second approach examines the role of the physical place as social structure, and the third approach examines place attachment. Approaches one and three refer to the social elements of place; approach two makes explicit reference to the physical dimensions of place. Similarly, Gieryn (2000) argues for a sociological application of place, and acknowledges social-physical intersection as it illuminates differences between places. He suggests that physical place produces and constrains collective action and normative behaviour and that the physical place forms identity and attachment among its inhabitants. Trentelman (2009), however, calls for a diverse range of place methodologies, noting that place explorations have been varied and include both qualitative and quantities approaches, with some privileging the physical or the social, holistic or specific, and positivistic or phenomenological. She finds a distinction between community attachment and place attachment within the literature. Community attachment, as studied by social psychologists and community sociologists generally do not address the physical nature of place and focus instead on the social relationships of place (Trentelman 2009). Using different language but drawing on similar insights practice theory also examines people's interaction with the physical place (Spaargaren 2011).

At this point, it is necessary to note that there are number of rich explorations of the very idea of place and its various powers in the geography literature. Harvey (1993), for example, sees place as situated capital, causing and

promoting a range of effects of people. He is critiqued by Massey (1993) who, closer to the argument in this paper, sees place as varied intersecting global and local processes not limited to capital relationships. Tuan (1979) engages with place as a humanist project deeply concerned with how we make sense of the spatial world. These and other geography literatures may have much to contribute to critically developing the place-power argument. However, a proper accounting of this literature must wait, as it is beyond the scope of the discussion in this paper. For example, a discussion of the intersection of Harvey's (1993) capital-infused place, with the place-power dimensions here, could easily constitute an entire manuscript. My task here is simply to present a focused description of place-power model rooted in empirical literature and data.

What is clear from this diverse literature is the distinction between social and physical place. A third dimension of place also emerges for some scholars. This dimension is more liminal and elemental, and is captured in Lewicka's (2010) question of understanding how people form meaningful relationships with place; places that bridge the social and the physical realm. These understandings of place can also be synthesised into a definition of place. Place is the intersection of the physical tangible reality of a location with the social relationships and processes that interact with it across scales of time and space.

The place-power model developed in this paper builds on all three of these components of place but adds a fourth element – the idea of place as an agent – to provide the important linkage to power. But first, we should briefly examine place with the SERT literature.

Place and Social Resilience

Place theory has been implicitly and explicitly linked to resilience theory in a number of ways. Growing out of several decades of work in biological sciences, resilience theory provides a partial framework to examine human social systems within complex adaptive social-ecological systems (Adger 2000; Gunderson and Holling 2002; McCay and Jentoft 1998; Davidson 2010). Resilience theory argues that complex systems can become vulnerable to external changes (perturbations or disturbances) that force them to collapse or reorganise (Gunderson and Holling 2002). Social resilience is the component of that theory that deals with how societies respond to change (Adger 2000; Davidson 2010).

Within a community context, resilience studies have produced analytical frameworks that link to concepts such as adaptation and vulnerability[3] (Adger et al. 2004). Adger's (2000; 2004) work, for example, focuses on issues of social capital, migration, and economy. Other work examines institutional arrangements as indicators of community social resilience (Anderies et al. 2007; Berkes, Bankes, et al. 2005). Frameworks such as these are empirically applied to communities facing the challenges of climate change (Berkes and Jolly 2001; Adger et al. 2004) or natural resource dependence (Gibson and Klinck 2004;

[3] The term vulnerability is sometimes understood as a loose antonymic description of resilience.

MacKendrick and Parkins 2004; Marshall et al. 2007; Marshall and Marshall 2007; Varghese et al. 2006).

Place and resilience are implicitly linked in Cheng et al. (2008) who propose that place informs people's responses to conflict and change in resource communities. Gieryn (2000) and Beckley and den Otter (2002), to name a few, discuss place in the context of social response to change. In following the logic of these arguments, any discussion of social response to change is necessarily a discussion of adaptation and therefore a discussion about resilience as well. Relationships with place thus become a key factor in understanding the social resilience problem, shaping social adaptation processes (Davidson-Hunt and Berkes 2007).

Marshall et al. (2007) deliberately incorporate place attachment, understanding it as a *social dependency,* when looking at resilience of resource dependent communities. These authors see place attachment as a predictive indicator of how people may adapt to change. They suggest that place attachment results in a dependency on the community resources for well being and may limit avenues of adaptation. In contrast, Hanna, Dale and Ling (2009) correlate place attachment with higher adaptive capacity. This literature on place attachment, however, stops short of a coherent framework for understanding the multi-dimensional aspects of place (social, physical and in-between (liminal)) discussed earlier. In the next section, I introduce one additional aspect of place that provides important connections to a theory of power and the place-power model that I develop in this chapter.

Place as Agent

The idea of place-as-agent is established within several areas of scholarship including political ecology (Neumann 2005; Zimmerer and Bassett 2003), anthropology (Cruikshank 2005; Scoones 1999) and sociology (Latour 2005). The inspiration for the ideas in this analysis stems largely from Cruikshank's descriptions of Aboriginal and colonial European interactions with dynamic glacial landscapes in north-western North America (2005). Tlingit culture generally, and some individual Europeans, understood place as a force or an agential power and certain practices, such as a taboo on grease cooking near ice, had to be respected or the glacier would react to their detriment. Cruikshank (2005:245) concludes:

> Postcolonial theory forces us to look critically at how Enlightenment categories, like nature and culture, were exported from Europe through the expansion of empire to places deemed to be at "the verge of the world," and how those categories have become sedimented in contemporary practices...This touchstone of Western rationality - the idea that a measurable natural world might be pried from its cultural moorings - has continued to insinuate itself in locations and landscapes...

Latour (2005:72) also notes the need to include *non-human* elements in social analysis for these "things…authorise, allow, afford, encourage, permit, suggest, influence, block, render possible, forbid" people's activity. For Latour (2005), invoking these non-human *objects* as agents in social life is a critical departure from most sociology, which sees the non-human world as simply passive mediators of social problems such as inequality and power, and not active participants in it.

Although pointing to notions of place as agent, the literature discussed above does not incorporate a coherent power analysis. The idea of agency by definition incorporates power, however, as it describes the capacity of some person, group, or thing to affect another, making it is a useful tool for conceptually linking place to power. Drawing on these insights, the next section details a place-power model, developing a three dimensional framework of place-power that is the focus of this paper.

Energising Place

Lukes' (2005) and Gaventa's (1980, 2005, 2006) three-dimensional theory of power is used in this paper as a way to link place with power. In the first dimension, *visible power* is used overtly and actively by one group over another through the mobilisation of superior resources. In the second dimension, power operates through mechanisms of passive influence on action as *hidden power*. Power in this dimension falls into the realm of rules or norms by which people may be aware of power relations, yet chose not to challenge these relations. In the third dimension, power is *hegemonic* and unconscious, living in the norms and customs that are uncritically and unconsciously adopted by individual. This dimension of power is where "processes of socialisation, culture and ideology perpetuate exclusion and inequality by defining what is normal, acceptable and safe " (Gaventa 2006:29).

This model was initially[4] used to analyse social justice and inequality issues (Lukes 2005; Gaventa 1980). At a later period, however, Gaventa (2005:9), notes that power does not necessarily require this explicit reference to social inequality in order to operate:

> Power 'over' refers to the ability of the powerful to affect the actions and thought of the powerless. The power 'to' is important for the capacity to act; to exercise agency and to realise the potential of rights, citizenship or voice. Power 'within' often refers to a gaining the sense of self-identity, confidence and awareness that is a pre-condition for action. Power 'with' refers to the synergy which can emerge through partnerships and collaboration with others, or through processes of collective action and alliance building.

[4] Lukes (2005), drawing heavily on Foucault and Bourdieu, lays the theoretical foundation to Gaventa's operationalisation of the three-dimensional view of power.

Power does not necessarily need to occur in an environment of injustice. Instead, power might be understood as a force that drives action in some capacity.[5] In my argument, place-power is understood existentially, inherent in the temporal system of place, not as a system of domination or oppression. Place does not have a class bias or privilege. While it may be agential in terms of how it interacts with people when they perceive and use it, it does not do this with intent. Thus, while social power and inequality are inextricably linked and a critical understanding of this relationship is vital to the cause of a more just society, a place view of power involves the more neutral understanding of power.[6]

In summary, the theoretical framework developed to this point draws on two separate discussions of place and power. It meshes the earlier conversation about the physical and constructed place and the agential qualities of place and then maps it onto Lukes' (2005) and Gaventa's (1980) understanding of power. This framework describes three distinct notions of place as power: the incarnate place, the chimerical place, and the discarnate place. Table 1 synthesises this blended framework, and each dimension of this place-power model is described below.

First dimension: The incarnate place

The New Oxford American English Dictionary (McKean 2005) defines incarnate as an adjective meaning "embodied in the flesh; in human form." Building on discussions of physical place, infrastructure, services and physical geography compose active, incarnate[7] place. These overt, tangible and undeniable elements of place inhabitants either consciously utilise, or compel action by their presence. I also include in this definition any lack of physical resources. The absence of resources can be an active and acknowledged determinant to action and thereby link to important power dimensions. For example, the absence of a local hospital might elicit complaints about the standard of local healthcare and have an impact on people sense of place and place attachment.

Other examples of the incarnate place exercising power are apparent in Ambard's (2004) study of workers in Hinton. Although these workers were employed in physically disruptive activity such as milling, they not only preferred to see nature intact when using the landscape for recreation, they also preferred to see the mill intact to support local livelihoods. It also appears in Stedman's (2003)

[5] For example, a group of people coming together to clean a vacant lot or take care of an ailing peer may not be doing so in response to inequality; they are not pushing against some other power over them. They are using their agential power to improve their situation but outside of a scenario of injustice.

[6] This is not to say that place does not contribute to injustice and inequality For example, poor place attachment can negatively impact community social capital and adaptive capacity (Hanna, Dale, and Ling 2009), or place can be a source of destructive conflict when disparate groups have incompatible relationships with the same place (e.g. Brown and Toth Jr. 2001).

[7] Tuan (1979:387) also briefly mentions 'incarnate' in reference to place, describing place it as something that "incarnates the experiences and aspirations of a people." This differs from my use of the term in that I am using incarnate to describe the physical place only, not the broader notion peoples experiences and desires.

notion of place-informed meanings; bush recreation creates a valuation of that place, and mill employment creates meaning among the workers.

When the physical history of a place mediates social relationships, place has life. When the buildings, natural environment, and other elements of place cause emotionally significant responses for people, place has life. The incarnate place consists of not only the physical, but also the dynamic and processual utilisation of the physical for adaptive needs of the community as it moves through change.

Second Dimension: The chimerical place

Chimerical is "an organism containing a mixture of…different tissues" (McKean 2005). Chimerical place is where incarnate place exudes with meaning and attachment for people that result in senses of identity and feelings about a particular place. In turn this relationship enables and constrains certain kinds of actions in the face of change. The second dimension of place can operate independently from the first dimension, as people can still exhibit strong place attachment despite the lack of first dimension resources. In other words, a physical thing may not be present, but sense of attachment is real. Place has power here because it exudes *something* which keeps people there, of which they are aware but may or may not find difficult to articulate. When inhabitants acknowledge their attachment or identification with place, they are describing the power place has upon them. Not wishing to leave is a constraint on their lives and on adaptive responses imposed by that place (Beckley 2003). Using that desire to remain in place to look for means of remaining is an enabler of local resilience if it helps them do so, or a possible limitation if not.

This dimension is where many place attachment and sense of place studies exist. Existing research suggests that positive attachments to place despite economic or other material realities impact local resilience (Sampson and Goodrich 2005; Marshall et al. 2007). The second dimension encompasses the liminal space of place where the social-emotive, conscious attitudes toward place intersect and combine with the physical reality of place.

Third Dimension: The discarnate place

Discarnate, on the other hand, refers to a "...person or being not having a physical body" (McKean 2005). The discarnate place is the non-physical place: the realm of the emotive life current of a location. It alludes to place as something immeasurable, operating in the nuances of the lives of residents as they interact and reproduce day-to-day the long-term experiences of place.

In Gaventa's (1980) Appalachia, the power of place is exhibited in the unique social conditioning or culture of the community residents, manifested in myriad ways over the temporal course of community life. This dimension is defined through the actions resulting from the culturally evinced, contextually unique forms of unconscious place attachment. This is the realm where place

specific habits, behaviours, and types of action manifest over time. These are seen in the following examples from the place literature.

Molotch et al. (2000) call these dimensions of place the *connective tissues* in their study of temporal change in Santa Barbara, California. These authors identify different elements of traditions, the complex social networks and interactions of a place to *layer* over time as a sort of sedimentary thickening of the social relations within place. However, Molotch et al. (2000) contend these are neither "preordained nor frozen" connective tissues and they act as a "rolling inertia allow[ing] for continuous flux within a stable mode of operation" (Molotch et al. 2000:819). The core character and tradition, social relationships and culture of a place may endure over time, despite cosmetic changes to the appearance or surface of the locale. Lloyd (2002) describes the same phenomena in observing the role of subtle vestigial social elements of a Chicago neighbourhood in its reinvention and revitalisation over time.

Belonging to a place, claims Stratford (2009), is a resource of its own. Place is *intrinsic* to people lives. In her case-study of a small Tasmanian town, people's attachment to place acted as a prophylactic to a proposed economic development that threatened to disrupt their place. Sampson and Goodrich (2005) point out that attachment builds a place-rooted social identity. This is analogous to Stratford's (2009) interpretation of the role of place, stating "that particular aspects of place attachment and characteristics and behaviours of 'localness' have served to maintain community following the loss of the forestry industry" (Sampson and Goodrich 2005:143). These descriptions again illustrate the connections between place and power through socialization and culture that provide continuity and direction for action (and inaction) through periods of change.

Moreover, it is this layering that provides continuity of unique community social and cultural characteristics, despite disruptions that may occur (e.g. loss of the major economic driver(s), like a mill closure). Perhaps Paulsen (2007:16) best captures the notion of discarnate power in his study of continuity and change in social constructions of a Santa Barbara fairground:

> The plasticity of heritage allows its invocation in defense of a number of types of places. As heritage allows its users to cull selectively from the past to retrieve elements useful in the present, a broad range of events and practices are available as discursive resources. These in turn may be used in defense of a similarly broad range of contemporary land uses.

The discarnate place is the unconscious and unique flexible deployment of heritage, intrinsic belonging, and cultural conditioning of the residents of a place or community over time. This is the realm of sentiment and history, perception, identity and social processes where place relationships reproduce themselves over time.

The discussion to this point establishes the theoretical context for the three-dimensional model of place-power I have just described and summarised. The next part of this paper uses this model to tell the story of place in the adaptive responses of two mill-dependent forestry communities, Fort St. James and

Youbou (both in British Columbia, Canada), navigating the arduous and uncertain period following the closure of their mills. I begin with a brief note on methods, another on the context of the forest mill-industry in Canada, followed by a story of the communities' responses to closure told through the place-power model. I close with a discussion of how this model helps us better understand community resilience.

Table 2-1: Comparing Power and Place-Power

Dimension	Power (Lukes 2005; Gaventa 1980, 2005, 2006; VeneKlazen and Miller 2002)	Place-Power
1st	**Visible power** - -Active, assertive power - -E.g. laws, courts, governance, police	**Incarnate place** - Overt, tangible and undeniable elements of place that inhabitants either consciously utilise or compel action by their presence or absence - E.g. commercial services, education, social services, natural environment
2nd	**Hidden power** - Passive but acknowledgeable controls on human behavior - E.g, strong place attachment resulting in an unwillingness to leave despite hardship	**Chimerical place** - Where place promotes attachment to people, informs identification with place and thus their actions in the face of change despite availability of Incarnate resources - Bridges the social and physical elements of place
3rd	**Invisible power** - -Unacknowledged ideology, socialization, culture - E.g. internalized class or gender privilege; cultural norms	**Discarnate place** - -Exhibited in the unique socialization or culture of the community residents and manifested in the myriad ways over the temporal process of community life - Revealed through the actions resulting from culturally evinced, contextually unique forms of unconscious place attachment - E.g the *types* and *forms* of community activity that re-emerge over time such as Molotch et al. (2000) character, tradition; Stratford (2009) belonging

Research Methods

A focused ethnography approach using key-informant interviews, participant observation, photographs, and secondary sources is the method used for this research. Single and multi-person interviews were conducted in two communities: Fort St. James and Youbou, British Columbia (Map 1). The interview schedule sought to illuminate the intersections of people's experience of mill closure and elements of place and situate these experiences in an analysis of the social ecological resilience framework. Place questions were centred on participants' perceptions about community life and use of local natural areas, infrastructure and services before and after the closure. Analysis drew on existing scholarship on place and social resilience as a framework to examine these data. Data were coded and analysed with NVivo 8 qualitative data analysis software for linkages to place themes and the place-power model outlined above.

Key informants were selected by a snowball method. The place focus of this research meant that to be a key informant really meant being a person who identified with and felt a part of the community. Therefore, anyone who lived in or felt themselves a part of the Fort St. James or Youbou community might be a key informant. Given that community groups and service organisations were also a key aspect of this place research, incorporating people from these organizations into my study was also a priority. My participants therefore represent diverse cross-section of people in both locations. Table A-1 (Appendix A) describes the number of participants used in this study by gender and occupation.[8]

Community Settings: Fort St. James and Youbou, British Columbia, Canada

Fort St. James

Fort St. James is located on the Nak'azdli First Nation traditional territory in north-central BC and has a population of 1355, within a two-hour drive of the regional hub city of Prince George. Established as a fur trade post in 1806, it shifted to timber harvesting and mining in the 20th century. In 2007 the community suffered closures in two out of its three major mills. Locally owned Stuart Lake Lumber closed in May of that year with the loss of 85 permanent jobs, or 10% of the community's workforce. This was followed by the bankruptcy induced closure of the United States based Pope and Talbot Ltd. mill which saw close to 400 people lose both direct (300) and indirect (100) jobs. At the time of writing, the Stuart mill remains closed, while the former Pope and Talbot mill was reopened by British Columbia based Conifex Inc. Conifex currently runs one shift of approximately 60 people which, although beneficial to the community, remains considerably short of the pre-closure numbers.

[8] A more detailed description of the method used in this paper is found in Appendix A, "Methodological Notes."

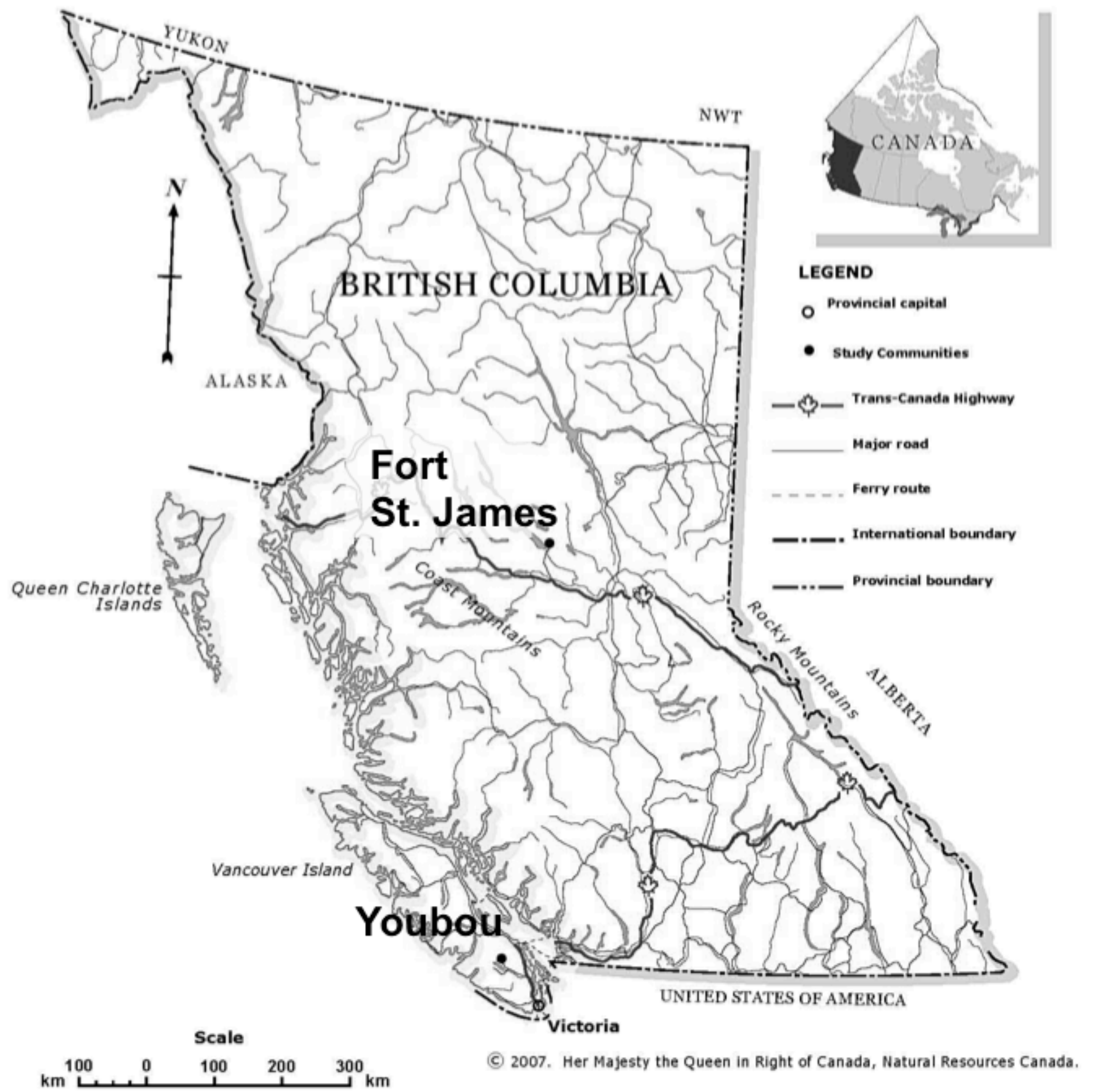

Figure 2-1. Locations of Youbou and Fort St. James, BC (Source: Natural Resources Canada)

Although small, the community retains political autonomy with both local municipal mayor and council, and a chief and council structure exists within the immediately adjacent Nak'azdli First Nation. Fort St. James also maintains elementary and high schools, a small hospital, a campus of the College of New Caledonia, social services offices, a women's shelter, as well as numerous small businesses, restaurants, a supermarket, and banking facilities.

Youbou

The community of Youbou located on the shore of Cowichan Lake on Vancouver Island, suffered the closure of its Timberwest owned single sawmill in January 2001. With a population of 1176 and its location on a lake within a two hour drive of the major centre of Victoria, it is of comparable size and setting to the community of Fort St. James. Unlike Fort St. James, Youbou has undergone a longer period of mill and community decline. Mill losses as a result of changing ownership regimes and technological improvements reduced mill employment from highs in the 1960s and 1970s of close to 800 people, to a closure low of 220. It should also be noted that only a minority of Youbou sawmill workers resided in Youbou at the time of the closure. Estimates by participants put this number at less than 50. The remainder of workers lived in the Lake Cowichan and Duncan areas.

On top of this, the community is now amalgamated into the Cowichan Valley Regional District (CVRD) who control its local governance through a regional directorship. For the community, this has meant, for example, a loss of control over use their community hall and the closure of the Yount School in favour of bussing children to the nearby town of Lake Cowichan. There are two small convenience stores with some groceries, and a seasonal pub-restaurant closed from late autumn to mid-Spring. There are also a marina and church. No medical facilities exist, and the community lacks a cemetery. For major shopping, healthcare, and other needs, community residents must drive 10 to 40 minutes to the better-equipped town of Lake Cowichan, or the small city of Duncan.

Youbou also suffered a population decline following the mill closure. This was apparent as I was conducting my field research in the community. Community members often explained how many of the homes were now owned and used as summer cottages by people living in Victoria, Vancouver or further afield, and that these were largely unused through the winter months. While precise numbers were unavailable[9], it was obvious that a significant out-migration out of the community had occurred since 2001 given the number of temporarily occupied residences. However, not all new residents were temporary as I regularly

[9] Comparison of Census data between 2001 and 2006 remains inconclusive as population counts are close at 1149 and 1176 respectively (Government of Canada n.d.). The resolution of the census data is insufficient as it considers Youbou as part of the Cowichan Valley I regional district, and does not describe the contiguous community of Youbou. However, it was very clear from personal observations and comments from participants and other community members that there had been a significant decline in permanently occupied residences.

encountered people who had moved to the community since the closure and found themselves enamoured with the place.

Seeing Place-Power in a Community Setting

The discussion to this point describes the analytical separation of the dimensions of place-power and the empirical setting for my analysis. These dimensions allow us to clearly distinguish the elements of place that act on a community. As is often done in place research, a separate analysis of each element is an incomplete accounting of the role of place. The story of place cannot be told by only looking at one dimension in isolation, or by conflating many dimensions of place and power together. Analysing quotes, images, field notes, local media, and other sources of data reveal the story of place in myriad ways, and I use the experiences of Fort St. James and Youbou in their post-mill transition to show how the dimensions of place-power interact to produce a multi-dimensional account of place.

Incarnate Place and Chimerical Sentiments

Incarnate place reveals itself through a descriptive inventory of place-based things like social services, programs, schools, businesses, housing, and natural environment, or their absence. These things are identified as incarnate forms of place as they influence community responses to change. To reveal this dimension of power data therefore must both describe some element of tangible place and show how that element influences community response to mill closure. The data presented below serves to illustrate this notion of incarnate place.

Fort St. James benefitted from a 2.5 million dollar provincially funded Job Opportunities Program (JOP). The JOP was a short-term program providing funding for employing former mill workers in small construction and community upkeep projects. Participants often expressed positive impressions regarding the role of the JOP in helping the community navigate the immediate post closure period. The program allowed people to remain in situ because it provided work and helped support former mill workers' Employment Insurance (EI) benefits, as well as improving the physical characteristics of the community.

> It's a huge legacy. Huge. Most public things have been painted, mended, repaired, added to, right in our community. Those things would never have been done before. So pretty exciting initiative, right? [Fort St. James resident and community college staff member]

Without the JOP, participants felt that "people would have just left" [Fort St. James]. Similar sentiments were voiced about the positive impact of the range of

educational services[10] available in the community in helping with the closure recovery, such as the following about the local community college:

> CNC [College of New Caledonia] has come through and put different programmes up, you know it's a gold school to think about post secondary and that type of stuff. [Fort St. James resident and healthcare professional]

Conversely, the lack of effective programing for former Youbou workers also had a power dimension in some interesting ways. Described as "useless" by former Youbou millworkers,[11] the one program that did exist also revealed the incarnate nature of community social services. Comment from a social worker in Lake Cowichan (the closest services-equipped town to Youbou, six kilometres away), to which the former millworkers would turn for help, revealed some of the context behind this sentiment.

> We also saw a lot of resistance to not working for $12 an hour, "I make 25, I'm worth more than that." There was a psychological thing where that dollar per hour was a reflection of who they were. They took that as their self-worth and they were the man of the house and they provided for their family, and there was no way that they could look at that. [Youbou social services worker]

Incarnate place also harboured sources of conflict in Fort St. James and Youbou. Kwah Road, dividing Fort St. James from the Nak'azdli First Nation, was seen as a marker of community conflict.

> Now that Kwah road is like a dividing line: "You got too many Indians in the [local venue]!" Somebody told me that twice now. And it bothers me; why don't the white people get up off their ass and do something? [Fort St. James resident and member of local organisation]

However, after the mill-closures, the presence of the Aboriginal community also acted as a life raft for the much harder hit Fort St. James.

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[10] Fort St. James community hosted a campus of the College of New Caledonia (CNC: a regional community college), and two adult learning centres, one of which acted as an adult high school, and the other a literacy, and job skills resource centre. Working relationships existed between these institutions and they were actively used by the community following the closure.

[11] Davis (1993) found that these types of support may be negatively characterised and resented as "make-work" and resented by their participants, disrupting social relations along gender lines. However, unlike Davis' study the JOP in Fort St. James positively viewed, albeit with a small number of participants voicing negative sentiments around apparent nepotism. On the other hand, the comments from Youbou participants were overwhelmingly negative and more in line with Davis's work.

> My theory is this community's been here a very long time. It's 200 years plus, right? And the Natives have been here forever and that's a good half the population. They're not going anywhere. [Fort St. James resident]

In an analogous way, the actual mill in Youbou was an incarnate element whose presence for many years glued the community together, yet its removal prompted the long and arduous struggle for community members. The preceding examples show how incarnate place can affect communities. In crisis, place based services and programs became resources for struggling residents and a source of connection and focus, influencing the ways in which they related to their place of residence and coped with difficult times.

Chimerical-power describes sentiments about place and acts in a two-way relationship with the incarnate dimension. The examples of Kwah Road, and the actual mill in Youbou, respectively, show how division became a source of stability and drivers of cohesion became catalysts of hardship. This sometimes changing perception of incarnate resources captures the chimerical dimension of place-power at work. Changes in the incarnate place prompted changes in the chimerical realm. On the other hand, the examples of community groups in Youbou show how chimerical relationships with place spawned new incarnate resources in response to the closure.

Me and You Nights, (MAYN) is an incarnate community group that attempts to recreate the social life of the community in its mill heyday by organising community dinners, fireworks, and other events. I experience the positive power of this organisation on the local sense of community when I joined a very successful fowl potluck dinner they organised (Figures 2-2 and 2-3).[12]

[12] The inclusion of children at this event (clearly enjoying themselves) shows discarnate place acting on people who were not even alive during the mill era. The attendees at dinner, familiar with the mill period or not, nonetheless found themselves involved in an event reproduced from past.

Figure 2-2: Me and You Nights Fowl Dinner (Image: C Lyon)

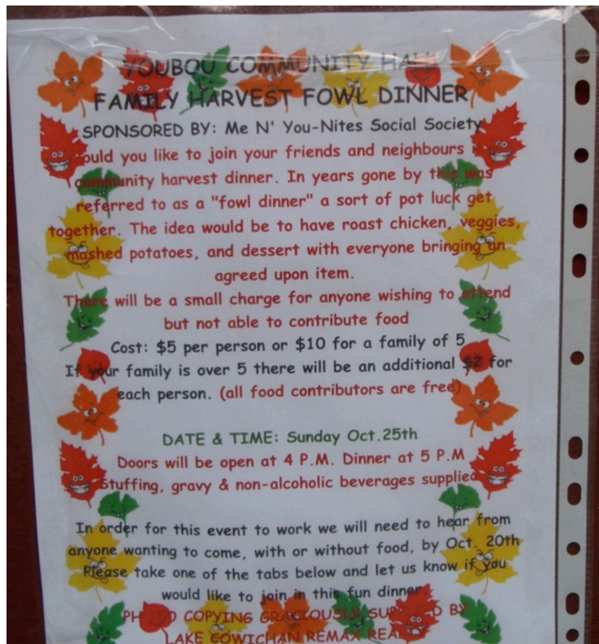

Figure 2-3: Posted advertisement for MAYN Fowl Dinner (Image: C Lyon)

This event filled the community hall with many very happy local and area residents (Figure 2-2)**.** Likewise, the *Youbou Historical Club* (YHC),[13] met regularly at the historic hand-set bowling alley (also at the community hall) where

[13] The YHS has also published a book of anecdotes from community members about community life through the mill era, many of which are penned by existing community members (see Campbell et al. 2008).

they compile and organise an archive of photographs, newspaper clippings, and artefacts from the mill period (Figure 2-4). A member of the group describes the process by which YHC institutionalised, literally growing out of the remnants of the mill:

> [The YHC formed] because of the mill closure and the fact that they [the mill] were going to be getting rid of everything and they did get rid of a lot of stuff that we probably could have had. But there were some pictures that were needed. Pictures that that they were going to give to the hall, and the mill manager at the time thought that it would be a good idea to get the community together to put names on as many of these pictures, many of them didn't have them. So we had a couple of open houses sort of thing and it sort just kept going. [Youbou Historical Club member]

As illustrated here, chimerical place drives the active use of the incarnate place. The loss of the mill, a disruption of incarnate place, also prompted the formation of the Youbou Timberless Society (YTS), which challenged the mill closure. Positive place attachment also prompted the formation MAYN. The incarnate community hall, with the bowling alley and league and the large gym (location of the MAYN potluck) exercised incarnate power by providing a venue for community organisations and activities, which aided chimerical attachment as these organisations also consolidated a sense of attachment to a place that was undergoing significant change.

Figure 2-4: Youbou historical archive at Youbou Lanes (Images: C Lyon)

In the preceding examples, we see how incarnate and chimerical place interweaves in response to mill closure. In Fort St. James, place attachment appears to partly explain why people did not leave the community in large numbers following the closure. In Youbou, place attachment, although there existed a palpable out-migration, acts as catalyst for community revitalisation where community members draw upon their affection for place in the creation of new social institutions of place. The data also reveal stark differences in incarnate resources in each community. Unlike Youbou, Fort St. James contained a plethora of institutions, services and professional organisations. Youbou, however, lost political autonomy when it was amalgamated into the Cowichan Valley Regional District (CVRD). It no longer has the autonomy to make decisions regarding the allocation of its few resources. Social services and businesses were located in the in Lake Cowichan and Duncan, meaning that contiguous Youbounians needed to travel to access these resources. The relative existence of these incarnate institutions changed the place relationship during crisis by providing service and programming support to unemployed mill workers and their dependents. In both cases however, the impact of place on residents through the attachment mechanism promoted adaptive responses that sought to keep people in place and revitalise the community both in the longer and shorter timescales. The

intersection of place and people in the chimerical realm therefore both intersects with and operates independently of the incarnate dimension. The presence of first dimension place-based services in Fort St. James complemented people's chimerical relationship to place by allowing them to maintain residency in their community despite immediate job losses.

These two dimensions capture the visible relationship between the physical and the cognitive dimensions of place, but they do not account for why specific types of chimerical and incarnate responses occurred. For example, why did MAYN form and not some other type of organisation? Why were the mills in Fort St. James not an incarnate catalyst for direct action around their closure? These types of questions bring me to the third dimension, the discarnate place. The following examples provide evidence for the discarnate qualities of place.

Discarnate Place: Powering it All

Discarnate place reveals descriptions of the unique socialisation and culture of the community and its residents, where place manifests in a myriad of ways. It is the place-power unacknowledged by community members, but manifest through their actions, discourses, and community life. This is unlike chimerical place, which can be seen in conscious expressions of place attachment and senses of place. Community members do not consciously describe discarnate power, but speak and live through it as it appears in the peculiar social and cultural characteristics of place.

In exploring the data from these communities I found strong differences in the cultural role of the mill in each study community.[14] In Youbou, the mill culture was represented directly through the activism of the YTS and the activity of the YHC (Prudham 2008; Campbell et al. 2008). In Youbou, the loss of the mill provided a catalyst for the formation of an advocacy NGO of displaced mill workers. These discarnate notions of place where embedded within the cultural system of the community and they appeared with frequent reference in participant comments regarding the post-mill era. In Fort St. James, participants made much less reference the mill and instead focused much more on non-mill community responses to the closure. The discourse around the mill reveals the mill as temporal boundary object embodying in different ways the multiple dimensions of place-power. In Youbou it began as the incarnate reason for the community to exist, becoming the driver of social life during the mill heyday. Following closure, the mill reappeared as a catalyst for forming MAYN, the YHC, and YTS. Youbou remains culturally oriented towards a mill-town. At the individual level, these references to the mill appear as chimerical place-power as they are sometimes clear expressions of attachment or sense of place. At the community level, however, they appear as a dominant discourse or cultural reference point that permits or inhibits, privileges or excludes, certain types of action and viewpoint. At this scale discarnate place acts as an ideology. Despite losses of incarnate and

[14] See Chapter 3 in this thesis for more detail on these findings.

chimerical forms of place, the discarnate dimensions remain and are reflected in ongoing discourse and community organizing.

Unlike Youbou, which has really only existed as long as Cowichan Valley forestry (~100 years), Fort St. James and Nak'azdli long predate the timber industry, and the settlement is about 200 years old. Being of Fort St. James means being of the Fort or Nak'azdli communities, which have existed through several economic transitions – furs, minerals, and most recently forests.

In this community, discarnate power did not appear to be affiliated with the mills. Protest and resistance to the closures did not manifest beyond some early rallies where participants "didn't think they helped at all" [Fort St. James resident], and such distinctions stand in contrast to the sustained protest effort in Youbou. The dearth of community mobilisation centred on the mills in Fort St. James, the relatively little effort put into directly redressing the closure and the greater effort put into non-mill community institutions point to a cultural orientation away from the mill. Indeed, if it were not for the logging trucks that routinely drive through town, one might not even be aware that it was a forestry town, as little physical or symbolic references to the mill exist.

For example, instead of the mill, the main symbolic reference point in Fort St. James was the actual preserved fur trade fort, run by Parks Canada (Figure 2-5).

Figure 2-5: Fur traders' vista from the fort, Fort St. James (Image C Lyon)

Others examples include a historic church located on the Lake Stuart waterfront, as well as the memorial to renowned local mountain pilot Russ Baker (Figure 2-6).

Figure 2-6: Not a saw: Russ Baker mountain pilot memorial, Fort St. James (Image C Lyon)

Decoration on a streetlamp in Fort St. James cites moose and a bush plane, not loggers and sawmills (Figure 2-7).

Figure 2-7: Where are the mills? Discarnate power on an incarnate streetlamp, Fort St. James (Image C Lyon)

In contrast, Youbou and the surrounding community also publically displayed many symbolic representations of the mill involving photographs in the

community hall (Figure 2-8) forestry and mill equipment intentionally preserved at the Lake Cowichan Museum and other places (Figure 2-9).

Figure 2-8: Photograph of a mill site during mill era at the Youbou Lanes bowling alley (Image: C Lyon)

Figure 2-9: Ross Straddle Lumber Carrier from the Youbou Sawmill (Image: C Lyon)

Figure 2-10: Entrance to the demolished Youbou mill site, 2009 (Images: C Lyon)

And finally there are the ruins of the sawmill remaining at the mill-site (Figure 2-10). The small blue decal is on the right-hand image produced by the YTS and reads "Ban Raw Log Exports" indicating the activist character of that organisation.

Further evidence of the nature of discarnate place comes from case-specific understandings of community. Youbou, although an actual incarnate location, was largely a social community. At the time of the closure of the Youbou mill, participants stated only about 20 out of 220 millworkers lived in Youbou itself. The remainder were scattered throughout Youbou, the town of Lake Cowichan, and city of Duncan. I interviewed participants in each of those locations, finding the Youbou community to be more of a diaspora. By contrast, the social community of Fort St. James is largely contained within the town boundaries.

In summary, the discarnate place is the power that makes places unique, and describes the specific cultural and social characteristics that exist in within a locale. A geography of place is evident through recurrent discourses on identity and place-rooted symbolism; what Sampson and Goodrich (2005:144) describe as that which "traversed the physical environs, the material form and the semiotic representations of social, cultural and physical landscapes" elucidating how people exist *"within* rather than *doing to* their place."

Research Implications

"...The invisible foundation of rhythms"[15]

As I have described in the previous findings, the existence of place-based infrastructure and services can aid a community in overcoming the severe impacts of immediate economic loss, keeping people in their place despite the economic incentive to migrate. However, this does not tell the complete story of the role of place. It is not just services or schools. It is not just the natural environment. It is not just attachment and perception. Place is invested in the physical, social, economic, and cultural processes within community, thereby acting as a multidimensional agent in its own right. Drawing on Sampson and Goodrich (2005), places are imbued with a dynamic living quality that defines their unique nature. Place is not merely a tangible, passive physicality waiting to be perceived and inhabited by people. Nor does it confine to a list of likes and dislikes voiced by residents about their place. It abides within lives and discourse in the community, as a power shaping people's thinking and actions. People change when they go through hardship such as mill closure and the loss of forestry, and so too does their relationship with place. The meaning and role of the place to their lives shifts, and therefore so does their perception of place. Place, the construction of it, attachment to it, and the social representation of it can alter the perceiver, giving it life and power.

Although some newer work is beginning to acknowledge the role of place in resilience, social-ecological resilience theory has not yet benefitted from a detailed interrogation of how place interacts with social systems. Likewise, there exists a large and diverse body of literature on place, but for the most part it does not incorporate a model of resilience. The three-dimensional model of place-power enriches the existing conversation by showing how place can be understood as a multi-dimensional dynamic system of power, influencing community responses in time of crisis.

The incarnate dimension of place holds promise for analysis of the physical aspects of place that provide practical solutions to the immediate problems of crisis. In my examples, these included education, employment, governance and social services resources, but they might also include in other contexts items such as roads, emergency services, agricultural services, power stations, harbours, forests, or any number of other physical assets a community might employ in a period of change. The utlitity of these place-based assets has been documented in the earlier social resilience literature.

The chimerical place, the second dimension of place-power marries the physical elements with the social elements of place such as attachment and identity. This dimension forms a conceptual tool that allows the emotive elements of place to be considered in their relative balance with the incarnate assets of place. This approach to research allows a resilience analyst to ask whether the elements of place can overcome or harness the physical elements or vice versa,

[15] (Rattenbury 2000)

and how these elements are taken up and influence action and direction within the community. In Youbou, the social elements of place in this second dimension of place-power were very active in the wake of closure and provide an important analytical lens for understanding the social manifestation of place. In contrast, the first dimension of place-power dominated in Fort St. James and community responses privileged these physical assets of place.

The third dimension of place-power, the discarnate place, provides a window into the *je ne sais quoi* of place. It allows us to conceptualise the why and how manifestations of place over time, which lead to various expressions of adaptation and resilience. These include chimerical creation of the Me and You Nights organisation, or the YTS. These manifestations of place drew on mill-place history to revitalise community social life and challenge the mill closure. The discarnate place is the power of place in the reorganisation of community life.

Together these dimensions form an analytical tool with the potential to allow practitioners, policy makers, and scholars to understand the multifarious and processually linked elements of place in communities. This is especially so for communities facing transition periods, where the understanding of specific community dynamics is important for developing effective adaptation strategies. Incarnate and chimerical elements of place-power are relatively easy to identify. Lists can be made of resources and assets within a community, and views on place attachment and perception can be discerned from field interviews and surveys. However, the discarnate place, the third dimension, is likely more difficult to define and arguably most important. Researchers who use this place-power framework in their own work have the challenge of finding ways to unlock the key contextual factors and social drivers within a particular locale. They must ask, 'what makes this *place* tick and where and how do these drivers manifest in community life?' Toward this end, in this chapter I have given examples of discourses, symbols, and definitions of community that emerge from this conceptual framework and this line of field research.

While some the questions about discarnate place may be answered at least partially by analysis of secondary sources (such as examining the nature and content of local media events and other exhibitions of social life), I suspect the deeper nuances may be more aptly captured by experiencing the community through primary ethnographic data collection. An investigator must hear the people of the community tell their stories of place. It is within these stories that the nuances of local social life reveal themselves. For example, I would not have known about the Fort St. James rallying around a community tragedy that was far more significant than the rally for the mill, nor would I have known just how much the mill resonated within the discarnate social fabric of Youbou, if it were not for the field work I carried out in these communities.

Conclusion

Like all emergent ideas, the model presented here is not a fully developed theory of place-power and resilience. It is an initial exploration of some

theoretical linkages with an empirical application. That said, I see clear and practical utility in understanding place as a dynamic power affecting community responses to change. With this approach to place research, local leaders and policymakers who are aware of how place may operate within a community might better grasp the reasons why local citizens respond differently between communities and places, and why change in some communities is viewed as deeply threatening and in other communities is viewed as an opportunity. One might thus conclude that a resilient place is one where people understand the power of place and use local notions of place to their own benefit.

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Chapter 3 Morphogenetic Resilience: Cultures of Collective Action In Transitioning Forest-based Communities

Introduction

The Canadian forest economy employs more than 300 000 people in close to three hundred mill locations across the country (Natural Resources Canada 2010). Since 2003, many of these mill communities have experienced cutbacks and closures resulting in close to 50 000 job losses (Natural Resources Canada 2010). This process of decline is on-going, especially in light of the on-going global economic recession and growing international competition from emerging nations (Natural Resources Canada 2010). Communities affected by closure respond in diverse ways. Many communities struggle with unsustainable levels of unemployment and income loss, resulting in the inability of the community to maintain minimum services and livelihoods (McCay and Jentoft 1998). These changes are thought to be part of general post-Fordist shifts in the Canadian resource sector (Barnes, Hayter, and Hay 1999).

Yet the post-mill fates of individual communities are not foregone conclusions. Some communities respond to industry upheaval, for example, by pushing for local control and ownership of the local mill (Krogman and Beckley 2002) or demonstrate positive social outcomes in spite of weak economic indicators (den Otter and Beckley 2002). Some communities appear to survive and thrive beyond the event horizon of economic catastrophe while others struggle to do so and undergo radical changes in demographic and economic composition. The post-closure period is one of upheaval and change and community response is conditioned by both exogenous and endogenous factors such as the role of government support, community assets and, as I argue here, the cultural system of the community itself.

Within the early stages of this study, the intention was to use a social resilience model (Gunderson and Holling 2002) to identify factors informing the presence or absence of collective action in forestry communities. As the research progressed, however, the data began to reveal broad and distinctive cultural differences between the two case-study communities, with a clear absence of mill-associated collective action in one community, and clear presence in the other. The first community, Fort St. James in north-central British Columbia, did not endure a sustained campaign of collective action in the wake of the 2008 mill closures. Community response was largely institutionalised and individualised. By contrast, the community of Youbou, located in the Cowichan Valley region of Vancouver Island, responded to the 2001 loss of their mill with strong collective action through an organised campaign of protest and legal challenge to the closure. Examination of this community's history and on-going activity revealed collective action as a norm, not an exception.

Observing these differences, I felt the original approach to my research was deficient in several important ways. While it was possible to describe the

differential community responses and discuss what these responses said about community resilience, an explanation of why the responses were so different was not forthcoming. The SERT theoretical framework, and existing theories of collective action provided limited insight into why collective action occurred around mill-closures in Youbou, and not in Fort St. James.

While struggling to understand the dynamics of collective action in these two communities I was introduced to Margaret Archer's (1995, 1996) work on structure, culture and agency. Reading Archer (1996), I was struck by how her concept of cultural morphogenesis mapped on to the essential dynamics of resilience theory's adaptive cycle. Archer conceives of culture not as an organic, coherent and patterned whole, but as a disparate system of logically consistent norms, with causally inconsistent interpretations of those norms by members of the culture. In this sense culture is mediated and transformed by social interaction over time. This approach has clear parallels to social ecological resilience theory's adaptive cycle and panarchy (Gunderson and Holling 2002). Thus, I began to consider the relationship between what appeared to be stark cultural differences in the communities and how these may have informed the collective action issue. Archer's theory appeared to offer an explanatory vehicle that fit well with my primary theoretical interest in social ecological resilience and helped answer my question around why collective action was dissimilar between my case-study communities.

This paper is divided into two parts. In the first part, I analogise social-ecological resilience theory (SERT) (Gunderson and Holling 2002) and Archer's (2000, 1996, 1995) theory of cultural morphogenesis as an exploratory vehicle for understanding the differential responses to mill closures in two communities: Fort St. James, and Youbou, British Columbia. I begin by outlining the SERT and its shortcomings in reference to the role of culture, explaining how Archer's theory of cultural morphogenesis maps on to conception of change in SERT.

In the second part, I provide empirical evidence that was derived inductively through a lens of SERT and Archer's theory of culture. The analysis reveals community based collective action in the form of resistance and non-resistance to the mill closure; collection action that was rooted in a cultural relationship between the community and the mill. I propose that data from this study reveals cultural systems in the communities that inform the range of agents' responses at the individual and community level. Essentially, I claim that the level of socio-cultural dependency on the mill, differentiated from economic dependency, helps account for differences in collective action between the communities.

At the end of the chapter I discuss the implications of this research for collective action and social resilience in the context of transitioning rural and resource based communities in Canada.

Social Ecological Resilience Theory

Social ecological resilience theory is a systems theory with origins in biology (Holling 1973). SERT has since developed into an elaborate conceptualisation of the functioning of multi-scaled, temporally dynamic, interactive social-ecological systems (Davidson 2010). This theory conceptualises the socio-ecological world as a complex dynamic system, composed of myriad subsystems (small and large ecosystems and communities of people) interacting and moving through long and short-term periods of growth, collapse, reorganisation, and renewal.

Under this conception, resilience is defined as the amount of stress a socio-ecological system can absorb before it changes or reorganises itself. This resulting change differentiates social-ecological resilience from the notion of elastic resilience where something might return to its original state following an episode of stress (Brand and Jax 2007).[16]

SERT, like sustainability, is ultimately a theory geared toward practical insights and solving problems that are associated with social and ecological change. A survey of the literature reveals a constant theme of empirical support. The flagship journal, Ecology and Society, is open access, and the field's academic society, the Resilience Alliance, also publishes a practitioner focused assessment guide (Resilience Alliance 2010, n.d.). This applied focus, however, still lacks a critical appreciation of the nuances of the social side of resilience. There is room, as I argue in the next sections, for sociological probing of essential components of the resilience heuristic, and in doing so, enhance a theory of resilience though a lens of culture

The behaviour of social-ecological systems conforms to a multiphase, multi-scaled heuristic model, the base unit of which is a temporally dynamic process model called the adaptive cycle (Figure 3-1). Individually defined SES are thought to move through a four stage, two dimensional process shown in Figure 3-1. The α-, Ω-, K-, and r-phases represent stages in the development and reorganisation of a social and ecological systems (Holling and Gunderson 2002). The y-axis, represents the potential "inherent in the accumulated resources of biomass and nutrients" in the system (Holling and Gunderson 2002:34). This is a measure of system capability or capital and accounts for the relative availability of resources for system functioning. The x-axis represents the connectedness of the system, the "strength of internal connections that mediate and regulate the influences between inside processes and the outside world" (Holling and Gunderson 2002:50). The greater the number of connections between its components means the more complex the system.

[16] Brand and Jax (2007) provide a thorough literature review of the definitional characteristics of the social-ecological resilience concept used here. Davidson (2010) suggests that this definition should be refined by separating elastic resilience from reorganising resilience, by terming the latter 'adaptation'. For simplicity, this distinction is not made in this paper, and resilience used here is analogous to adaptation.

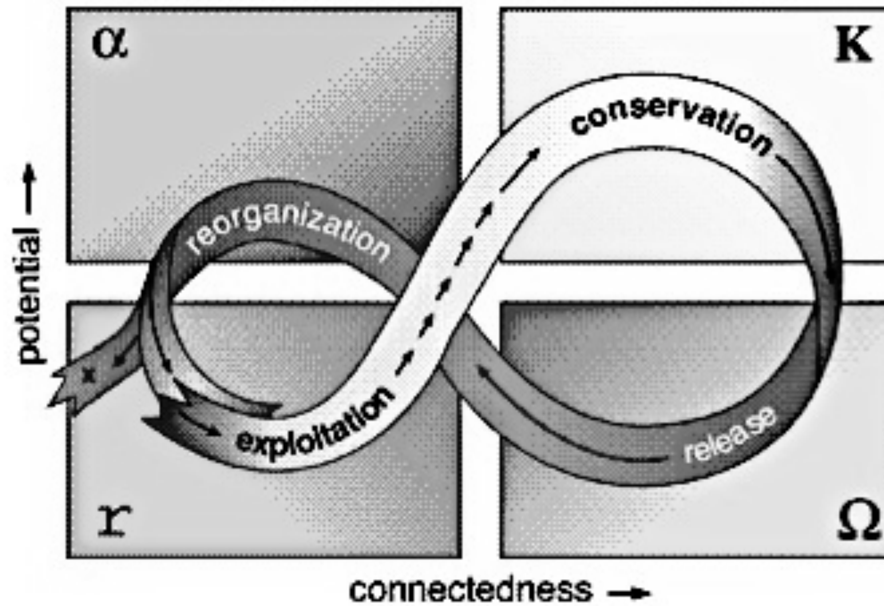

Figure 3-1: Adaptive Cycle (Holling and Gunderson 2002)[17]
,

The r-phase in the lower left quadrant represents an emerging system. System potential and connectedness are relatively low, and the system is in the process of accumulating resources capacity. As the system grows it becomes more complex and its performance increases with the accumulation of capital. In social systems, this is social capital, referring to how social networks are used "for collective good, both in material terms and for wider spiritual and social benefits" (Adger et al. 2004:35).

When the system reaches the K-phase, it is both extremely complex and extremely rigid. Efficient functioning relies on the maintenance of the balance of connections within the system and to other systems. A disturbance or upheaval here may force the system to move into a period of instability, Ω-phase; and subsequent reorganisation into a new emergent system, the α-phase. Individual systems operate at different times and scales, and in network with each other. A disturbance at the K-phase in one system may be caused by activity in another set of processes that begin to influence it in ways that upset the balance of connections at that high-level of complexity. In this way, systems are nested in other systems across time and space. SERT theorists term this infinite network of systems a panarchy (Holling 2007; Holling, Gunderson, and Peterson 2002)(Figure 3-2).

[17] This image has been reproduced and included in this research paper for the purpose of review under the s.29 Fair Dealing provision in the Canadian Copyright Act.

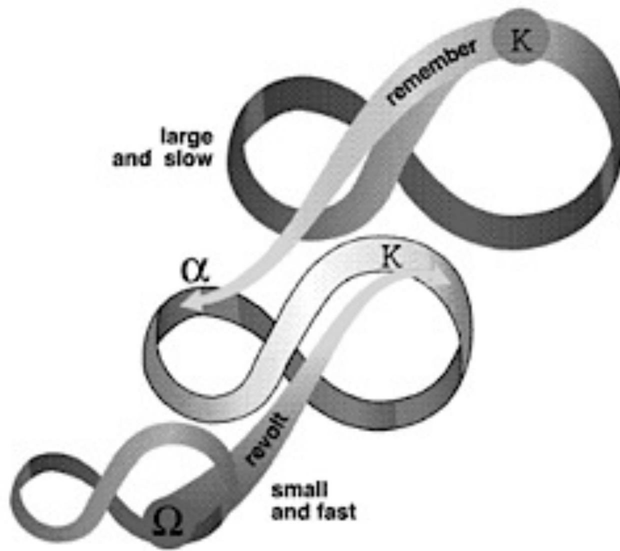

Figure 3-2: Panarchy model from social ecological resilience theory (Holling, Gunderson, and Peterson 2002)[18]

SERT has several essential characteristics. It recognises the social and ecological worlds as dynamic and mediated and it sees these worlds as complex and interconnected systems where, through the panarchy concept, changes in one process can stimulate change in another. Too much change within a complex system pushes the system over a threshold, forcing it to reorganise. Additionally, this theory is a tool for delineating specific processes of change and revealing how they interact. Thus, any compatible social theory must therefore also be able to account for these elements. I next review the literature on SERT and explore some of the ways it falls short of addressing the social realm and perspectives on collective action.

We know what resilience is and what it describes, but how does it do work?

In a recent paper, Davidson (2010) critiques the current state of SERT, noting that although there is mounting research on the implications of the resilience model, much of it is confined to non-anthropic natural systems, or resource management problems. To date there remains a dearth of critical appraisals of this model in social contexts by social scientists (Davidson 2010). These gaps are notable given that the SERT literature not only makes claims on the social realm, but it explicitly distinguishes social from ecological systems, defining social resilience separately as "the ability of a community to withstand external shocks and stresses without significant upheaval" (Adger et al. 2002:358). Although SERT makes favourable comparisons between the functioning of human and natural systems, and uses the same concepts of

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adaptation and panarchy to explore these systems, social systems research in this field of study has not yet benefited from deeper theoretical analysis, particularly, as Davidson (2010:2) notes in the "back loop" of the adaptive cycle.

Some work on the social components resilience explicitly reference the role of institutions as mediators of resilience (e.g., Adger et al. 2002; Anderies, Ryan, and Walker 2006; Anderies, Janssen, and Ostrom 2007). This work seeks to elucidate indicators of social resilience, for example economic stability, income distribution and migration rates (Adger 2000), or the role of social capital and state support for vulnerable groups (Adger 2003). Other work has added to this list of factors, calling for further exploration of place and livelihood attachment, culture, knowledge, risk, values, and ethics, as contributors to social resilience (Adger et al. 2009; Heyd and Brooks 2009; Marshall et al. 2007).

Heyd and Brooks (2009:270) note that "most of these discussions, however, focus on the physical, economic or managerial" attributes of social resilience and that more work is needed regarding the role of cultural elements in SERT. Another recent paper brings us closer to the mark, noting that social norms and culture inform adaptation but are also influenced by adaptation (Adger et al. 2009). Yet these authors frame their arguments as propositions, and not empirical explorations of how these mechanisms operate. Davidson (2010:2) frames this as a problem of learning "how societies generate, acknowledge, are impacted by, and endure, environmental crisis." In other words, much this work is focused on understanding the structural elements of resilience.

Elaborating on that argument, some SERT literature falls short of deeper examining deeper motivations and drivers of change within social groups.. While recognising that human systems are different from more causal and structured ecological systems (Gunderson and Holling 2002; Janssen 2006; Davidson 2010; Garmestani, Allen, and Gunderson 2009), it has so far mostly succeeded in producing a growing list of factors or indicators that inform social resilience. In other words, we know what resilience theory is as a model of change and what it describes as a process of adaptation, but how does it work in more specific ways? Missing from this theory is a way of understanding why people act in ways that blend or dovetail with broader themes in SERT. We might understand the structural issues that inform behaviour, but without an explanatory infrastructure that accounts for variation in agents' action in the face of change, we are left with a structurally heavy theory that is missing its agents, or actors, the energy that actually animates and brings about transformation. Cleaver (2007:241) makes a complementary argument in her critique of collective action and institution theory in resource management contexts, suggesting that existing structures and contexts influence the ways in which people come together to cope with, in her instance, a resource management problem:

> If we are interested in how institutions that shape access to rights and resources work, and how effective and equitable their outcomes are, we need better understandings of why and how individuals act, and the balance between empowerment and constraint in such actions.

While Cleaver (2007) explicitly argues a connection to resilience theory, her treatment of collective action problems involves a sociological critique of work by Ostrom (2005). Ostrom's institutional theory features prominently in some aspects of resilience theory, where coherent institutions are thought to be important features of a resilient social ecological system (Anderies et al. 2007; Berkes, Bankes, et al. 2005; Gunderson, Holling, and Light 1995). Cleaver (2007) argues that Ostrom's work tends to overemphasize agency as merely the exercise of individual decision-making within institutional structures. It often fails to address its location within constraining and empowering norms of class, gender, and other power relationships. Cleaver's critique of institutional collective action theory for its lack of attention to agency also acts as a de facto critique of some current resilience theory.

Given these recognized limits in SERT and given the mass of literature that deals with issues of agency and structure within the broader sociological literature, the potential for constructive dialogue between these scholarly fields appears to be quite promising. It makes sense that any theory making claims about social behaviour be addressed by the disciplines built around social theory and as a starting point for this dialogue it is necessary to either create or locate an analogous theory of the behaviour of social systems. While SERT has acknowledged the role of human agency in problems of adaptation, it does not address the nature of agency or the role of the systemic structures upon it. In the section that follows, I contend that Margaret Archer's theory of morphogenetic social change does just that and she does this in a model that meshes neatly with the adaptive cycle and panarchy model of change. The next part of this paper details Archer's model of change in this respect.

Structure, Culture and Agency

Morphogenesis

Archer's approach to the classic sociological problem of structure and agency does not side with one or the other. Rather, her interpretation introduces time as a mediator between the two (Archer 1995). At heart, structure becomes the pre-condition through which agents act, meaning the structural conditions that agents inhabit before action forms the context through which they act (Archer 1996, 1995). Agents, by their actions, transform existing social structures into new ones; morphogenesis -- the morphogenetic cycle. A lack of structural change is therefore termed morphostasis. In Archer's terms, the morphogenetic cycle (Figure 3-3) embodies the idea that "structure necessarily pre-dates action [T1] and that structural elaboration [T4] necessarily post-dates those actions [T2-T3] which have transformed it" (Archer 1995:157,168). Put another way, there is an existing condition and event which renders this condition socially or cognitively untenable, resulting in an exercise of agency which may alter the pre-existing condition (morphogenesis) or reproduce it (morphostasis).

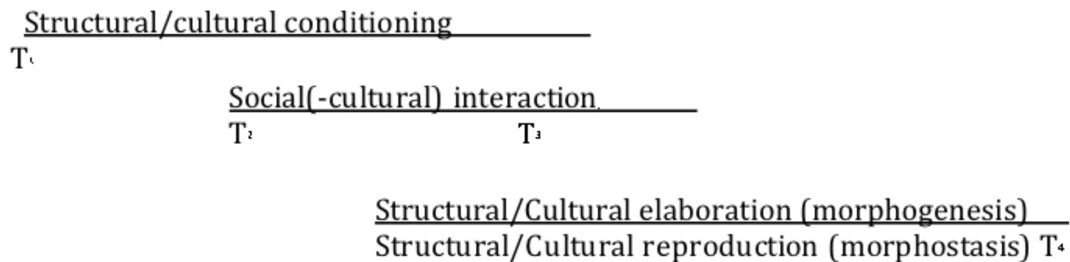

Figure 3-3. The Morphogenetic Cycle (Archer 1995, 1996)[19]

Archer's Cultural Morphogenesis

Cultural morphogenesis (Archer 1996) draws on the same processes Archer (1995) uses to explain the temporally cyclic relationship between structure and agency, but with structure becoming the Cultural System (CS) in which the Social-Cultural (S-C) realm is woven.

The CS is understood as the "corpus of existing intelligibilia - by all things capable of being grasped, deciphered, understood or known by someone" independent of whether actors in the Socio-cultural realm recognise a given intelligible thing (Archer 1996:104). The CS then includes both the logically consistent and inconsistent elements of society because the only condition for inclusion in the CS is that the thing is capable of being grasped or understood, and not whether it is actually understood by a given number of people (Archer 1996). The CS forms the meta-structural operating system for society in which S-C agents are able to act. The S-C realm is where people interact and understand the "intelligiblia" of the CS. Cultural change ('elaboration' in Archer's terms) occurs when S-C agents recognise problems in the existing CS and move to change it through the development of new ideas and the discrediting of old ones.

Cultural elaboration causes changes in properties of the CS, thereby altering structure and generating new structures. Tighter social connections mean a more intricate and rigid culture system, and a narrower range of "morphogenetic amplifications of deviation" (Archer 1996:178). The CS remains valid for only as long as S-C agents does not alter it (Archer 1996).

Archer contends that only one CS can exist at any given time because the S-C interactions (e.g. people/agents thinking and learning) stimulate awareness of inconsistencies in the CS, prompting agents to change the CS. The argument that different cultures have different CSs is rebutted by the notion of cultural

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translation, meaning the potential for things to be known remains intact as no social entity exists in a vacuum: other cultures are knowable things making them part of a CS (Archer 1996). A different CS occurs when dynamics such as the development "of knowledge, elaboration of beliefs, and accumulation of literature" alter the pre-existing CS into a new CS (Archer 1996:104). It is important here to note Archer's distinction between logical and causal relationships in the CS. Recalling that the CS incorporates consistencies and contradictions in the state of understanding, causal relationships are moot because they incorporate a dependent relationship between elements, and inconsistent ideas can independently co-exist within the same CS. On the other hand, a logical relationship, according to Archer need not harbour dependency or causality, so that elements of CS can logically be unrelated, allowing the system to hold contradictory elements. Archer (1996: 105) illustrates the distinction between causal and logical consistency in the CS as follows:

> The ideas of, say, Buddha agree with those of, say, Schopenhauer is to say nothing about the subjective mental experiences of the two people - it is a logical statement: to say that the ideas of Schopenhauer were influenced by those of Buddha is to assert something about subjective mental experience - it is a causal statement... [S]ociety's 'propositional register' have to stand in some logical relationship to one another. This is the case even if the relation between propositions is one of independence: for this is logical independence ascribed in conformity with the same principles of logic.

The intelligibilia (using Archer's term from the beginning of the section) of the CS grow as one CS replaces the next with expanding knowledge and belief systems. Increasingly complex societies are reflective of increasingly complex CS. Simply, the more things there are to know, the more complex subsequent incarnations of the morphogenizing cultural system become. A fractional example might be the knowable elements of the society that produced the single and simple wood and canvas Wright brother's aircraft, compared to knowable elements of the society that produces highly complex aircraft capable of hauling hundreds of passengers close to the speed of sound. Archer (1996:176-177) describes this process as a,

> substantial increase in 'cultural density, by which this sector of the Cutlural System becomes particularly rich in fine and subtle distinctions, possess an elaborate and often technical vocabulary to describe them and a complex body of concepts to manipulate or capture them. The development of a thousand words for cattle, the intricacies of caste rights and prohibitions, the bulging libraries of exegetial literature are all products of the same situational logic.

And critically, as we shall see, this increasing density means that "the more complex the internal structure becomes, the more difficult it is to assimilate new

items without major disruption of the delicately articulated interconnections" (Archer 1996:177). Put another way, the more complex and established that a cultural system becomes, the less it is able to absorb external shifts without restructuring in some way. Drawing on the language of what I argue is a parallel theoretical architecture, SERT, the more complex and rigid a CS becomes, the less resilient it becomes. Archer (1996) refers to this process of increasing complexity and rigidity as systemization and boundary formation, acting as a "protection" for the CS, which operates through its own internal dynamic to preserve and maintain itself at the expense of opportunities for cultural elaboration and consequent changes in the CS.

Linking Culture and Social Resilience

We now come to the thrust of the first part of this paper. I contend that the adaptive cycle/panarchy model of SERT corresponds to the morphogenetic cycle proposed by Archer. Recall from earlier that an SERT compatible social theory must harbour interconnected processes, and be able to analytically differentiate these processes from each other. Therefore, it is possible to compare the parallel states of Archer's theory and SERT. First, both theories begin with the assumption of a stable yet dynamic system. In SES, the phases r to K represent a period of stability accompanied by increasing connectedness and system complexity, leading to a rigid system that is dependent on the careful maintenance of structured parts. In the morphogenetic cycle, the T1 to T2 phases represent a period of CS stability that may include an increasing density of elements. Second, a disturbance in the K-phase of the adaptive cycle is thought to stimulate a reorganisation of the system as the balance of connections is disrupted, prompting a collapse in the Ω-phase, and reorganisation of the original system into a new system in the α-phase. This is akin to the T2 to T3 phases of S-C interaction which in turn challenges the norms of the original CS and stimulates the cultural elaboration in T4 and a new CS. Table 3-1 provides a comparative description of each of these phases between the two models.

Table 3-1: Comparison of the Adaptive and Morphogenetic Cycles

Phases of the SES Adaptive Cycle (Holling and Gunderson 2002)		**Stages of the Morphogenetic Cycle** (Archer 1995, 1996)	
r to K	Period of system growth and complexification Growing system capital and connectedness	**T_1 to T_2**	- the intelligiblia of the CS grows in density declining in capacity to absorb deviations
K to Ω	- system is rigid and complex, making it highly vulnerable to shocks	**T_2 to T_3**	- the rigidity existing CS causes it to fail as the S-C agents become aware of and then challenge the existing

			CS
Ω to α	- shocks cause the system to restructure and reorganise as its internal structures are unable to absorb changes	**T_3 to T_4**	- the new CS begins to take form as S-C agents form new structures
α to K	- system reorganises and stabilises into a new system, beginning the process over again	**T_4 to T_1**	- a new CS emerges and the process begins over again

Constraints on S-C elaboration by the old CS are akin to constraints on the reorganisation potential of a social or ecological system. These constraints are based on the nature of the rigid, pre-threshold social ecological system and the relative totality of the collapse phase. At this junction, one can ask a number of questions about this cultural system (CS). At the social level are there surviving elements of the old institutions, be they ephemeral social structures such as values, beliefs or norms that would describe a CS? Are there more formalised institutions such as governance systems that might also constrain the range of potential variances in reorganisation of a social system by its constituent agents? Figure 3-4. demonstrates this parallel through a close-up of the K to α-phase of the adaptive cycle. The thick line on the left represents the rigid pre-threshold Cultural/Social system and the vertical line is the threshold of change. In Archer's parlance, this is the point where (for whatever reasons) S-C agents recognise the inconsistencies in the CS. In the social resilience conception, this is where systemically unsupportable exogenously driven change occurs. In both, the systems are forced into change. The arrow fan (Figure 3-4) growing from the threshold point represents the range of potential systemic reorganisations rooted in the greater or lesser degree of constraints imposed by the relative survival of elements of the old system or structure and its influence upon the emergent one.

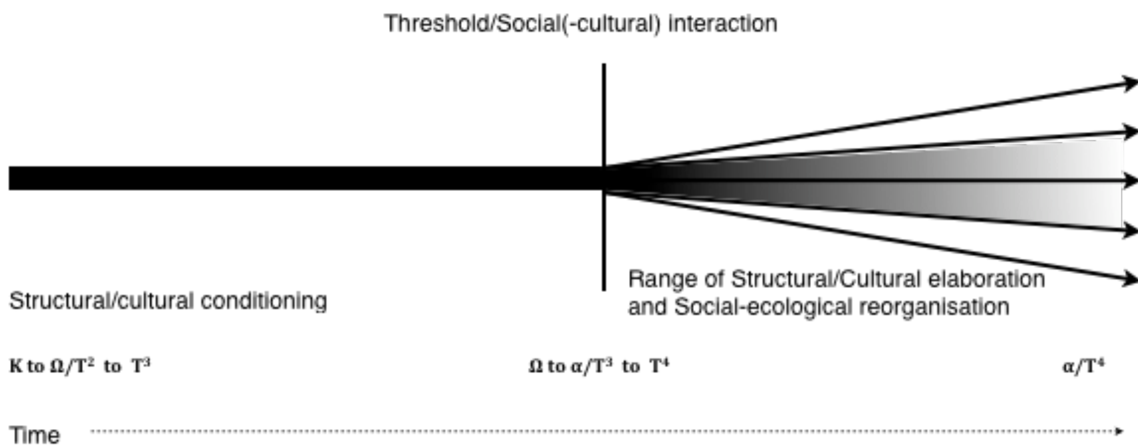

Figure 3-4. Range of cultural elaboration and reorganisation in social systems

Collective Agency

Before exploring the empirical evidence for this theory of culture, this section provides a brief comment on the connections between SERT and collective action, as a key dimension of this study. Davidson (2010:10) articulates the difference between social systems and ecological systems with a discussion on the role of imagination, anticipation, and collective action in social resilience:

> We are capable of recognizing risks, human-induced or otherwise, to our social systems and/or those things we value *before they manifest*, and thus we have the p*otential* to take conscious, transformative steps to attenuate them...while both of the previous two factors can motivate individual action, the ability of either to generate increases in societal well-being is considerably enhanced through collective action.

Davidson (2010:10) suggests that a "successful social adaptation" to change in the resilience context is only possible through what she terms *collective agency.* That is, the "social evolutionary changes that materialize as the intended result of goal oriented collective action" which differ from individual agential action (Davidson 2010:10). This point of collective agency, Davidson argues, is an adaptive capacity in its own right as "the nature of collective agency can define the ensuing adaptation or transformation trajectories" (Davidson 2010:11). But what defines the nature of collective agency? Why does one group of people respond differently to another facing similar circumstances? How do the mechanisms of society, the particulars and peculiarities of context inform unique responses?

These questions bring us back to Archer as her theory of morphogenetic change offers an explanation of why agents follow one pattern of action and not another. Recall the discussion of the influence of structure, the cultural system - Archer's constraining contradictions - and their effect on cultural elaboration. The claim by Adger et al. (2009) that the nature of social adaptation to change is conditioned by the structure of that society is directly analogous to Archer's claim that the CS or structure of a society influences the behaviour of its agents when it comes to changing that society. Notably, this suggests that culture or structure, conceptualized as a system, serves as a critical informant of adaptive change in a transitioning community.

We are then left with two theories of independent origin, one of which makes claims on the social realm drawing on the ecological realm, and another originating only in the sociological realm nonetheless paralleling the same heuristic model of change. Archer's theory provides support to the social component of social-ecological resilience, by situating SERT claims on the behaviour of social systems within an established sociological framework, and vice versa. This is an important contribution to SERT as Archer's framework provides an explanation of how, or perhaps more accurately, where, agency operates within an SERT model of change; something that, as Davidson (2010) has noted, is lacking in existing social resilience thought. The remainder of this

paper, using the setting of forest-based communities in transition, is devoted to providing a preliminary empirical grounding for this conceptual relationship.

Field Research Methods

Focused ethnography is suitable for intensive short-duration ethnographic research on a specific topic or experience (Knoblauch 2005). Data are collected through key informant interviews, participant observation, field notes, and photographs. Fieldwork to collect these data occurred between August and November 2009 in Fort St. James and Youbou, British Columbia. Figure 3-5 shows the locations of these communities. These communities were selected based on criteria that are discussed briefly here.

First, the communities were of a similar size as rural and resource dependent communities with similar demographic characteristics. Second, the communities had suffered significant mill closures with obvious impacts on the community. In the case of Fort St. James, a scoping visit in May 2009 gave me an initial sense of the severity of the mill closure and the apparent lack of collective action. In the case of Youbou, the existence of the Youbou Timberless Society and past research by Prudham (2008) revealed a very clear pattern of collective action around the mill closure. These two communities thus had clear similarities regarding closures, but had different patterns of collective action. Figure 2-1 is a map showing the locations of each community.

Participant Selection

Participants were recruited through a snowball method. Virtually every community member might be considered a key informant as they all had an experience of the community that would be relevant to my questions about the responses to closure and collective action. If people did not work for a community service or organisation, they were either a former mill-worker or a relative of one. My interview data thus represents a diverse selection of community members. The total number of participants are N-59, with N=28 in Fort St. James and N=28 Youbou. A non-community government source gave me an additional N=3. Table A-1 (Appendix A) shows a breakdown of these participants by gender and community role.

Participant Observation

Participant observation involved attending community activities, group meetings, and social venues. In Fort St. James these observations consisted of a Rotary Club meeting, an Aboriginal drum circle, as well as various services, shops, and restaurants. In Youbou, I bowled with regular team bowling at Youbou Lanes, attended meetings of the Youbou Timberless Society, Youbou Historical Club, and Me and You Nights. I also visited a weekly public lunch put on by a

local faith organisation. Woven within these were countless informal conversations with nonparticipants.

Data Analysis

I thematically coded interview data for content and analysed using NVivo 8 qualitative data analysis software. Having no pre-established ideas about why collective action occurred or did not occur with the communities, I inductively reflected on the interview data and notes from my fieldwork in terms of their fit within my theoretical interests in culture and adaptation. This analysis led to the theoretical arguments around culture presented here.

Responses to Mill Closures

Preliminary analysis of the data revealed two broad themes that were coded *resistance* and *non-resistance*. Resistance is defined as actions that stood in direct opposition to the mill-closure in an attempt to (in some way) thwart or challenge the loss. Participants in both communities described collective action around the closure and narratives of feelings and rationales that suggested a direct focus on the circumstances of the mill. Non-resistance is focused on non-mill related phenomena that nonetheless sought to redress the negative impact of the closure but without explicit reference to the loss of the mill, and was also present in both communities. The data show resistance has a higher incidence in Youbou than Fort St. James (Figure 3-6). Out of the 35 unique interviews utilised for this research, an approximate 60% - 40% split exists between communities regarding the thematical code of non-resistance, with Fort St. James showing more incidence of non-resistance (60%) versus Youbou (40%). However, given the uneven distribution of participants in the mix of interviews, these figures require triangulation with other data and rationales. Interview data were also coded thematically as *mill life, mill in community,* and *mill attachment.* The first code refers to portions of dialogue where participants referred to life at the mill, the second refers to instances of reference to the mill in day-to-day community living, and the third indicates a favourable view of the mill in reference to the community. These three themes within the data were found to be biased toward Youbou and show the mill to be of greater relevance in community life. Figure (3-6) compares interviews with these thematic variations.

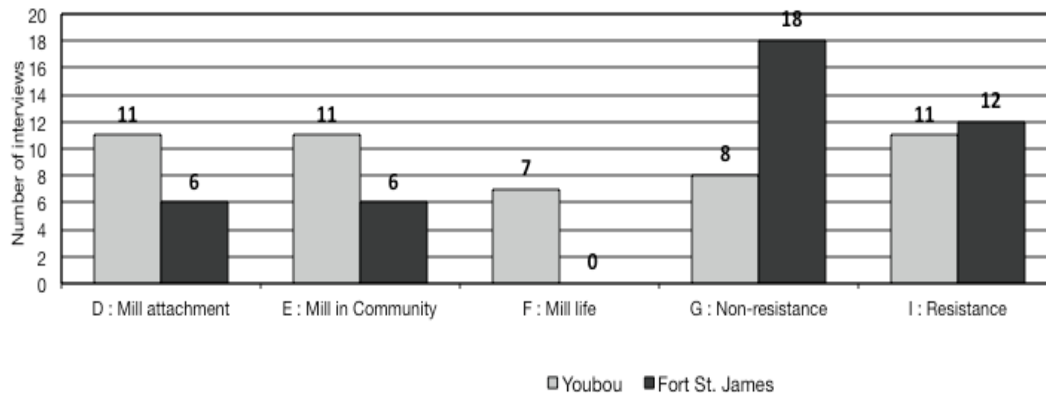

Figure 3-5. Characteristics of mill association by community

The following subsections describe these variations in more detail, focussing on evidence of the role and implications of the mill in the CS of each community.

Youbou's Cultural System: Mill-focussed Collective Action

Resistance here is exemplified in part by collective action, incorporating activities such as rallies, protests, legal actions, and narratives of displeasure and challenge to the mill closure and related circumstances. Resistance also includes a pejorative view of the post-mill era that stood in sharp contrast positive and nostalgic views of the mill. Likewise I noted that the subtheme of *mill attachment* was resurgent in narratives of resistance. Here the mill formed a cultural locus of the community to the degree that the mill was of the community and the community was of the mill. If one suffered, so would the other. I suggest that these relationships formed the components of the cultural system (CS) and facilitated a constrained response to the closure.

The closure of the Youbou Sawmill was initially legally contested by the union (IWA - 80) over the suspected surreptitious removal of the appurtenance clause (Clause 7) in Tree Farm Licence 46 (TFL 46).[20] After abandoning this challenge, the maturing YTS unsuccessfully attempted to revive the case. Prudham (2008:6) describes the early YTS, composed mostly of ex-mill workers (hence former IWA union members) as "largely reactive, confrontational, and seemingly ad hoc," clearly demonstrating *resistance* as its modus operandi. Furthermore, both former mill workers and community members held rallies, protests, and conducted roadblocks against the closure and eventual tear down of the mill. Virtually all participants living in the Youbou area at the closure period

[20] Tree Farm Licences are the logging rights for a specific area of forest granted to forestry companies. Until recently licences generally contained a clause stipulating that timber harvested in a given area must be sent to a mill in that area. Removal of that clause, contentious in the case of Youbou, means that timber can be sent to mills outside the region or even the country. This can have adversely impact the survival of local mills, as the case of Youbou illustrates.

participated or supported these direct actions. The impact of the closure was and remains deeply resonant among the former workers and community members.

While it may be obvious that people would react in this way when their source of livelihood is lost, this initial insight does not capture the deeper connections to individual livelihoods, place and culture that are contained within these events. These deeper insights into mill attachment and livelihood attachment appeared in the following quotes that describe how embedded the mill was in community life:

> The company was a part of everything in the town. We wouldn't have the bowling alley or the hall without the company. We wouldn't have had the church without the company, the fire departments without the company. They were involved in everything. They used to put on the Christmas part of the kids. All the men paid into a fund and at Christmas time, they put on a great big Christmas party at the hall, they had Santa Claus coming, a present for every kid, oranges and candy for every kid. The schools put on a great big festival. They were a part of every part of your life. [Youbou resident and member of Youbou Historical Club]

The centrality of the mill to historical community life described in this quotation gives an indication of the severity of impacts that it loss imposed on the community. As a long time Lake Cowichan resident employed by a community organisation observed:

> It was a shock when the announcement was finally made. There was lots of protest, lots of anger, bitterness. The whole gambit, and then you know on top of that it was unnecessary so there's that going on. And then you've lost your job, and that must be terrible, it must be an awful feeling. You were a vital part of the community and now you're not. So there was that. So they formed a Youbou Timberless Society. [Youbou member, manager of community institution]

Others reinforce these sentiments, as the following statement from a former millworker present at the closure notes:

> You know you've actually got people from the public, stood on the line there and got arrested because they believed the mill shouldn't be removed from the community. [Member of the Youbou Timberless Society]

Acts of resistance also included activities in the realm of direct action such as that described by two former Youbou mill workers (M1, F2, etc differentiate between male and female participants in multiple person interviews):

> M1: It was a dozen times we were at the legislature trying to get the politicians whatever, rallies or whatever, we were having meetings or whatever. We just felt, we didn't lie down or whatever, like a lot of times

> now when a mill shuts down, you don't hear nothing, like no workers did nothing. Try to get the government to listen or whatever, there was like you know jobs protection officers, commissioners, now there's nothing. The way the governments made the law if they shut, they used give 90 days notice, now it's less than that. But of all the mills that ever shut down, nobody's ever had like the unity or the workers trying to, still try to keep it open or whatever...
>
> M2: When the mill went down they actually, there was a little camp just at the mill gate, and that was manned 24/7 with people there. Any time we heard there as any kind of a major thing, the call went out. There were from 50 to 100 people there. ...[O]ne time they brought a bunch of construction workers in to start dismantling the mill, and we had letters of support from the local mayors, Cowichan, our local representative, even at that point premier Campbell had sent a letter to Timberwest, asking them to hold off on the dismantling of the mill. Timberwest weren't doing that [sic], they wanted that mill down as quickly as possible. The mill was basically down by June and it was closed in well July 26 was the last log cut, but skeleton crew worked until January. [Members of the Youbou Timberless Society]

A Youbou expert in local history complemented Rajala (1993) by describing Youbounians as a "feisty bunch" and speculated on the origins of this activist behaviour:

> I don't know if there's something in the water, again I think a lot of it comes back to the isolation. You just had to make do. 'Cause you just didn't go to Duncan on a limb as you do now. Oh I need some milk I think I'll go to Duncan. We just don't, they just didn't do that back then. I talk to people my age, and they say if they got into Duncan once a month it was a big deal. So you just didn't go. So you made do and you took care of your own problems. [Youbou community member]

The historical role of the Youbou mill in community life was quite pronounced. Six of the long-term Youbou residents made explicit reference to the central role of the mill in community life, to the extent that the social life of the community ran to the mill shift-whistles.

> Everything ran by the mill whistle when we were kids. Down at Arbutus Park there the place would be teaming with kids. The whistle would go off and it was cleared in about five minutes. Everybody headed for home. Suppertime...because you better be there before your dad was there. Cause it was a mill town, the guys came home, they washed up, they sat down to their dinner, and then life went on after dinner. And that was it. [Youbou resident, Member of Youbou Historical Club]

Moreover, the existence of the Youbou Historical Society and its painstaking documentation of mill-centred community life suggests an on-going identification with the mill-history of the town. This volunteer group of community members meets weekly in the heritage bowling alley[21] (Figure 3-9) in the community hall, and had amassed and organised an impressive collection of binders containing newspaper clippings, photographs and other media detailing community and regional life and history going back the 1800s (e.g. Campbell et al. 2008).

Figure 3-6. Youbou Lanes handset pin bowling alley (Image: C Lyon)

Youbou and the Cowichan Lake area have an extensive activist labour history dating to the early 20th century (Rajala 1993). The community maintained a union hall that was a focus of early post-closure organising by the IWA Local 80 and then, for a short period, the emergent Youbou Timberless Society (YTS). Response to the mill closure appeared to draw from this history of resistance and collective action.

Fort St. James: Non-resistance and Non-Mill Collective Action

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[21] The bowling alley (Figure 3-7), I was told, remains the only 'hand-set' (no mechanical or computerised pin setting devices) pin alley in Canada (or North America depending on who was explaining it). Local teenagers are hired to sit behind the barrier separating the alley from the pin-area reset during matches. Many long-time local residents commented on having that same job when they were young. The lanes remain actively used by a local bowling club and unorganised members of the public.

Non-resistance is demonstrated and defined by the lack of collective action or discourse that directly challenged or addressed the mill closure. It also includes the presence of discourse or action that focuses on mitigating the impacts of the closure through retraining, education, or counselling programs. Non-resistance is essentially all that is done to address the closure, but through social networks and institutions unrelated to the mills. It is difficult to capture explicit statements that specifically illustrate the absence of a course of action that appears as non-resistance. These would have to indicate a deliberate reasoning that the person had a choice and sought to navigate the closure through resistance or non-resistance. Instead, the path of non-resistance appears to be linked to community orientation away from the mill in the sense that organised collective opposition to the closure did not occur beyond some initial rallies followed by the community channelling their energy elsewhere. This is not to say that collective action does not occur in the community, as comments from participants all made reference to specific cases where it did happen, only that it was largely absent in relation to the mill closure.

While the data reveal comparable references to resistance in both communities, they also show a dramatic increase in non-resistance activities and actions in Fort St. James (Figure 3-6). The former is accounted for by the reference to a number of rallies and community meetings that occurred in the early stages of the Fort St. James closure. Virtually all participants were aware of these community meetings, but did not feel that these made a difference apart from providing a venue for solidarity. The role of collective action, despite the existence of a union at the Pope and Talbot mill, radically diminished beyond the immediate closure period. The response of one participant typified the general view expressed by participants of that early activity:

> They did have community rallies about that but we haven't had any of those in two years though... [I] don't think they helped at all. It didn't change anything. They showed us some good support for people. People got good input on what was happening and why it was happening...yeah I think they did good for educating people on what it was why it was happening. And then it kind of just died off. [Fort St. James resident, business owner]

In other words, the rallies did not appear to be a catalyst for action directly targeting the circumstances of any of the closures, nor were they sustained for any great length of time. Residents' social energy did not appear focused on reopening the mills, or protesting the closure, so much as it was toward utilising community assets such as education facilities and social programs. Residents appeared to see the community *sans* mill as the major locus of the cultural system. One participant thus elucidated:

> [E]ven though the forestry and the mills have been the primary economic drivers in the community, it isn't the only reason that people live here. They live here for the community, they live here for the sense of family.

> There's multi-generational families here and I believe that the educational system is good, so when you put all of the aspects of family life together, you've got the majority of it being readily available here. When you look at the recreational aspects that other people in other towns might have to go outside of the town to get, we've got it right here. So when you look at all of those aspects that you have in your normal daily life, it wasn't just the job for the one bread earner. That wasn't the make or break it kind of situation. It was all of these other things too. [Fort St. James resident and public servant]

This emphasis on community as the focal point rather than the mill itself is exemplified by a description of where sustained collective action did occur. Collective action was most evident during a recent community tragedy, where two young snowmobilers went through the ice on Stuart Lake around Christmas, 2007, just after the mill closure took place. The following participant echoed the sentiments of four out of five others who brought up the event.

> It's been tough here for a long time. So even back then there was a terrible accident out here on the lake. A couple of kids drowned just at Christmas time and it took, I think it took about two, two months or so to find the girl and probably another two or three weeks to find the boy. And what I remember about that was despite the economics of the day and the difficulties even then of what was going on, families responded in an incredible way. I mean people were out there drilling these holes trying to find these two young people. Day and night. It didn't matter if they were a First Nations person, non First Nations person, where you worked, all of those lines got rubbed away. People just worked together for that common cause. And if anything you know, Chris [interviewer], over the last few years I think families have responded even more that way. Could be a child fell in the office here had a kidney failure, a kind of early premature kind of cancer. Well there's fundraisers, and dancers and people pulled together to help out that family. [Fort St. James resident, local public servant]

The absence of a pronounced cultural role of the mill within the community emerged from discussions with other research participants as well. Residents focused their energies on available retraining and other programs, as the following exahange illustrates.

> M1: There was a change here at the, we've had more people come in to take maths because of upgrading to get into a millwright, welding program, machinist program. They need math, math 11. So we have had more men coming the last year, year and a half for that course.
>
> M2: And one thing we've really noticed is that the college is really taken off too.

> M1; and the college is become a big busier. Like it's almost like they you know as things close down, people got laid off. It's almost like the college took on a life of it's own. They've expanded. You know, new buildings and a couple buildings in town, and they're way busier than I remember them being before when the economy was good up here. [Fort St. James residents, social services workers]

A conversation with several others described how these programming and services aided displaced workers and community members.

> F1: Well the JOP programme was good for a lot of families. A lot of families didn't get paid out. It saved a lot of people.
>
> F3: It gave the people who were working a purpose. To get out of the house to do something, the keep themselves busy. And you know. People started going back, getting English as second language. Upgrading their skills.
>
> F1: Schooling, there's been a big - sorry my husband's native. So I know a little bit about that. There's been a big push for schooling. We'll send you off to go do this. To go get your first aid, all these tickets. And they'll pay for it. So there's been a big push that way.
>
> F3: Yeah that's true, funding, government funding as well…if you're a laid off mill worker. That's how my daughter got into school in delta because she's a laid off mill worker, they were able they were going to support her through the _____ programme to do what she wants to do. So that's been OK that way. So as much as that we didn't have the mills there have been a few opportunities to help. Not everybody mind you but...
>
> Interviewer: there's been a trickle of opportunities.
>
> F1: You actually had to get your butt out there, and you had to fight for that. Getting on to the JOP programme wasn't easy. They could only hire so many people at a time and you had to wait. [Fort St. James residents, health services workers]

Community and individual energy in Fort St. James did not manifest in a sustained contestation of the mill closure. Instead the general approach was focussed on adapting to the situation at hand and trying to envision a different future apart from that of the long stable run of the mills. The role of the Job Opportunities Program (JOP) mentioned in the preceding selection, a provincially funded local employment program was notable. Following the closure, residents made use of extensive retraining programming from the community college, as well as provincial government funding used to implement the JOP for displaced

millworkers.[22] This scheme provided small, rotating work crews for community upkeep and renewal projects. Local residents and businesses could submit requests and a crew would be dispatched to do carpentry, painting or light construction work. The JOP proved extremely popular with comments from seven out of 11 participants from the community voicing comments to the effect that it had,

> a phenomenal positive impact in literally and figuratively the sense of community was is very very strong. The sense of getting things done that [Fort St. James] might not have had the opportunity to do. Excellent, absolutely excellent. [Fort St. James resident, local public servant]

While the perception of the JOP was largely positive, several participants suggested that a degree of nepotism was present in the program as well as the few available employment opportunities in the community.

> Its not what you know, it's who you blow. Not even kidding. It doesn't matter, you could be the dumbest person in the world, no skills, no qualifications, but if you know that right people you get a job. And like just coincidently, two [people] whose dad was their boss they somehow got the most primo job in the summer working back to back shifts in the [local workplace]. [Fort St. James resident, young adult]

Regardless of whether these views were positive, negative or neutral regarding the post-mill activity in the community, they all represent a lesser focus on re-establishing the mills or contesting the legitimacy of their closure, as was the case in Youbou. Major collective action was limited regarding the closure, but existed in regard to the impacts of non-mill social issues on individual community members. While undoubtedly the main economic driver of the community, the mill does not appear to comprise an integral cultural element of the community. Even if community members reframed their relationship to the mill as a coping mechanism, this reframing still appears to constitute an adaptive S-C exercise of agency on their part, which resulted in a new non-mill focussed CS. As such, community response is not constrained by cultural structures stemming from mill attachment and suggests that agency at the community level takes on a different range of manifestations than would be the case if the mill was an integral part of the culture of the community. In Archer's terms this might be understood as a greater range of elaborations as the community becomes something new. In resilience thinking, this might be understood as an expanded capacity for

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[22] A comment on time is useful here. Youbou's mill closed in 2001, nearly nine years before my fieldwork took place compared to Fort St. James at only two years. However, the collective action in Youbou began immediately after the closure, yet in the same timeframe, Fort St. James experienced only a few rallies. This suggests that the time since the mill closure in these cases does not have an impact on whether collective action occurred. However, this is not to say that collective action around the forest industry will not happen in Fort St. James at some point in the future (conditions around which would be worth looking at), only that time seems to have little relevance in the present context.

alternative reorganisation following the loss of mill. A plurality of social, cultural and economic orientations unrelated to forestry existed in Fort St. James and this in turn allowed for a broader spectrum of possibilities for agents to elaborate the cultural system, actions which did not necessarily include collective action (particularly resistance).

In Youbou, the idea of community was bound up in the embeddedness of the mill in the people who were directly and indirectly affected by the mill and/or its loss. They, to this day, seem to operate as a mill-informed collective. From the very nature of my interaction with participants evidenced by the large number of multiple person interviews, to the existence of a number of community organisations drawing on mill history for activist or nostalgic purposes, collective action is culturally embedded within the community. The contrast to Fort St. James is apparent.

In Fort St. James, the mills are detached from the cultural nature of the community. Community here does not operate on such a formally collective basis, but instead it appears to be exercised on the individual level, focused on individual level social networks, such as neighbours helping neighbours, and through local social services, government and education institutions. This does not mean that the absence of group action in Fort St. James is detrimental to community wellbeing in the wake of closure. The absence of collective action simply represents a different cultural elaboration of a cultural system that, unlike Youbou, is differentiated between mill and community.

Discussion

Using the language of Archer's theory, the viability of the cultural system (CS) in Youbou and Fort St. James was forced by the mill closure into a period of agent-driven change. When the mill closed it exposed the inconsistencies (factors compelling closure despite community reliance on mill) within the cultural system that in turn required a response from the socio-cultural level (S-C), and subsequent cultural elaboration. In the case of Youbou, with the integral nature of the mill to the cultural system, this elaboration at the socio-cultural level maintains the mill and mill era social life as a strong reference point. I suggest that this cultural or social dependence on the Youbou mill acted initially as a constraint and then an enabler of the community's post-mill adaptive response. By way of contrast, in Fort St. James the role of the mill appeared relatively independent of the S-C system and as a result, little organised collective action occurred. Dramatic instances of collective action were referenced and emphasised in the interviews, but these pertained to a community tragedy that was unrelated to the mill closure.

These results raise some interesting theoretical and empirical considerations. While we can understand how structure acts to constrain or enable agential elaboration of the cultural system within these communities, more important questions are left open regarding how culture and agency interact with community resilience. Following mill closure, did the cultural relationship of the

community to the mill contribute to or detract from its resilience or adaptation? Was the Youbou response more adaptive than the Fort St. James response? Answer to these questions remain quite complex and elusive**.**

Collective Action and Social Resilience

Collective action is commonly understood as occasions where people come together and organize in pursuit of a common goal or public good (Macy and Benard 2006). Much theory of collective action is functional in nature, suggesting that the catalyst for action is rooted in certain unacceptable conditions. Groups are thought to form and act if certain key conditions are met. Based on this approach, rational choice theory (RCT) has been adapted to common property resource management (CPRM) (Cleaver 2007) and political protest research (Opp 2001; Muller and Opp 1986). In CPRM, institutional structures are thought to shape collective behaviour (Cleaver 2007:223-224). In political action contexts, RCT suggests that motivation to participate in collective action occurs at the individual level and stems largely from social structures and incentives (Muller and Opp 1986; Opp 2001; Ostrom 2000; Olson 1965).[23] Resource mobilisation argues that collective action occurs when certain structural conditions are met regarding relative availability of resources in the context of group needs or goals (McCarthy and Zald 1977). Relative deprivation theory suggests that collective action occurs when one group makes unfavourable comparisons to another in terms of wellbeing, prompting the former to action (Wilkes 2004).

However, the analysis presented in this paper challenges the “pervasive functionalism” (Cleaver 2000:263) of these interpretations of collective action, showing that it did not occur in one community even though the broader contextual challenges were similar to the other. People did not act 'collectively' in Fort St. James as a response to the proposed catalyst for action. Instead, they (as individuals) made use of pre-existing social networks and government support services for retraining, or privileged action at the individual and familial level as they sought work elsewhere or helped individual neighbours. Put another way, adaptive strategy in Fort St. James was not collective at the community level. However, the actual outcomes for the communities, although ongoing, are vastly different.

In Youbou, the mill is no more, and the area where it stood for the better part of a century consists of overgrown rubble and concrete foundations. There are plans to develop the site into a mix of residential and service development but at the time of writing, no sod has yet been turned. There is evidence of a severe population turn over, and the remaining residents still hold fast to the mill period. This does not necessarily mean the community has failed in some way, as these residents show strong interest in rejuvenating what remains of the old the

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[23] Opp (2001) entertains a review of the rational choice research program regarding political action. Structural factors recognized in this work include phenomena such as rising inequality or limited avenues of redress, and incentives might involve various social rewards, like maintaining a sense of belonging, for joining collective action.

community. Groups such as *Me and You Nights* a community social events group, the *Youbou Historical Club*, as well as the closure-inspired activist NGO, the *Youbou Timberless Society* shows a strong inclination to symbolic and practical vestiges of the mill-era Youbou. While the limited cultural elaboration imposed by the cultural-dependency of the community on the mill may have in some ways compelled agents toward a collective action that challenged the closure, this same dependency has also allowed for the maintenance of a social environment despite the loss of the mill. A core group of long-term residents have adapted to these new constraints and have pushed the community into an embryonic stage of adaptation, or per Archer, cultural elaboration. While the loss of the mill and subsequent failure of collective action to redress the closure through direct action or legal means is regrettable for the community, local collective action formed the core of new efforts to reorganise and renew the community.

Fort St. James, on the other hand has witnessed the partial reopening of the former Pope and Talbot mill by the investor, Conifex. There are negotiations toward locating the Terrane Metals mine nearby and making Fort St. James a hub for that mining industry (Terrane Metals Corp. 2010). The existence of a range of education, social services and job programming support has allowed the community to sustain itself through the closure despite the lack of organised community response to the closure.

These differences might be partially explained by Adger's (2003) structural argument that collective action at a community level is dependent on extant social networks and is generally inversely related to the state's role in mitigating the impacts of change. In other words, where the state’s influence is limited, social networks and local capital become surrogates. With a greater state role, energy is diverted from local collective action and into subscription and resource seeking within the state's management regime. This formulation also may explain why an explicit campaign of collective action occurred in Youbou (with limited resources) and not in Fort St. James (with significant resources). The dearth of public resources in education, retraining, or other programming and government support in Youbou might act as a driver for the community to form their own surrogates, hence the creation of the YTS and the legal challenges. On the other hand, in Fort St. James, the presence of support organisations offered community members an alternative to the mill and community members were thus compelled to forgo collective action and make use of these state-funded resources. As a counterpoint to this argument, however, there is no explicit evidence in the data to suggest that the provision or lack of provision of community resources are correlated with the absence or presence of a mill-culture dependence. It is possible to conceive of a community with both a diversity of institutions as well as strong cultural affiliation with the mill. Indeed, the history of Youbou, where the mill itself was responsible at one time for providing services to the community is a case in point. This situation, however, still allowed for a culturally embedded activism to emerge in Youbou, challenging the idea of an either-or equation regarding local institutions and collective action. Furthermore, the social community extends beyond the political boundaries of Youbou into Lake Cowichan and Duncan. These larger communities have many institutional

resources that former workers might utilise. Given the dearth of workers living in Youbou at the time of the closure, it would have been understandable for them to make use of resources in the surrounding communities in which they lived. A correlation also suggests that cultural dependency on the mill would deteriorate as mill-provided services were removed. This was not the case and, as the results show, the remaining long-term residents of the community still maintain a cultural affiliation with the mill nearly a decade after it was physically demolished.

These differential responses and outcomes between Youbou and Fort St. James begin to demonstrate that simplistic indicators of resilience or predictive theories of collective action are difficult to apply in this situation. Collective action, conspicuous or otherwise, is not an end in itself, and its presence or absence in a context does not necessarily indicate more or less resilience. Instead, it is merely one of a number of elements present or absent within a cultural or social system that can inform how a system navigates change. In broader terms, culture (as defined in relationship to place), at least as much as anything else, informs the relative occurrence of collective action within a locale. The presence or absence of collective action does not indicate an absence or presence of local resilience, but instead is simply a reflection of the cultural constitution of the community.

Yet, the question of what this implies for communities and policy makers remains. Part of the answer might revolve around a greater awareness of the factors influencing local culture in communities in transition. Understanding cultural relationships to place, and how these (in turn) are reflected in community attitudes, gives residents and policymakers a relational framework to understanding the social dynamics of communities in the wake of change.

Conclusion

Margaret Archer's theory of cultural morphogenesis maps onto a model of change that is found in SERT. This superimposition provides a partial answer to the underexplored question of agency, structure and culture in resilience theory. Moreover, it provides a framework for understanding what happens at a cultural level in communities that are navigating change. It shows how culture informs, constrains, and enables the adaptive responses of groups that are undergoing strain. The case studies develop the idea that local cultural context plays a significant role in community responses to mill closure challenges. The findings also suggest that constraining cultural factors also act as enablers of positive adaptation, although as Youbou shows, this may take some time to materialise following a threshold event.

This analysis also complements post-Fordist and post-staples meta-descriptions of resource sector change as well as a preference within resilience theories for structural or functionalistic approaches. These approaches privilege institutions and other measurable indicators of resilience, and this analysis offers more insight into human agency and social change that lead to adaptation.

Moreover, the findings suggest that economic upheaval does not by itself constitute a motive for collective action. In Youbou, collective action coincided with a strong pre-existing activist culture, which in turn produced an immediate collective response to the closure. In Fort St. James collective action occurred when individuals or families in the community were in need, but to a lesser degree than was the case in Youbou. Theoretical insights and empirical evidence in this study provide some insights into these differences between communities and what this means for collective action, adaptation, and more resilient rural communities in the future.

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Chapter 4 Conclusion

The original intent of this thesis project was to examine the intersection of place, collective action, and social resilience within a transitioning forest-based community. As the research progressed and the data were analysed, deeper questions and stories began to emerge.

Place, it also emerged, plays a key role in the community adaptive responses. Simple descriptive concepts such as place attachment or sense of place did not fully capture what the data appeared to be whispering about the role of place in the community following closures. I could describe how people used the physical attributes of place, or felt about their communities, but these descriptions alone did not provide a nuanced explanation of how place intersected with communities in crises. In this study I found that place played a complex and powerful role in community adaptive responses. Adapting Lukes and Gaventa's three-dimensional model of power, I began to understand place as a multidimsional power in and of itself. Borrowing from Cruikshank's description of Tlingit conceptualisations of place as active manipulator of human fortunes and then Latour's invocation of non-human entities as agents able to shape behaviour, I saw a conceptual tool which when mated with Lukes and Gaventa's power theory, would provide a cogent device for understanding how place interacts with communities in upheaval. The result of this intellectual exercise is the three-part incarnate, chimerical and discarnate model of place-power I empirically describe in the second paper. This framework in turn, may provide a useful tool for scholars and practitioners to understand the complex interplay between elements of place and people in periods of social transition.

Collective action occurred in each community, but around vastly different drivers. In Youbou, it revolved around the mill closure, whereas in Fort St. James this was not the case and people rallied around social or personal events affecting community members. This contrast could not be easily explained by traditional functionalist theories of collective action and it was here that I began asking questions about the culture of each community. What made Youbounians so energetically activist in the wake of closure, and Fort St. James so comparatively less so? What was it about place that might account for these differences and what did that say about the ways these communities adapted following closure? Culture, more specifically, the histories of each community, which indicated localised systems of responding to crisis, seemed to form part of an answer to this question. Archer's notion of cultural morphogenesis (that is a system of knowledge, values and norms mediated by time and forced to change through the people's recognition of inconsistencies or upheavals) provided a theoretical lens for understanding this shift.

Together these papers form a theoretical framework for culture and place to inform community adaptation and resilience during a period of radical change. This study is therefore a contribution to resilience theory, which has been criticised here and in other places for being heavily functionalist, and lacking in

deeper understandings of the social world to which it makes strong claims. Bringing, the concepts of culture and power into social ecological resilience theory enhances its explanatory capacity. These papers bring a deeper sociological analysis to the human side of that equation and this may have implications for academics, policy makers and practitioners who bear the responsibility of helping communities navigate periods of deep change.

Future Developments of this Research

The two papers in this thesis are closely related. While each paper uses an assembly of theories to sketch interpretations of events in the communities, the themes are closely linked. A further paper, unwritten for this thesis, would articulate the interplay between place-power and the cultural system of each community, particularly in the realm of discarnate power. The mill-culture relationship differed between each community. These relationships, as part of a cultural system of each community, also demonstrate pre and post closure exemplars of discarnate power though organisations like *Me and You Nights*. A third manuscript would therefore explore the role of the place-power dimensions in the cultural system of a community as it changes over time. This paper would synthesise the two arguments presented in this paper into a coherent descriptive framework for understanding the contextually unique culture and place dynamics of adaptation and transition.

This future work will help to move the empirical discussion of social resilience away from technical indicators such as income and social networks and brings the conversation deeper into the realm of social theory and the lived experiences of people in these communities. While it cannot predict with specificity the ways that agents will act in periods of change, the research does describe some of the key local social structures and the peculiarities of the cultural system through which people act. Reading qualitative data for cultural trends and relationships with place as I have done here allows the researcher to tease out the key drivers of social action. These in turn illuminate some key pathways of community adaptation to social change.

Chapter 5 Appendices

Appendix A: Methodological Notes

This thesis is an empirically supported theoretical exploration of how collective action and place, viewed through social-ecological resilience theory, inform community level social adaptive responses to change. Two forestry mill-dependent communities (coping with the closing of their mills) provided the research settings. In keeping with my overall research goal, I asked the following questions of these communities: Why did collective action, such as protests or organised redress campaigns, around the mill-closures occur in some communities and not others? Second, how did community members' relationship with place influenced the communities' social adaptation to mill closure? I located these questions within a social-ecological resilience theory framework, as this is an established theory for understanding ideas of social adaptation. I use focussed ethnography as my research method, as this is a well-established means of understanding social change.

This appendix offers a methodological account of my research and is organised into the following structure. First, I describe the overall rationale for my approach, followed by descriptions of community and interview participant selection. This is followed by subjective details my fieldwork, and data analysis. I conclude with notes on the methodological rigour and ethics that validate this research.

Focused Ethnography

Ethnographies seek "to understand how [people] collectively form and maintain a culture" (Marshall and Rossman 2011:19). Focused ethnography is used to "evaluate or elicit information on a special topic or shared experience." (Richards and Morse 2007:58). This particular approach forms the basis of this thesis research. In this case, participants shared either as individuals or representatives of community organisations, the experience of the mill closure or community life after the closure. Attitudes, behaviours, descriptions and narratives voiced in response to interview questions about this event allow the researcher to draw out themes common to participants and thus elucidate descriptions of culture (Richards and Morse 2007).

While it is generally thought that conventional ethnography requires a prolonged immersion within the group being studied (de Rooij and Fabian 2008; Marshall and Rossman 2011; Knoblauch 2005), that approach originates in the anthropology discipline (Knoblauch 2005). Instead, as Knoblauch (2005) notes, focused ethnography is specific and substitutes long data collection periods with shorter periods utilising more intensive methods such as audio or video recording. In sociological ethnography, as with my study, the researcher is largely within

their own cultural environment, and not another as is the case in conventional anthropological ethnography (Knoblauch 2005).

Consistent with the goal of focused ethnography, my goal is to seek description of specific phenomena within a larger cultural setting, not a thorough descriptive understanding of all elements of the culture of the community, as that would also be closer to a full ethnographic account. Instead, I focus on a very specific set of questions about place and collective action in the life of a community. Moreover, I do so within the context of rural communities in a familiar cultural context. Together, these elements suggest that focused ethnography is an ideal research method, as my project objectives clearly match these methodological criteria.

Case Study Communities

As mentioned earlier, my main research questions deal with the role collective action, place in the social resilience of these communities. Based on the focused ethnography method, I used three criteria that I expected would be most likely to help me select the communities best suited to an exploration of these questions. These criteria were community size, mill-dependence, and initial evidence of collective action, as this would narrow candidate locations to those of suitable size that fit the focus of my research. This resulted in the selection of Fort St. James and Youbou. Further details on these descriptions appear in the body of the thesis.

Fort St. James

I was familiar with Fort St. James based on earlier scoping interviews with community leaders from the public and private sector, conducted in May 2009. Despite the apparent lack of collective action by community members following the closures, the community seemed to cope successfully.

Fort St. James is located on the Nak'azdli First Nation traditional territory in north-central BC and has a population of 1355. Located about 150 km from the regional city of Prince George, it was established as a fur trade post in 1806, it shifted to timber harvesting and mining in the 20th century. In 2007 the community suffered closures in two out of its three major mills. Locally owned Stuart Lake Lumber closed in May of that year with the loss of 85 permanent jobs, or 10% of the community’s workforce. This was followed by the bankruptcy induced closure of the United States based Pope and Talbot Ltd. mill which saw close to 400 people lose both direct (300) and indirect (100) jobs. At the time of writing, the Stuart mill remains closed, while the former Pope and Talbot mill was reopened by British Columbia based Conifex Inc. Conifex currently runs one shift of approximately 60 people which, although beneficial to the community, remains considerably short of the pre-closure numbers. A preliminary scoping trip to the community revealed little evidence of collective action in the wake of these closures.

Youbou

Fort St. James stood in contrast to Youbou which had produced the activist organisation, the Youbou Timberless Society (YTS) and engaged in a court challenge to the loss of its sawmill. Furthermore, published scholarly research existed on Youbou and the YTS (Prudham 2008), confirming that it was a notable place regarding community action in the transitioning forest economy.
The community of Youbou is located on the shore of Cowichan Lake on Vancouver Island, about 150 km from Victoria, and suffered the closure of its Timberwest sawmill in January 2001. With a population of 1176 and its location on a lake, it is of comparable size and setting to the community of Fort St. James. However, here the comparisons cease. Youbou has undergone a long period of mill and community decline. Mill losses as a result of changing ownership regimes and technological improvements reduced mill employment from highs in the 1960s and 1970s of close to 800 people, to closure low of 220. Note that only a minority of Youbou sawmill workers resided in Youbou at the time of the closure. Estimates put forward by participants put this number at less than 50. The remainder of workers lived in the Lake Cowichan and Duncan areas. There is strong current of collective action by community organisations (Youbou Timberless Society) and residents following the closure.

Data Collection

The fieldwork for this study occurred between August and November of 2009 where I resided for approximately six weeks in each community (beginning with Fort St. James). During this time and aside from recruiting and interviewing participants to my study, I participated in community events, took photographs, and explored the communities.

Semi-structured key informant interviews were the main vehicle for data collection used in this thesis. Key informants are sought for their insight into phenomena experienced individually and collectively by the community and provided the data used in this study. This method of data collection is suitable for ethnographic fieldwork as the sample size had to be manageable for single researcher yet still elucidate the desired, specific, data within a limited time-frame. These stipulations required a diversity of participants able to offer multiple perspectives on community life and the mill closure. Their general characteristics are described in Table 1. Participants were selected through cold calling key organisations and people and by snowballing potential interviewees from existing participants. It was virtually impossible to develop an exhaustive list of possible participants beforehand due to the complex array of actors in small towns. Moreover, the broad category of key informant suggested that I might consider anyone who experienced life in the community around or after the closure either as a representative of a key institution or a member of the public. My data therefore includes single and multiple-participant (group) interviews with persons

representing key organisations such as government, social services and businesses, as well as former mill workers and non-forestry residents living in the community or affiliated with Youbou. Most were present at the time of the closure, however in some cases, I interviewed people who arrived in the communities post-closure as they are representative of the post-mill change and their observations were valuable for their commentary on community life after the mill.

Sample Characteristics

Sampling is limited by the need to keep the size of the study within manageable boundaries, a limited period in which to locate participants, and a willingness of potential participants to consent to being interviewed for the study. The key-informant nature of the sampling and the research question allow for very broad selection criteria. As I am exploring experiences of place and views on the closure many community residents are potential key-informants. In essence, I am looking for experience of community. Table 1 shows the breakdown of participants contributing to this thesis by community, gender, and community role. The total number of participant interviews was 59, with 28 each in Fort St. James and Youbou. Another three were without community affiliation who could nonetheless, in their role with the provincial government, provide critical insight into community and provincial thought and action regarding mill closures.

Table A-1. List of Participants by Gender and Community Role

	Youbou (N=28)	Fort St. James (N=28)	Non-aligned (N=3)
Gender			
Female	13	19	2
Male	15	9	1
Community Role			
Local government	1	4	
Health		3	
Adult education		5	
Provincial government	1	1	3
Small business		2	
Social Services	3	1	
Former mill worker	22	4	
Community group	17	1	
Community institution	2		
Post-secondary Student	1	3	
Professional	1	1	
Spouse of mill worker		1	
Tourism		1	

Semi-structured Interviews

Semi-structured interviews are a suitable method for use in focussed ethnographic research (Richards and Morse 2007) and formed the primary mode of data gathering in this thesis. The interview schedule (see Appendix C) seeks to illuminate the intersections of people's experience of collective action and place in order to situate them within a social resilience theoretical analysis. Place questions are designed to illuminate participants' perception and use of the local natural area, infrastructure and services following the mill closure. Collective action questions are designed to gain participant insight into what, if any, collective response occurred in the community following the closure. The social resilience analysis drew on existing scholarship on place and social resilience as a framework to examine these data. Interview data are coded and analysed for linkages to these themes.

Single and multiple-person/group interviews were conducted in-person. While I had not expected to meet with individuals on a group basis, many of my participants preferred this method. My point of contact for these meetings was typically one individual who would then recruit suitable participants based on what I had described to him or her as my ideal participant. This process worked out well as group interviewees often reflected on and discussed my questions, memories jogged, and the exchanges between them produced richly nuanced responses. Moreover, the small size of the communities meant that these initial contacts knew a diversity of possible participants and were invaluable in securing a range of key informants.

These interviews normally occurred in participants’ work-places or homes, although some were conducted at restaurants and coffee shops. One interview happened at my residence in Youbou. I asked the participants where they would prefer to hold the interviews as their comfort and ease during the interview processes was most important. These places represent their choices.

Participant Observation

I participated in several community and community group events. In Youbou, these were the Me and You Nights fowl supper at the community hall, meetings of the Youbou Historical Club, as well as weekly lunch put on by the local church. I also attended meetings of the Youbou Timberless Society, which tended to occur in Duncan and Lake Cowichan. In Fort St. James, I participated in meetings of the local Rotary Club, the weekly tea and drum circle on the Nak’azdli First Nation. In both communities, my unsuccessful survey work, regular visits to community services and commercial venues, and informal conversations consisted of participant-observer event in and of themselves and were also rich sources of nuanced information about community life.

Gaining Entry and Being in Fort St James and Youbou

Richards and Morse (2007:55-56) describe five stages of ethnographic field research: 1) "negotiating entry" to the community; 2) familiarising with the community or setting, 3) "cooperation and acceptance by the community;" 4) withdrawal; and data analysis. This section describes the process by which I gained entry into each community, became familiarized with it, became involved in participant observation in addition to the semi-structured interviews described above, and finally withdrew from the community.

Gaining Entry

The process of gaining entry started before my arrival in each community. I was familiar with Fort St. James from an earlier scoping trip with colleagues so I did have some initial contacts there. Through these, I was able to secure a temporary rental apartment and arrange some initial interviews and introductions. I was unable to gain a full entry into the First Nations community of Nak'azdli at Fort St. James. The Band Council mediated entry here and I could not secure permission to interview Aboriginal participants without the Council's permission. Due to the availability of Council members, I did not gain this permission until I was close to the end of my fieldwork. However, I was able to attend in a regular community event (a weekly Labrador tea and drum circle) at Nak'azdli and familiarise myself with the community.

I knew no one in Youbou so my entry into the community came about through looking for media advertisements for accommodation. My eventual host, a long-time resident, was heavily involved in community activities and was able facilitate my access to number of community events and individuals. (is there are first nations community here, did you have to engage the council – make explicit if you did /did not etc).

Familiarisation and Participant Observation

Familiarisation took a number of forms. As I had no vehicle and the communities were small, I walked virtually everywhere I went. This allowed me to develop an instinctive familiarisation with the local geography. I was never lost! Moreover, this approach allowed me to notice small details of place that I may have missed from a car. I was also administering a survey in conjunction with my interviews, which, although abandoned when I could not achieve a significant sample size, also introduced me to a number of community members and interview participants.

In Fort St. James, I was a frequent user of community infrastructure such as grocery store and the tiny farmer's market, printing service (for consent forms and other research materials), municipal office, coffee shop, post office, and local restaurants. I had fishing gear with me and unsuccessfully tried to catch my dinner

(a number of times) at the rock breakwater by the tiny marina. Lake Stuart is also oriented in such a way that the sun sets over the lake and there are a number of superb vantage points around the lake for watching this compelling event.

In Youbou, there were almost no service facilities. I would sometimes have lunch or dinner at the seasonal pub as a means of observing who seemed to go there. More than once I found myself invited in for tea, stopped on the road, or offered a ride by local residents interested in my research. These individuals did not always become formal participants but the informal conversations offered me deep insights into community life. One resident took me on a tour of the community by boat. Another showed me a hiking route to a high feature overlooking the community. Overall, both communities were deeply welcoming and engaging and I had little difficulty around familiarisation and acceptance. I also took many photographs throughout this period, some of which are included in the body of this thesis.

Withdrawal

I withdrew from each community at about the six-week mark. Aside from larger project limitations that limited the amount of time I could spend in the field, two things began to happen more or less simultaneously. Participants were routinely providing familiar responses to my questions, indicating I had achieved data saturation. It also became more difficult to find participants, as existing participants were starting to direct me to people I had already interviewed when I asked them if there was anyone they might suggest I speak to. At these points I felt I was at the end of my optimum time in each location and it was time to leave.

Data

As discussed, I participated in community events and took photographs of these events and other elements of community life. I also made notes about emerging and recurring themes in the interviews and informal conversation, and reflected on my time in each place. I conducted all interviews used in this research. These I digitally recorded on a small portable recorder and transcribed, verbatim, using commercial word-processing software. I then coded the transcribed interview data for recurring thematic content and analysed it with NVIVO 8 qualitative data management software.

Analysis

The culmination of research presented in this thesis is a significant waypoint in my on-going learning process. In order to describe my analysis, I must also reflect on and describe this process as the two elements are tightly linked. Mine is a theory-heavy work; much more so than I had originally thought

it would be. I found the process of data analysis to be much more of a theoretical struggle than an empirical one. The following paragraphs contain an account of that process as it ultimately resulted in the ideas presented in this thesis. Although my findings were to be interpreted through social-ecological resilience theory, which would necessarily mean some theory development, I did not set out to develop SERT at the level contained in this thesis. Instead I wanted to understand my questions of place and collective action *through* SERT by asking how place and collective action contributed to community resilience and deal mainly with theoretical linkages that might occur there. In retrospect, this approach appears naïve and my project was bigger than what I perceived it to be in my initial proposal. I did not plan for this research to be the larger theory building exercise that it became.

Initially, I conceived my project to use a mixed method approach utilising quantitative door-to-door surveys and qualitative key-informant interviews. I proposed to spend some time among the Fort St. James and Youbou communities and conduct key informant interviews and surveys about the relative occurrence of collective action and where place might fit into the picture of community response to mill closure and set out to do this. However once I was in the field, several things occurred which caused me to adopt a focussed ethnography approach.

First, it became clear that the surveys were impractical because my response rate, although steady, was not high enough to allow me to collect a statistically significant sample within a reasonable timeframe. Second, unlike my surveys, I accumulated a much higher number of key informant interviews than I expected to get. Third, my involvement with key informants mean that I quickly found myself recognised by different community members and involved in a variety of community events and activities. I engaged with far more people in the communities than my consented interviews and unused surveys represent. My research, almost by default, became ethnographic.

The coded interview data served as one pillar of analysis. My observations of community life and participation in community events, particularly in Youbou (Me and You Nights, Youbou Historical Club, Youbou Timberless Society) served as others. Indeed, the distinction between the number and nature of events and groups occurring between (more in Youbou) the communities served as significant observations on their own. It was these other moments that gave took participant comments out of the abstraction of text, and allowed me to situate participants in the context of my having experiences some of the reference points within the interview content. Both the participants and I had levels of familiarity with the space of the community thereby understanding elements of a shared reality.

The data, nevertheless, told their own story. After returning to Edmonton and beginning the transcribing and coding process, I found myself with what amounted to a descriptive list of findings. I had memos regarding some descriptive about some of the general impacts of closures on the communities, participant statements regarding the relative efficacy of various adaptive activities and feelings about community. I also had some early and incomplete ideas on

what these implied for ideas of adaptation and resilience. However, I felt that these did not offer enough of an explanation for what I saw and felt after my time in these places. Had I stopped there I might have used these descriptive findings to contribute to the already heavy list of social resilience indicators without as substantial a discussion about their interplay with existing SERT. I sensed, though, this result would have been insufficient for understanding the mechanisms that drove the collective action and place relationships I observed and so I found myself wandering deep into theoretical taiga. I made the theoretical insights presented in this research later in my analysis after a considerably period of reflection.

Like the role of dynamic process in the adaptive cycle and panarchy heuristics, my thinking on resilience theory developed and shifted throughout this research project. Davidson (2010) for example, was published during my analysis period. Her compelling critique of resilience sublimely mirrored many of my much less refined and emergent ideas regarding SERT's problematic claims on the social world. Moreover, the constant reflection that occurs through the research process is really a learning process. Moments of insight appear along the way as shortcomings in the data and theory reveal themselves as opportunities for reflection.

As I describe in Chapter 1, my attraction to SER goes back to my undergraduate degree where I first encountered this work. I remember finding myself captivated by the ways in which I could see its patterns of growth, collapse, reorganisation and renewal everywhere, including in my own life. It intuitively made sense as a heuristic device for understanding change within the world and me. Thus, when the theory fell short of fully explaining my observations, I did not see that as evidence of a poor theory for understanding the social world so much as I saw it as a useful theory in need of further development. I define theory as the dynamic lenses of knowing elements of the social world that can be understood as systems of knowledge interacting with each other like SER's panarchy. Multiple theories coexist and the academic debates around them comprise a discursive system that constantly moves through cycles of theory building, contestation, followed by reformulation or rejection. If the SER heuristic serves as a parallel guide, then theories integrate with or challenge each other, forcing elaboration. The inability of one theory to fully explain a given phenomena does not mean that it is a poor fit for the data, as it can be strengthened through the inclusion of other theory.

Hence, I found myself considering ways to bring other social theory into resilience in a way that would help me more fully understand my data. The focus of my thesis consequently moved from using existing theory to explain empirical evidence, to using my empirical evidence in an attempt at developing the theory where it fell short of explaining the evidence. My thesis is therefore ultimately a critique of SERT using empirical data to support and extend the theoretical discussion. That I ended up drawing on place, power and culture theories are largely functions of my awareness of them, often from previous academic reading, or in the case of Archer, a chance mention of her work by a colleague.

Furthermore, the role played by what I can only describe as intuition was critical regarding my sense fit with SERT.

In summary, my data analysis was and is a process of learning that began before I started this project. In the post-field analysis, the thematic coding and interpretation of empirical data, when interpreted through existing SERT revealed opportunities to attempt to build a more socially robust SERT.

Study Integrity

Qualitative research has established methods of ensuring the cogency of both method and results. Numerous terms have emerged over the years to address issues of rigour. Terms such as *fit* (Morse and Singleton 2001), *comparability* and *translatability* (LeCompte and Goetz 1982), *authenticity, trustworthiness* and *goodness* (Tobin and Begley 2004) describe what Yin (2011) terms the *trustworthiness* and *credibility* of the research. Whichever terminology one chooses, they all describe naturalistic terms for ensuring *validity, reliability,* and *generalizability* of a naturalistic study (Tobin and Begley 2004). All terms describe various ways of ensuring methodological, analytical, and representational integrity throughout the study process.

Richards and Morse (2007) describe ways of ensuring validity and reliability throughout the stages of the research process. In describing these stages, and in keeping with Yin's (2011:19-20) suggestion that the foundation of good qualitative research is transparency of the research process, a planned and deliberate approach, and "adherence to the evidence," I describe the ways I have accommodated Richards and Morse's (2007) stages.

First, Richards and Morse (2007) describe the need for the researcher to have skills to use both empirical data and the relevant theoretical literature effectively for the inquiry at hand. I have some experience conducting fieldwork for my undergraduate honours thesis and employment with Statistics Canada. I therefore felt comfortable entering the field alone. Moreover, I had written a research proposal beforehand which contained both a literature review and a description of what I intended to do in my fieldwork. As described elsewhere in this appendix, this proposal met the standards of the university research protocols and meant that I was academically equipped to undertake fieldwork. Second, matching method to the type of research question helps to ensure the validity of the findings. Semi-structured interviews, key-informant sampling, participant and non-participant observation are all appropriate techniques for ethnographic inquiry. By using these, I have ensured the data collected is appropriate to the question asked of it.

Third, Richards and Morse (2007) describe the need for flexibility regarding dysfunctional data collection schemes. I describe the shift from mixed-method to the ethnographic approach elsewhere in this appendix. Fourth, the frequently similar responses from participants toward the end of the fieldwork indicated data saturation, meaning I had verification. As the sole coder of my data, I did not have to concern myself with consistent coding between multiple

researchers and the paper trail of data, records and analysis is available, satisfying the need for a transparent research process. Together, these points signify the reliability of the both method and data and satisfy the requirements of internal validity (LeCompte and Goetz 1982).

As my thesis focuses heavily on a theoretical argument, there is room to comment on its effect on validity. LeCompte and Goetz (1982) provide the useful categories of comparability and translatability for conceptualising validity in ethnographic work. Translatability refers to a clear description of "research methods, analytic categories, and characteristics of phenomena" (LeCompte and Goetz 1982:34). Comparability is understood as describing theory or observations clearly so that they may be compared to other circumstances. In this thesis, I use empirical evidence, based on a comparison between comparable phenomena and places to built translatable and comparable (genderalisable) theory.

These supported descriptions of the process and criteria of my empirical observations and theoretical constructions form the substance of my work. They demonstrate a replicable, generalizable, and informed study, and meet the demands of methodological integrity.

Ethics

This research is vetted and approved by the University of Alberta Physical Education and Recreation, Agriculture, Life & Environmental Sciences and Native Studies Research Ethics Board (PANELESS REB) (Appendix D). Participation was voluntary and no monetary or material incentives were offered to interviewees in exchange for participation. Informed consent is gained through presenting or reading aloud a project information sheet, which is left with the participant. If in agreement after reviewing the consent form, the participant would complete and sign a consent form (see Appendices B and C). Consent was nonbinding and participants were free to withdraw from the study at anytime during and after consent. Transcribed data were anonymised, with any reference to named individuals removed during the transcription process. Audio files are contained within a password protected computer hard-drive and locked storage spaces.

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Appendix B. Participant Information Sheet

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Faculty of Agricultural, Life & Environmental Sciences

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INFORMATION SHEET

Place and Community Response to Forestry Transition

Purpose:
This project explores the role of community residents' sense of place in their responses to mill closure. Place means the town and area where the community is located. Sense of place is about how community members use and feel about the places they live and work. The goal of this project is to try to understand what characteristics of the community affect how people respond to mill closures.

I am particularly interested in how people feel about their community and how they understand and respond to changes in their community.

Methods:
You are being asked to participate in this research by responding to a set of questions. If at any time you do not feel comfortable with the questions or you wish to stop participating in the interview, you are free to withdraw without consequence.

The interview should take about one hour to complete.

Confidentiality:
During this interview, we would like to use an audio (voice) recording device. This recording will be typed out by myself. The recording provides an accurate record of our conversation and is only used by the research team. Your name will not be used in any published document or project report. Instead a number will be given to that interview. A number, or a fake name, will be used on anything that gets written about the interview. Only the research team will have access to these files, which will be kept within a password protected electronic archive. This information will be kept for five (5) years and then destroyed.

Benefits and Risks:
This research is part of a larger project with a goal of understanding how communities are responding to changes in the forest industry. Benefits from this project may include learning about other community experiences from across Canada, and improving the ability of communities to cope with changes of this nature.

It is not expected that this project will have any risks for you. However, experiences like job loss maybe hard to talk about. In this case you are free to decline or pass on a question without consequence. Even after you have agreed to do the interview you can decide to withdraw from the interview. This can be done before, during, or right at the end of the interview. Simply tell the interviewer that you do not wish to continue. If you decide to stop participating in the interview, none of your information will be used in the research, and the record of the interview will be destroyed.

Use of your Information:
This project will support Masters research at the University of Alberta. Research funding comes from the Social Sciences and Humanities Research Council, which has no vested interest in the outcome of this research.

The research team will use the information you provide to understand your community's response to forestry transition. Information may be used in project documents, academic publications, and other

outlets such as a project website. If you want, we can send you a version of these documents when they are completed.

Researchers:

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If you have any concerns about this project, or the conduct of the research team, you may contact Dr. Wendy Rodgers, Chair of the Faculty Research Ethics Board, at 780-492-8126. Dr. Rodgers had not direct involvement with this project.

Research Ethics Board, 2-14 Ag/For Centre, University of Alberta, Edmonton AB T6G 2P5, Phone: 780-492-4931, Fax: 780-492-8524

Appendix C. Participant Consent Form

UNIVERSITY OF ALBERTA

Rural Economy
Faculty of Agricultural, Life & Environmental Sciences

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CONSENT FORM

Project Title: Place and Community Response to Forestry Transition

Investigators:

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Dr. John Parkins (Supervisor)
Department of Rural Economy
University of Alberta
Phone: 780 492-3610
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Consent:

Have you read and received a copy of the attached Information Sheet?	YES	NO
Have you had an opportunity to ask questions and discuss this study?	YES	NO
Do you agree to participate in an interview for this project?	YES	NO
Do you authorize the use of an audio recording device during the interview?	YES	NO
Would you like to see copies of the final papers and reports stemming from this research?	YES	NO

Signed this _______________ day of ____________ in the year _______________at

_______________ in the province of ____________.

___________________________ Signature of Participant

___________________________ Name (please print)

Appendix D. Interview Schedule

Project Title: Place and Community Response to Forestry Transition

Semi-structured (detailed) Interview Schedule

Part 1.

1. [In the spirit of semi-structured interviews, the following list of questions is intended to provide direction for the research participant, while affording opportunities to expand and move the discussion into areas that are unanticipated]
2. Can you confirm with me that the information I have about lay-offs and mill closures in your community is correct? [Confirm the factual information]
3. How have these events affected the community and your family?
4. Did the closure surprise you? Was it expected?
5. How have community members responded to these events? [Gain insights into the initial response of the community]
6. How have spouses and families reacted to the closure? Are there any unique actions or roles they've played in the aftermath of the closures? [Use as a lead in to open up a discussion of gender]
7. Were/are there community meetings or public events to discuss these issues? [Were there any collective gatherings or activities that brought people together to address the issue and start thinking about next steps?]
8. How were these meetings organised, facilitated, and who was involved?
9. Did you participate in these meetings? [Why / Why not?]
10. Do you think these kinds of meetings are/were useful for the community? [Why / Why not?]
11. Can you tell me about any concrete plans that have come together within the community as a result of these lay-offs and mill closures?
12. Will these plans help? How?
13. Are there other / additional strategies or activities that would be helpful for your community at this time?
14. What are the resources/assets within your community that may help you at this time?

15. What are the resources/assets outside of your community that may help you at this time?

Part 2: Place

1. About how old are you?
2. How many years have you lived in this community?
3. Have you ever moved away and then returned? If so, why did you return? [skip to next question if answer is no]
4. Do you enjoy living here? What is it about living here to you like or dislike?
5. Would you prefer to live here instead of other places?
6. How do you feel about the way the town looks and feels? Is it easy to get around? Are the shops and services easy to access?
7. Do you do most of your shopping in town, or do you go elsewhere? Do you use the internet to shop?
8. Do you use the local area for recreation and fun? (For example quadding, fishing, hunting, hiking, etc)
9. If you worked at the mill, what do/did you do there?
10. Do/did you enjoy it? Would you do something else if you could?
11. Do you feel differently about the community after the closure? If so, how?
12. Would you consider living outside the community to do this?
13. Do you belong to any community groups or clubs? [religious groups, recreational clubs, etc] If so, what? How often do you meet? Where do you meet? [goes to understanding how collectives of people use place]
14. Were any of these groups involved in responding the mill closure? If so, where did the discussion or decision to do something first happen?[Recall earlier question to this effect]
15. Do you think the community will figure out a way to keep going, even if one is not apparent?
16. Do you have any advice for other communities who are going through similar challenges?

17. Can you think of other people in your community who would be helpful to this project?
18. Is there anything else that you'd like to add about the things we've talked about? About living here?

Thank you for your participation.

Appendix E. Certificate of Ethics Approval

UNIVERSITY OF ALBERTA

Faculty of Physical Education and Recreation
Faculty of Agricultural, Life & Environmental Sciences
Faculty of Native Studies
Research Ethics Board

2-14 Agriculture-Forestry Centre
Edmonton, Alberta, Canada T6G 2P5

Tel: 780.492.8126
Fax: 780.492.8524

Certificate of Ethics Approval

Applicant(s):	Christopher Lyon
Co-Investigator(s):	John Parkins
Faculty:	Agricultural, Life & Environmental Sciences
Project Title:	***Place and community response to forestry transition***
Grant/Contract Agency:	SSHRC
Research Ethics Application #:	09-62
Research Ethics Approval Expiry Date:	June 11, 2010

I have received your application for research ethics review and conclude that your proposed research meets the University of Alberta standards for research involving human participants (GFC Policy Section 66). On behalf of the Physical Education and Recreation, Agricultural, Life & Environmental Sciences and Native Studies Research Ethics Board (PANELESS REB), I am providing **research ethics approval** for your proposed project.

This research ethics approval is valid for one year. To request a renewal after the approval expiry date, contact me and explain the circumstances, making reference to the research ethics review number assigned to this project (see above). Also, if there are significant changes to the project that need to be reviewed, or if any adverse effects to human participants are encountered in your research, please contact me immediately.

Chair, Research Ethics Board
Faculties of Physical Education and Recreation,
Agricultural, Life & Environmental Sciences and Native Studies

Print Name: Wendy Rodgers **Signature:**