Integral Community: Lenses, Values and Indicators for Maple Leaf Meme Maps

by Marilyn Hamilton BA CGA PhD

Abstract

This research into integral community mapping reports two results. The first explores the literature and methodology for mapping community values (at geo, bio and noetic levels of reality) combining integral, spiral and living systems frameworks. With indicators from five previous studies, the combined meta-framework is proposed as a common language to dynamically map community. The second result, reports on a Pilot Project conducted in Abbotsford, BC, Canada, which maps the noetic values of a random population sample using integral and spiral frameworks. Findings demonstrate the relationship between subjective, intersubjective, objective and interobjective values at seven levels of complexity, utilizing both qualitative and quantitative methods. Comparisons are made between the values of the general population and a selected group of community leaders. The study concludes that the pilot project demonstrates how to create a common language from data obtained from multiple methodologies and sources. The study recommends the expansion of the research to a bio-regional and national level.

Integral Community; A Pilot Project

In the fall of 2002, the Abbotsford Community Foundation (ACF) set out on the first phase of a strategic planning process. As a first step in that process, ACF focused on developing a Vision, Mission and Values statement. In preparation for that process, they asked themselves what became the Research Question for this pilot project:

- ***What do we know about our community?***

ACF had a vested interest in knowing the community not only to create an appropriate vision, but to develop an operational strategy for attracting and managing legacy funds for the benefit of the community.

Other Abbotsford organizations have interests in answering the same question and struggle to do so on a regular basis, including the City, the University College, the Health Region and the private sector.

Thus the ACF Pilot project gathered information about the Abbotsford community that can be used for virtually any organization in the community, interested in gaining insights into " the many kinds of community – found in neighborhoods, or where people work, or where they practice religion… sharing ethnic heritage, or professional skills or passions for particular activities. [They all] want to understand what these different types of communities have in common."

Background

Research Context

The Abbotsford Community Values research is a pilot project for research designed to serve two larger orders of magnitude.

1. Canada-Wide Research

Maple Leaf Memes (MLM) is research aimed at mapping the values landscapes of each major community, city, bio-region, and province in Canada on a systematic and regular basis.

In the Conclusions, of a nation-wide research project examining, Quality of Life in Canada, Judith Maxwell (2002, p.18) has characterized the results of MLM kinds of research as a "report card". She visualizes:

> "enhancing the collaboration among the various initiatives purporting to monitor elements of quality of life such as standard of living, sustainable development, population health, community health, personal well being, economic status. …[The] integration of existing quality of life indicator models …[in] a single model … would lead not only to the creation, but also, more importantly, to the use of a common language, framework and set of indicators by all those interested in quality of life in Canada – including citizens, all levels of government, non-governmental organizations, researchers, academics and the media. "

2. Global Research

MLM is intended to be part of the initiative, called the Global Values Monitor (GVM) developed in conjunction with the Global Values Network, to design, construct, field-test and implement a process of identifying the core value systems within specific bio-regions, cultures, organizations, and countries on a global basis. GVM is based on the constructs of Spiral Dynamics (Beck, et al 1996), the Integral Model (Wilber, 1996, 2000, 2002) and Complex Adaptive Systems (Graves, 1974; Beck et al, 1996; Stevenson & Hamilton 2001; Hamilton 1999).

Assumptions About the Study of Community

Community is a Living System

In this study we are making some assumptions about community in the way that we study it.

1. Our first assumption is that community develops as a result of individuals and groups organizing in the context of our Life Conditions. (Hamilton, 1999, 2002).
2. The context of Life Conditions is another way of describing the fact that our communities exist in contexts and/or environments.

3. Life Conditions contribute to core values of organization, community, city, culture, *bio-region, province and country* (at all levels of scale) (Beck et al 1996).
4. Core values emerge in a bio-psycho-social-cultural (integral) evolutionary spiral of ever increasing complexity, as the success of one set of values co-emerges new life conditions that require a new set of values in order to solve the difficulties caused by the success of the previous set (Graves, as cited by Beck et al 1996; Wilber, 2000).
5. The study of complexity informs the study of community (and vice versa) (Stevenson & Hamilton, 2001).
6. Communities of the future require different values than communities of the past (Smyre, 2002)
    a. Balance action, thinking, productivity and relationship values
    b. Be open to new ideas
    c. Integrate multiple ideas with non-linear thinking
    d. Embrace connected individuality
    e. Emphasize dynamic sustainability
7. Community development expands capacities for change & opportunity.
8. Most Life Condition indicators have focused on bio-physical, observable properties (eg. factors tracked by census data ; and land use planning). (Wight, 2000)
9. Most social development indicators of community have not been mapped in ways that can easily be linked to the bio-physical (often land-based) indicators of community. (Wight, 2002)
10. Therefore (possible) correlations between social and infrastructure conditions have not been linked, causing disconnects between the different conditions (eg. population explosion, pollution, and ecological degradation) and capacities and/or barriers (eg. political decisions and belief systems (Wilber, 1998, 2002).

Opportunity for the Research

Community Values Profiling is a Global, National and Urban Interest

A global interest in community profiling has existed since the Gro Brundtland, Report of the World Commission on Environment and Development, “Our Common Future” was published in 1977. (Brundtland was appointed Director General of the World Health Organization (WHO) in 1998.

WHO’s European website 2003, has recently distilled its 1980’s vision of a healthy city to these words: “A healthy city is one that is continually creating and improving those physical and social environments and expanding those community resources which enable people to mutually support each other in performing all the functions of life and in developing to their maximum potential (WHO, 2003).”

At the forefront of proactive application of healthy community principles, Jacksonville, Florida, in conjunction with ecological economist, Hazel Henderson, and local citizens in 1991, designed “Targets, 2000” indicators for a community progress report card. The indicators included: education, economy, public safety, natural environment, health, social environment, government politics, culture/recreation and mobility (Jacksonville, 1993).

On a national level of scale, Time Magazine (November 20, 1995) profiled the “State of the [Canadian] Nation” with a 14 page spread on indicators sourced from Statistics Canada, private polling, and research organizations. Their key classifications were identified as: people, economy, wealth, health, crime, education, and culture.

Thus, it is apparent that in the last twenty years, mapping the state of community has become a global interest.

Summary of Research Intentions

This report describes the Abbotsford Community Map Pilot Project, in the context of global, national and urban interests. It proposes a comprehensive integrated model for mapping the values of any/all communities and it also reports the Findings of the pilot research project situated in Abbotsford. In these ways it attempts to ground the two larger projects: Maple Leaf Memes and Global Values Monitor. The sections that follow review the Literature, summarize the Methodology and explain the Findings, Conclusions and Recommendations. (A longer report providing more details is available by request to the author.)

Literature Review

This literature review examines three domains of literature related to the research question, “What do we know about our community?”

1. **Frameworks for Researching Community Values**
   This is a review of frameworks for examining values in the context of community.

2. **Epistemologies of Community**
   This is a review of how we study community – how do we know what we know? It examines epistemological and methodological assumptions

3. **Measuring Community Capacity: Taxonomies of Indicators**
   This is a review of different approaches to measuring community capacity, with a review of specific indicators that have been used to measure various capacities.

The Summary of the Literature attempts to integrate the three domains by charting the indicators within an integrated framework of community values, drawn from five recent studies of values.

1. Frameworks for Researching Community Values

Overview

The five research studies (referenced below) at the country, province, city and global levels, open up the question of how to frame a review of values in community. The following literature review explores models that show how values emerge from the dynamic interconnections of life conditions and complex adaptive capacity in human systems.

Meaning of Values

Implicit in the question " What do we know about our community?" are assumptions about what we value about our community. In effect, we might be asking "What does our community value?" So in learning about our community, a place to start is to examine what we mean with the word value. The dictionary defines values in several ways:

> "Value: 1. the relative worth, merit, or importance;… 9. liking or affection, favour or regard; 10. values (sociological) the ideals, customs, institutions etc. of a society toward which the people of the group have an affective regard. These values may be positive, as cleanliness, freedom, education, etc. or negative, as cruelty, crime, or blasphemy; 11. (ethics) any object or quality desirable as a means or as an end in itself. "
> The Random House Dictionary, English Usage, Unabridged Edition, 1967, p. 1578

Thus the multiple definitions of the word "value" indicate that it has personal, cultural, biological and social meanings. Value also seems to arise both from inside the person ("liking or affection") and outside the person("people of the group" and "society").

By extension, value seems to emerge at different levels of scale and complexity (individual, group, society, globe).

Personal Values

With a particular focus on connecting values to what we know about our community, it is important to ground the origin of values naturally in our every day living. Values arise from our very consciousness; in particular, our awareness of:

- observations (through our senses)
- thoughts (through our cognitive capacities)
- feelings (through our emotional capacities)
- wants (Bushe, 2001).

In other words, the connection of our stimulus driven observations to thoughts and feelings, results in wants; ie. values. What we come to value, thus becomes the basic process which drives our consciousness and the infinite feedback loops that reinforce our capacities.

Family & Group Values

In conjunction with our biological realities as human beings, we share our observations, thoughts, feelings and wants with others – first in our families and

then in other groups. This is the basic process of learning in relationship, a process where the sharing of our observations, thoughts, feelings and wants become our stories (Short, 1996). And these stories in turn become exchanges that develop into shared wants, and shared values.

When values become not only shared in close groups, but replicated by sharing, in wider and wider circles of families and groups, we encounter the phenomenon of values as carriers of instructions about how we want to behave together. Eventually, these instructions for shared values act like the genes on a DNA molecule. Csikszentmihalyi (1993) gave these instructions the name “meme” to signify their similarity to genes. He observed, that like genes, memes had the propensity to cluster together into groups, and replicate themselves not just individually, but in clusters.

Clare Graves (1971, 1981) made it his life study to understand the sequence of values that seem to emerge over the lifetime of an individual. He charted waves of value clusters, making careful note that values were inextricably linked to observations, thoughts, feelings and wants that arose because of given life conditions. Graves research affirmed the complex, adaptive quality of values – that people’s wants/values arose in tandem with the life conditions, about which people observed, thought and felt. These life conditions spanned personal/intentional development systems; biological/ecological habitat; cultural worldview systems; and social/civil/workplace systems. Graves research into psychological behavior corroborated the view that humans are in fact Complex Adaptive Systems (Kelly et al, 1998).

Foundational to Short’s view of learning in relationship, is the theory of Family Systems. A number of family systems theorists (Friedman, (1985), Bowen (Centre for the Study of Natural Systems. Bowen Theory , 2002), Hellinger (Beck, 2002)) explore the relationships that arise from the early and dynamic social environment of the family. For the purposes of this review, the key points they make are that:

- learning is a social experience (as much as an individual experience)
- family is generally the first environment where learning occurs
- family is where values are first experienced, learned and reinforced
- family is an ecosystem of self-other reinforcing values.

These family systems theorists recognize the systemic nature of values and the self-organizing capacity of family systems. These are powerful human system examples of the basic qualities of self-organization observed at many other scales and in many other natural systems (Wheatley (1999), Wheatley & Kellner-Rogers 1996), Eoyang (1997).

Group and Organization Values

Building on Graves work on values, Beck (Beck & Cowan, 1996) co-developed the spiral dynamics model of values that was applicable at multiple levels of scale:

- personal
- group
- organization
- society

Beck and Cowan, extrapolated the clusters of values across time at comparable time scales, thus identifying value (or v-meme) clusters that developed across:

- individual lifetimes
- organizational life cycles
- community stories
- social histories.

The spiral dynamics model, founded on Graves research that connected life conditions and personal development observed that waves of values alternated between:

- individual (express self)
- collective (sacrifice self).

The parallel work of Wilber (1996, 2000a, 2000b, 2002), Wade (1996) and others, based on a reading of the psychological literature, developed meta-models of similar wave patterns of development.

Community and Social Values

The evolution of values at the community level, represents an aggregation of wants at a level of complexity that is evident in the primary lenses that are mentioned above.

Hamilton (1999) examines the natural emergence of capacities from even a self-organizing online community system, where much of the “sense making” sensors from sound, sight and body language that are taken for granted in most community exchange are not available. Nevertheless distinct patterns, structures and processes emerge from the interaction of the agents in the system. The defining characteristics of a living system become evident in a container that spans the globe – a community system that survives, connects with its environment and re-generates. A community with a distinct identity, relationships and information exchange.

Stevenson and Hamilton (2001) chart the apparent connections between community and complexity. Similar to the interconnecting feedback loops noted by Bushe (2001) on the individual level, they describe community as a complex adaptive systems with these characteristics noting:

> "elements of complex human group behavior, such as values, processes and strategies, as ways to describe how human CAS achieve both competitive fitness and collaborative partnership. In a way, human CAS are well equipped to respond to their environments, adapt and co-evolve with other CAS. We see the emergence of this behavior over and over again, in teams, organizations and in communities. …
> "What we "see" in this interplay between [CAS] "A" and "B" are the emergent patterns of behavior that result from their interaction. When we add more CAS (e.g. "C", "D", "E") to the mix, more complex, non-linear, unpredictable and emergent behavior arises. Complexity science suggests that these behaviors are … based on simple rules of perception and selective memory which results in a specific pattern of behavior. …
>
> "As we become more aware of how CAS interact, we notice the high degree of "interconnectedness" of everything that is occurring and we begin to see "relationship" as the primary informant of complex systems at work. In fact, Berger and Luckmann (1966) suggest that everyday reality is an intersubjective world shared by others….
>
> "It is suggested by the authors that CAS are holonic in nature, as individuals (human CAS), or as groups of human CAS such as families, clans, organizations and communities. This notion of a holonic world[1] suggests that human CAS are always "in relationship". While human CAS are engaged in their self-organizing activities and encouraged to be so in a world that is built on trust, it is evident that the worlds we live in are not always trustworthy and our ability as human CAS to survive requires different behaviors to be displayed. When trust is present, however, risk-taking, innovation, creativity and adaptation to change are promoted and encouraged . Critical self-reflection also becomes a norm in this environment where holons meet and interact with other holons."

Hamilton and Stevenson note that community systems as complex adaptive systems appear to be:

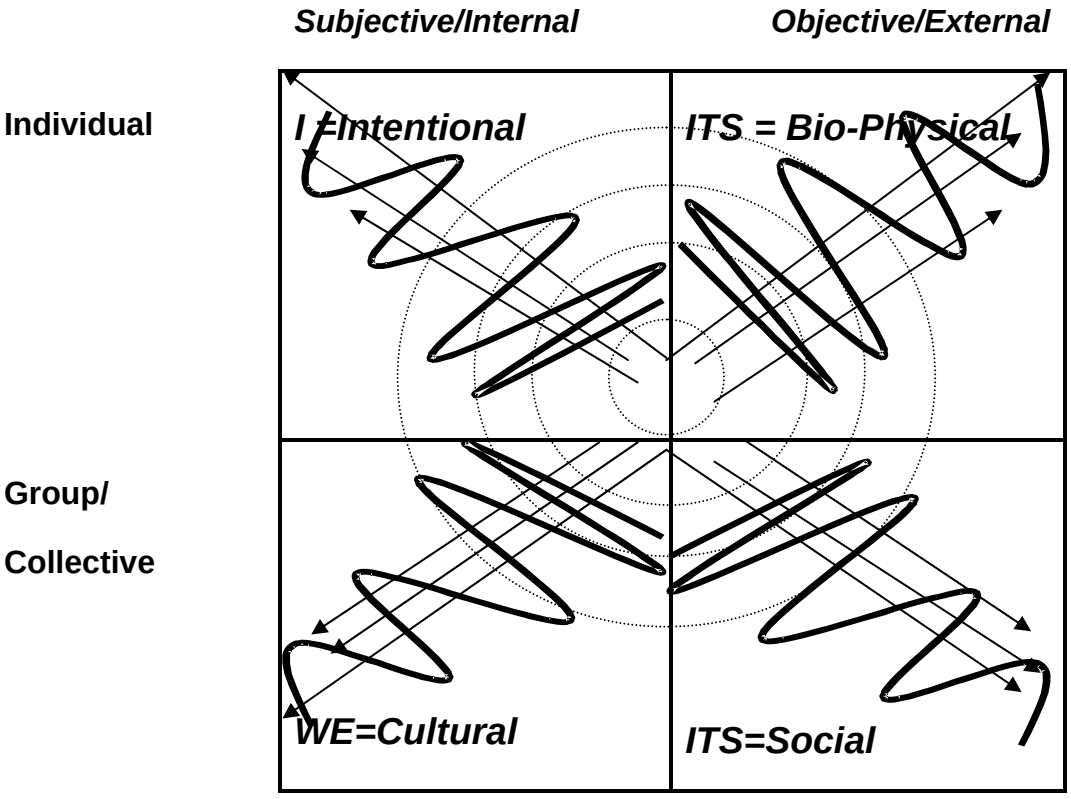
- scaleable
- quasi-fractal
- dynamic
- unpredictable
- interconnected
- nested
- users of simple rules
- subject to phase shifts

[1] The term "holonic" is adapted from earlier referenced terminology (e.g. holographic, holarchy, holon) to mean that which represents itself as holographic (based on the process of lensless photography developed by Dennis Gabor in the 60's in nature. Further reading concerning the concept of a holographic paradigm can be found in the works of Karl Pribram , David Bohm "On Dialogue", Ed. Lee Nichol (1996), Ken Wilber and others.

- potentially affected by weak signals
- field sensitive

Integrating Values into Emergent Dynamic Integral Spirals
From the foregoing discussion of values, it becomes possible to create an integrated map of values that encompasses subjective/objective and intersubjective/interobjective values. The map is based on the Ken Wilber's (1996) AQAL (all quadrants, all levels) model of reality (see Table 1-1). Wilber (2003, Part 1, p.13) has further identified the values related to each quadrant as the values relating to I, We, It and Its, which as he notes are reflected by the pronouns that universally arise in all languages to describe the lens of every voice in a social/cultural collective.

Table 1-1: The Integral Model of Values



The four quadrant map also includes an all levels dimension of development, that spirals outward in four directions from the centre of the map. The outward flowing spiral represents the stages or waves of development that emerged in Graves' and Beck's research and that Wilber, Wade and others have traced

through research of the literature. Therefore, in effect, the Integral Model encompasses the Spiral Dynamics Model as well.

Graves in fact, specifically identified the values that emerged from his research into individual development as belonging to a model that he described as a "Emergent, Cyclical, Double-Helix model of bio-psycho-social development" (Beck et al, 1996, p. 48). Expanding on Graves' bio-psycho-social research, Beck and Cowan demonstrated that an individual's development across a lifetime, transitions between "express-self systems" and "sacrifice-self systems" – in other words self and group systems. When we examine Grave's data from "sacrifice-self systems" we start to see an emergence of "worldviews" that appear to correspond with a series of definitions of community encountered in the literature (Peck 1987, 1994; Jarman & Land 1995; Gzodz, 1995; Isaacs, 1999). In Table 2 Stevenson and Hamilton have listed how these values (v-memes) of community correspond to Wilber's Integral Model and propose how they correlate multiple definitions of community with these v-memes.

Keeping in mind, that the descriptors presented in Table 1-2, alternate with stages where the individual "expresses self" at ever more complex levels, the data seems to support the view that an individual's view of community will be influenced both by their individual developmental level and the "life space" in which they (and their experience of community) exist. Beck suggests, that "One of the basic assumptions within Spiral Dynamics is that complex, adaptive human intelligences form in response to the stress and strain forged by life conditions. … VQ [v-meme] codes emerge whenever the older thinking patterns can no longer handle the new complexity that they have helped create."

Table 1-2: Emergent V-Memes and Community Values

Spiral Dynamics V-Meme Code	Integral Model Level	Key Value ♦ Focus	Characteristics of Complex Adaptive Intelligences	Expressions of Community Values	Examples Positive + Negative -
Beige	1	**Survival** ♦ Self	♦Depends on instincts & habits to survive ♦Life basics have priority	♦ Survival bands perpetuate life ♦ Lives off land, street	♦ + food bank ♦ - homeless
Purple	2	**Safety** ♦ Group	♦Creates safe clans & nests ♦Respects powerful elders ♦Separates Us vs. Them ♦Ritualizes the mystical, signs	♦ Respects folk ways ♦ Honors family, kin, ethnicity ♦ Traditions are important ♦ Guards sacred places	♦ + immigrants retain homeland ways ♦ – use of turbans instead of helmets threaten safety standards
Red	3	**Power** ♦ Self	♦Defend self against World full of threats & predators ♦Enjoy self to the fullest in the moment	♦ Breaks free from domination and constraints ♦ Conquers, outfoxes, dominates other aggressors	♦ + artistic expression ♦ - bullies, gangs
Blue	4	**Truth** ♦ Group	♦Recognize one right way ♦Gain purpose in causes ♦Suffer guilt in consequences ♦Sacrifice in honor	♦ Conserve peace and quiet ♦ Act cautiously and carefully ♦ Enforce order, tidiness and neatness ♦ Honor social position	♦ + traffic laws ♦ - over-regulation ♦ - over taxation
Orange	5	**Success** ♦ Self	♦Invent best solutions ♦Exploit resources to create good life ♦Measure performance ♦Act optimistic, take risks, be self-reliant	♦ Social and economic structures prosper through strategy, technology, competition, planning, engineering	♦ +20 year city plan ♦ + profits for redistribution of wealth ♦ - rich vs poor divide ♦ -ecology threatened
Green	6	**Communitarian** ♦ Group	♦Seek inner peace ♦Everybody is equal ♦Everything is relative ♦Honor harmony in the group	♦ Create social safety nets ♦ Demand political correctness ♦ Accept diversity ♦ Invest in culture	♦ + universal health care ♦ - spend $ before wealth produced ♦ - risk bankruptcy from social over spending
Yellow	7	**Systems** ♦ Self	♦Sees all life as natural systems ♦Remains flexible, spontaneous, functional ♦Considers, chaos & change are natural	♦ Differences can be integrated into interdependent, natural flows	♦ + integrates all value lenses ♦ - undervalues group capacities
Turquoise	8	**Holistic** ♦ Group	♦Scans the macro ♦Synergizes all life ♦Works for safe orderly world ♦Restores harmony	♦ Interconnected ♦ Highly diversified ♦ Not isolationist ♦ Information rich	♦ + thinks local, acts global ♦ - TBD

Adapted from: Beck, D., Cowan, C., "Spiral Dynamics", Blackwell Publishers, 1996, p. 332-333, Stevenson and Hamilton (2001)

The spiral and integral frameworks have been used as a construct to examine varying levels of scale; viz. personal development (Tupper, 2003); leadership (Smith, 2002; Reams, 2002); organizational conflict resolution (Reynolds, 2003); community (Hamilton, 1999); and even social systems, such as fear (Fisher, 2003).

Both the Integral Model and Spiral Model appear to be useful frameworks through which to view values using both the lenses of complexity and community. They seem to provide a framework for examining the micro and meso levels of life conditions and values that emerge large scale change. Beck states: "The focus … should be on the process dynamic itself, not on any specific system, level, stage or whorl that has been activated in forming the complex, adaptive intelligences. Each of the emerging value system waves not only addresses the unique problems in the milieu that gave it birth, but also adds texture and quality to the more complex v-meme codes in the future ." (Beck, 2000)

Summary: Values Models

The values models discussed above emerge from a view of human psychology and behavior, that is based in natural or living complex adaptive systems. The models are congruent and emergent from one another on a scale running from individual to family, organization, community, and society. The models represent a natural outcome of the human condition at all levels of scale. This discussion seems to confirm that we cannot know community without becoming aware of its values. And we do not develop values outside the context of community.

The Epistemology of Community: How Do We Know About Community?

In 1997, the researcher observed that community could be known through four different lenses: personal, biological, cultural and social (Hamilton, 1997). This observation came from the use of integral constructs (Wilber, 1996) and the researcher's experiential reflections (Hamilton, 1999).

Since that time a school of thought has started to emerge in the study of (urban) geography that is developing a body of theory and research using these same integral lenses.

An 'Integral Geography' for Mapping and Studying Human Life Conditions

Brian Eddy (2003) has constructed an 'A-B-C' Ecological AQAL model (Eco-AQAL model) as a theoretical basis for the study of *Integral Geography*. This framework reinforces the study of community as situated in life conditions that span three broad holonic spheres that embrace the universe (cosmosphere), the living environment (biosphere) and the human experience (anthroposphere). He

groups the study of these conditions into a spectrum of “pure and applied sciences” (Table 2-1).

Table 2-1: Spectrum of Sciences and Life Conditions (Eddy, 2003)

Science Cluster	Sciences	Relevant Life Condition
Earth and Planetary Sciences:	Math, Physics, Chemistry Astronomy Geology Hydrology Meteorology etc.	Universe Earth Matter (C-Sphere cosmosphere)
Life Sciences	Biology Microbiology Zoology Botany etc.	Life Environment (B-sphere biosphere)
Social Sciences	Psychology Sociology Anthropology etc.	Humans (A-Sphere anthroposphere)

Eddy's explorations into geography recognize the holonic nature of an evolutionary framework, built on Wilber's framing of holons (1996, 2000, 2001, 2002) and holarchies. He identifies the boundaries of "Physical Geography" as belonging primarily to the biospheric and cosmospheric processes, mostly with focus of their influence upon the anthroposphere. "Human Geography" on the other hand is primarily concerned with the anthroposphere, and employs a very different range of tools for inquiry than the strictly conventional scientific approaches in the B and C spheres. Human geography makes considerable use of hermeneutics, collaborative inquiry, and phenomenological approaches in addition to the social sciences listed in Table 2-1. The Eco-AQAL model emphasizes that complex human behaviours be treated as holarchic emergent capacities that are created by and in turn co-create life conditions from all three spheres. He proposes that, virtually on a kosmic scale, the human condition arises from the integration of three levels of differentiation: the cosmosphere, the biosphere, and the anthroposphere. In effect, all levels are in play at all times, thus creating massive entanglement of feedback loops, within and across the three spheres. He suggests this approach as a primary 'starting point' in mapping and monitoring human-environment interaction, or as a basis for identifying life condition patterns at different geographic scales.

Moreover, Eddy examines the evolutionary 'economic' capacity within the anthroposphere as it appears to match the integral/spiral levels proposed by Wilber (1996) in the integral model and Beck and Cowan (1996) in the spiral model. Eddy emphasizes the spans of geographic influence which emerge from the economic bases are made possible by the life conditions arising from the three interacting spheres on a locational basis.

Table 2.1a : Economic Capacities & Geographic Span

Level of Consciousness (Wilber, Beck & Cowan)	**Economic Capacity/Base**	**Geographic Span/Influence**
Beige	Gatherer	Local
Purple	Gatherer/Hunter	Local Extended
Red	Hunter/Horticultural	Region
Blue	Horticultural/Agrarian	State
Orange	Industrial	Nation
Green	Industrial/Informational	Multi-Nation
Yellow	Informational/Systemic	Globe (anthroposphere)
Turquoise	Ecosystem/Global	Globe (A, B, C spheres)

Adapted from Wilber (1996), Beck and Cowan (1996), Eddy (2003)

Eddy goes on to apply these insights as a basis from which to examine community development and 'involutionary tensions' among five general types of North American communities: frontier village, large urban, sub-urban, rural-urban, and small urban. Although the Eco-AQAL model is at an early stage of development, the intriguing link of his approach to this examination of values is that he has combined theories of 'Earth Systems', 'Life Systems' and 'Human Systems' as they intersect in geographic space to influences community values in a plethora of human geographies, or '*Integral Places'*.

Integral Regional Planning for Community

Refocusing our contextualizing of community in terms from a kosmic scope and scale to one that is regional, an examination of planning practise casts light on the importance of values to community planning at the regional level.

Dr. Ian Wight, in his practise as an urban planner, has argued for a more integral regional planning practice (2000). He notes that planning has evolved through a series of traditions whose current answers to the planning dilemma seem to have reached an impasse of effectiveness. He cites the tradeoffs between "environment, economy and equity; the opposing interests of regional self-sufficiency and globalization; the operationalisation of various 'regional balance' goals; the thorny question of how best to define regions; and the most appropriate roles to be played by different levels of government and different

sectors of society". Thus Wight expostulates the active tensions in the integral model, exemplified by the emerging levels of consciousness and values drivers.

Wight's approach to a new solution is to explore the notion of holons and holarchies, and thus to propose a "third way" that transcends and includes the enduring values from each planning approach. Wight is careful to lay out why he believes that the region could be a proper unit of analysis for the study of community. He reminds us of the arguments from the current traditions for:

- **Regional Analysis**: "Having roots in Losch, central place theory and regional science … often emphasizing economic systems, with a sub-tradition focusing on regional ecologies.
- **Regional Idealism**: "with an emphasis on the region as the appropriate scale of community …bioregionalism … region-based community awareness." (Includes Geddes, Mumford, RPAA.)
- **Regional Institutions**: " with an emphasis on the region as the appropriate scale of government administration … regional governance and/or management …regional agencies, such as regional transit authorities and water districts." (Includes TVA, ARC, Port Authority of New York/New Jersey, metro governments in Portland, Minneapolis, etc.)

Wight suggests that the three main traditions have not been able to reconcile analysis, idealism and institutions in a coherent fashion – that there have been many facts but no values. However, Wight proposes that the three frames might be integrated so that they inform one another, rather than be at cross-purposes. Thus, he also suggests that the integral model provides the framework for doing so. Wight identifies the three traditions as relating to the integral model as set out in Table 2-2.

Table 2-2: Regional Planning in the Integral Model (Wight, 2000)

	Internal / Subjective	***External / Objective***
Individual	I = Intentional ?	ITS = Bio-Physical **Analysis**
Group	**Idealism** WE = Cultural	**Institutions** ITS = Social

In proposing this integral re-framing of regional planning, Wight notes the omission of one of the integral quadrants, namely the Intentional. He even asks if this may be the "missing link that might explain the stunted evolution of regional planning?" (p.5). He bravely suggests that if regional planning were re-framed into the I, WE, IT/ITS realms that encompass Art, Morals, and Science (or as Wilber (2001) names them The Beautiful, the Good, and the True; ie. The Big Three) it would need to be reinvented. The Regional Planner would need to

shapeshift from engaging primarily with “IT/ITS” of applied regional science, to integrating the Big Three as an “ecologically-wise agent of integral … practice (p. 5)”.

Wight goes on to explore the value of reframing regional planning not only through the four lenses of AQAL/ Integral model but by exploring the inferences of the embedded holarchy of the model. (He challenges the whole notion of hierarchical dominations by proposing (like Eddy (2003)) that holarchies transcend and include values.) Wight cites his own curiosities (1999a) about reconceiving regions simultaneously as territories and functions, “dialectically interacting in a ‘nest-work’ as holons in holarchies” (p. 6). He concludes that “for regional planning today, the post-conventional imperative seems to me to revolve around re-thinking regions as holons in hierarchies (p.7).”

Thus Wight posits at the level of bio-region the value of framing planning for community with an AQAL approach.

Placing, Placemaking and Planning Community
In 2002, Wight continued to extend his application of Wilber’s integral theory to urban planning, this time in a discussion of place and placemaking.

Wight suggests that “Place” captures the connotation of an AQAL approach that spans “exterior, interior, communal and individual. Place merits consideration as a key venue for the integration of ‘it/s’ and ‘we’ with the ‘I’ of the beholder – in both material form and non-material consciousness (p.3).”

Wight (2002) proposes the hypothesis that, “Place may be conceived as multi-level as well as multi-quadrant. It has both primalcy and potency – integrating past, present and future. It is submergent and emergent, a common thread through the nestwork. It is always in flux, in development, being made and re-made, to better ground and situate the development of individuals and collectivities. Its basic development structure is nest-like or spiral-form, including – while transcending less-developed stages, yet always anticipating more developed stages (p. 4).” Thus Wight appears to conclude that place is a complex emergent similar in emergent process to the model being proposed by Eddy.

Wight goes on to situate Place in the Integral/Spiral map at the orange/green transition point: “In terms of current ‘most developed’ collective consciousness, place may be situated around the transition from formal to early vision-logic; in other words, place is on the verge of going ‘post-formal’ p. 4).”

By contrast Wight lays out the Planning approaches that have emerged at different stages of consciousness (see Table 2.2a).

Table 2.2a: Different Types of Planning Related to Levels of Consciousness

Level of Consciousness (Wilber, Beck & Cowan)	Planning Type	Limits to Geographic Span/Influence
Red	command and control	Region
Blue	master planning and zoning	State
Orange	strategic planning	Nation
Green	communicative action	Multi-Nation
Yellow	ecological	Globe (anthroposphere)
Turquoise	holistic	Globe (A, B, C spheres)

Adapted from: Beck et al (1996); Wight (2002), Eddy (2003)

For comparison purposes column three repeats the effective stages of influence charted by Eddy (2003) but here, reframed as "limits to geographic span". In some ways the comparison of the two charts acts as a bridge to Wight's contention that planning "intervention wise, … is interpreted as reflecting a wholeness-seeking imperative, involving the building of systems within systems within systems – but within the context of an integral embrace ….It also open up a key sense of the evolving place of place in this Kosmos that is starting to become aware of itself (p.11)".

"Place," laments Wight (p.11) " seems to have become a casualty of … both the success of modernity in achieving the differentiation of the Big Three [I,WE, IT], and of modernity's failure in achieving their integration….Place …is in a sense inseparable from being human. Yet place has too often too easily been dehumanized as simply an 'it', as an objective – often spatial …[A] more expansive perspective on place [and place making] …is a form of Wilber's integral practice … the integration of 'It' and 'We' and the 'I' of the beholder."

Thus Wight lays the foundation that planning for concluding that planning takes many forms, dependent on time/space, life conditions and the states of consciousness that have emerged.

Cities as Communities of Difference

Most experiences of community in urban settings these days confront the reality that we live in communities of difference. The extent and speed to which even vast agglomerations of differences have emerged are often surprising even to residents. In the Canadian census data 2001, Abbotsford BC, a small new city (created in 1996 from the merger of two smaller municipalities) with a population less than 120,000 (and the researcher's place of residence), was named as the Canadian city with the third "highest proportion of visible minorities of Canada's urban centres " (Census 2001, as quoted in Abbotsford News, 2002).

Sandercock (2000) sets out to explore differences in cities in response to a research challenge that posits city residents as “children of various diasporas” (Zukin, 1996). She wants to know what it might mean to “manage difference in ways that could be transformative rather than repressive (p. 13).” She honours the explorations of Fincher and Jacobs (1998) in cataloguing the growing differences in globalizing European cities. Sandercock notes the three forces she, herself has previously proposed that underlie the convergence of differences in cities: transnational migrations, post-colonialism and the rise of the civil society. Like Wight in respect to regional planning, Sandercock bemoans at the city scale, the “overall failure of the planning system to respond to the increasing diversity of the city (p. 14)”. She also proposes the need to change the planning process because of the entrenchment of “the values and norms of the dominant culture … reflected in plans, planning codes and bylaws, legislation, and heritage and urban design practices, [and the] planners inability to analyze issues from a multicultural perspective or to design participatory processes that bring racial and ethnic groups into the planning process (Ameyaw, 2000, p. 105) (p.14).”

In culturally diverse cities, Sandercock proposes four ways that the cultural diversity of cities are a challenge to the planning process:

1. Because the “values and norms of the dominant culture are embedded in legislative frameworks of planning, in planning by-laws and in regulation (p.15)”
2. Because the “norms and values are … also embedded in the attitudes, behaviour, and practices of … planners (p. 16)”.
3. Because “racism within communities and neighbourhoods finds its expression …through the planning system (p. 16)”
4. Because planners encounter “cultural practices that are incommensurable with their own values (p. 16)”.

She proposes four ways to respond to the embedded dominant values challenges:

1. Overhaul the planning system through legislative change (a daunting task that requires both cultural conviction and sustainable energy of the proponents of change).
2. Allow and encourage market forces to make change (usually a solution that is only partial and often inequitable).
3. Create opportunities for dialogue between the differences.
4. Educate planners to acquire an expanded set of skills.

Sandercock openly acknowledges that her third option is a therapeutic approach, which she starts to substantiate from the psychological literature. Openly acknowledging that one of the reasons she supports a therapeutic approach concerns the “dark side of difference: fear of the other”, Sandercock recaps her previous writings (2000a, 2000b) that explored fear in terms of the

fear of the stranger as outsider and/or foreigner. Without reference to either Wilber (2001) or Beck et al (1996), she undertakes a brief overview of the importance of fear as a motivator in human behaviour and the need for appropriate interventions in the planning process to mediate it. She concludes that "fears and anxieties [from other-based differences] cannot be addressed by the rational bureaucratic regulatory methods …of planning (p. 23)." (The researcher suggests that this is her way of describing spiral/integral blue/Level 4.)

She sets out, through an example of a planning dilemma, situated in Sydney Australia, to explore the different kinds of planning space that need to be created to develop a solution supported by all sides of the conflict: safe, sacred, transitional, transformative and political space.

In exploring the planning consultants' intervention approaches and tools, Sandercock embarks on an exploration of ways of knowing "that are very relevant to the new complexities of nation-building and community development in multicultural societies" (p. 26), citing the power of story telling, interpreting body and visual language, (serious) play, visualization. Her insights about the power of qualitative, narrative and action research-based ways of knowing bring fresh approaches to learning about community and offer planners "ways of knowing" that may have rarely been tried before.

Sandercock's approach to therapy as a model of community planning is reminiscent of Ury's "Ten Roles of Third Siders" (1999). Like Wight, Ury offers an expanded model of conflict resolution that includes prevention as well as containment and a commensurately larger role repertoire to address issues (see Table 2-3). Sandercock's proposed interventions related to dialogic healing seem to be related to the centre cluster of conflicts marked with an (*) in Table 2-3. (The research of Reynolds (2003) on conflict resolution and early conflict resolution practices within a community of practice seem to substantiate a multi-role, multi-toolkit intervention approach for a community of great diversity.)

Table 2-3: Ury's Third Side Approach

Purpose	**Roles**	**Address Conflict Caused By:**
Prevention	Provider	Frustrated needs
	Teacher	Poor skills
	Bridge-Builder	*Weak relationships
Resolution	Mediator	*Conflicting interests
	Arbiter	*Disputed rights
	Equalizer	*Unequal power
	Healer	*Injured relationships
Containment	Witness	*No Attention
	Referee	No Limitation
	Peacekeeper	No Protection

Adapted from Ury (1999) p. 190

Sandercock's approaches to planning not only seem to link to the practices of conflict management, but also her fourth response option seems to partially presage Wight's (2001) suggestions that planners must become "ecologically-wise agent[s] of integral … practice". However, her approach does not yet embrace the wholeness of the integral model.

Sandercock's explorations of "Cities of Difference" provides important insights about values assumptions in operation at the city level that relate to planning, conflict resolution and perhaps most importantly ways of knowing.

Community Planning as a Community of Practice

Both Wight and Sandercock raise the issues of communities of practise within a planning profession which has power to define the boundaries of what constitutes community. This affects the paradigm of community, the study of community (ways of knowing), and the practices of community. As we have already covered the ground of community paradigms in the earlier discussion of Eddy's and Wight's work above, and because we outline an approach to methodologies below, we mention briefly here a helpful framing of "Communities of Practice" as outlined by Wenger (1998) that substantively (though unintentionally) supports Wilber's argument for an integrated plurality of methodologies to know anything.

Wenger describes, in group work, the "complementarity of participation and reification" (p. 63) essentially acknowledging the intersubjective and objective natures of learning (the left and right hand sides of Wilber's integral model) and the intertwining roles of the individual and the collective. Wenger talks about community in terms of three dimensions (p. 73)

1. mutual engagement
2. joint enterprise
3. shared repertoire.

The first of these dimensions emerges from shared meaning; ie. what is of value. The second of these dimensions develops from the negotiation process of shared meaning and arises from the emergent relationships. The third dimension is a set of capacities that emerge from the first two dimensions.

Wenger's theory of learning takes into consideration the role of participation and reification in community memory; the development of practise across the three dimensions noted above; and the generational learning which allows for continuity of practice despite changes in practice participants. Wenger makes a powerful case for the reality of tradeoffs in learning and communities of practice at different levels of scale – the local vs the global. "In these trade-offs, one kind of complexity replaces another, one kind of limitation is overcome at the cost of introducing another….My point is that changing the scope of our engagement is not so much expanding its range as it is a series of trade-offs between forms of complexity (p. 132)."

Thinking particularly about the city/regional planners as a community of practice, it is helpful to understand Wenger's realistic, but compassionate view of the limitations of any such community : "Communities of practice … are important places of negotiation, learning, meaning and identity… [These] processes – negotiation of meaning, learning, the development of practices, and the formation of identities and social configurations – as involving interactions between the local and the global (p. 133)."

Wenger's discussion (p. 190) of the ecology of identity as a process that is negotiated between participation and non-participation (modes of belonging) seem to speak to the dilemma of dominant planning norms and values outlined by Sandercock, as a way of explaining how the community of planning practice emerges. Furthermore Wenger's proposal for learning design (p. 232) encompasses the four paradoxical dimensions that could lead to a more integral planning practice, thus addressing Sandercock's fourth response to embedded planning norms and values. The four dimensions are:

1. participation/reification
2. local/global
3. identification/negotiability
4. designed/emergent

Thus Wenger's approach to education, like Stevenson and Hamilton (2001), seems to embrace the value of meta-paradigms (reification, global, identification, designed) while at the same time insisting on the complex adaptive nature of learning (participatory, locally influenced, negotiable, emergent).

Integral Epistemologies (Wilber, 2003)

As Ken Wilber has unfolded the intricacies of the Integral Model since his first full explication in (1995) and (1996), he has continued to expand on the implications embedded in it. From a research perspective one of the most important expansions has related to integral epistemologies. First explored in "The Marriage of Sense and Soul", (2000) Wilber set out to substantiate the validity of the scientific method and the genius of the rational approach to knowing. However, he did not allow the IT/ITS right-hand scientific methodologies (summarized in Eddy's Table 1 above) to remain as the only valid ways of knowing. Wilber put firmly on the epistemological map the validity of the methodologies that relate to the left-hand quadrants. At the same time he clearly set out the basic principles that the left-hand methodologies had to honour in order to meet the rigour of the scientific method which had been articulated from the right-hand quadrants. The three unifying "essential aspects of scientific inquiry" (p. 155) for methodologies relating to all quadrants, that Wilber outlined were:

1. "**Instrumental Injunction**: … an actual practice, an exemplar, a paradigm, an experiment, an ordnance. It is always of the form, "If you want to know this, do this.
2. **Direct Apprehension**: … an immediate experience of the domain, brought forth by the injunction: that is, a direct experience or apprehension of data …science anchors all of its concrete assertions in such data.
3. **Communal Confirmation (or rejection)**: … a checking of the results – the data, the evidence – with others who have adequately completed [the injunction and apprehension] (p. 155-6)."

These three aspects apply to any methodology, situated in the integral model. Furthermore each of the methodologies within the quadrants is informed by the paradigm/worldview which gave rise to the way of knowing (and vice versa) (Wilber, 2003). Table 4 illustrates some examples of the methodologies that might relate to knowing community in the four quadrants.

Table 2-4: Methodologies Contributing to Knowing Community

	Subjective/ Internal	***Objective/ External***
Individual	I = Intentional **Meditation** **Reflection** **Journaling Life History** **Awareness Practices** **Intelligence Training**	ITS = Bio-Physical **Air Pollution Analysis** **Water Purity Analysis** **Soil Analysis** **Census Demographics** **Literacy Levels**
Group	**Story Telling** **Appreciative Inquiry** **Focus Groups** **Interviews** **Dialogue** **Professional Practice** **Action Research** WE = Cultural	**School Grading** **Hospital Accrediting** **Economic Measurement** **Employment Analysis** **Asset Usage Analysis** **Industry Standardizing** **Empirical Research** ITS = Social

Wilber explains (2003a) the value of an AQAL map as a form of self-checking framework.

> "AQAL, used appropriately, is merely a self-scanning software that checks to make sure that you yourself are engaging in those actual practices if you want anything resembling an integral embrace to emerge...
> "For example, [an Integral Operating System] IOS scans the system to see if first-, second-, and third-person dimensions of being-in-the-world

> are being acknowledged and consulted in any particular situation, and it sends up a red flag if a major human potential (suggested by an integral methodological pluralism) is not being included in the discussion…
> "An IOS specifically attempts to coordinate the very best of the major paradigms in order to produce a more balanced and comprehensive approach to the Kosmos. IOS combines the strengths of the major types of human inquiry in order to produce an approach to any occasion that "touches all the bases," that refuses to leave some dimension untouched or ignored, that honors all of the important aspects of holons in all of the their richness and fullness."

(Maxwell (2002) captures well a very practical reason why multiple methodologies are needed to study values. She makes a strong case that only citizens can create a values framework that is grounded in experience and relationship. She emphasizes the need to use qualitative research to do this through the use of Focus Groups, interviews, dialogue, etc. in order to capture the richness of citizen stories and perspectives. At the same time she recognizes the expertise of professional indicator researchers to bring a quantitative capacity, and scientific discipline to the research.)

Wilber goes on to elucidate one further benefit of an AQAL methodology as "holonic conferencing". He states "Different quadrants, waves, streams, and states bring forth different phenomena; and therefore different modes of inquiry, different methodologies, different paradigms and human practices can be nonthreateningly situated in an AQAL space that makes room for all of them. Holonic conferencing allows us, for example, to index most of the significant and time-honored modes of human inquiry, understanding where each of them are useful and effective, as well where they might need to be supplemented by approaches covering some of the other important bases…. The reason AQAL or IOS has had such a rapid acceptance in many of those fields is that, based on honoring human capacities across a full range, IOS opens up even further potentials for any field to advance in depth and fullness, simply by recognizing those aspects of an AQAL space not yet tapped by the particular field.

Summary: Epistemology of Community

This review of literature has attempted to lay out arguments for knowing community at multiple levels of scale and in an AQAL context: global, regional, city, and community. It has also used the four AQAL lenses of community to examine conundrums of community planning paradigms, methodologies of study, and communities of practice.

3. Measuring Community Capacity: A Taxonomy of Indicators

Overview

In the previous two domains of literature review we have examined frameworks for community values and methodologies for learning about community. In this domain we review the taxonomies of indicators that (primarily Canadian) communities have used to measure themselves and/or their capacities in some way.

Five Values Based Research Studies

In the short span of time since the turn of the millennium, values in the Canadian culture have been researched and identified at several different levels of scale. For the purposes of this review, four research studies located and conducted in Canada, and a fifth on a global level, have been examined for evidence of the relevance and identification of values. The value sets in each of the studies are summarized and integrated below.

Country:

1**. Canada's Social Contract: Evidence from Public Opinion**
by Matthew Mendelsohn, Professor of Political Studies at Queen's University
Canadian Policy Research Networks, Discussion Paper No. P/01, Public Involvement Network, November 2002

Purpose

This report was prepared for CPRN to synthesize the polling evidence from the past 20 years on the views of Canadians on governments, markets, families and communities.

Methodology

The data was gathered from commercial, academic, think tank, and government sources. A separate Appendix to the report displays the evidence examined.

2**. Indicators of Quality of Life in Canada: A Citizens' Prototype**
Summary of Results of Public Dialogue Sessions and
Prototype of National Indicators, Quality of Life Indicators Project
Canadian Policy Research Networks, April 2001

Purpose

The main goal for the Quality of Life Indicators Project is to create a national set of indicators that reflects the range of issues that truly matter to Canadians. At the same time the intention is to create a common language for dialogue "across the public, private and voluntary sectors … to enable a more balanced discussion on public priorities across social, economic, environmental and other dimensions of quality of life" (CPRN iii).

Methodology

This project used a public dialogue process to encourage a select number of Canadians (total of 250 people in small group settings (i.e., 25 groups of 10 citizens each)) to speak with each other about what constitutes quality of life.

Province:

3. **BC Health Directional Plan**
Expert Panel: Challenges, Choices to Ensure Access
by Judith Maxwell, Canadian Policy Research Networks, Canadians' Health Care Values, Presented on February 4, 2003

Purpose
The purpose of this study was to provide a process for citizens to create the values framework for health reform. The intention was to create a citizen derived logic model for "How health care in Canada should be financed, and who is responsible for what".

Methodology
The data collection method consisted of 12 full-day dialogues with a representative sample of 500 Canadians in 2002, using scenarios and creating their logic models for how health care in Canada should be financed, and who is responsible for what.

City:

4. **Early Development in Vancouver: Report of the Community Asset Mapping Project** (CAMP) by Clyde Hertzman, Sidney A. McLean, Dafna E. Kohen, Jim Dunn, Terry Evans, August 2002

Purpose
Human Resources Development Canada and an academic research team at UBC focused on the City of Vancouver's Early Childhood Development, to develop a long term system of monitoring how determinants of childhood development emerge in specific communities, and how local circumstances could be changed to improve the life chances of children.

Methodology
The study is based on a "population-wide developmental assessment of kindergarten children in Vancouver using the Early Development Instrument (EDI), according to children's neighbourhood of residence. The neighbourhoods are then characterized in terms of their sociodemographic status; developmental risk circumstances; and *de facto* access to services and facilities that are meant to assist child development. The information is then plotted on GIS maps.

Globe:

A fifth study was examined because of its explicit examination of values at a global level.

5. **Values Education for children and young adults – Living Values An Educational Program**, UNESCO/UNICEF /http:www.lv/values/freedom.htm [5/11/2000 9:04:02 AM] accessed April 4, 2003

Purpose

The purpose of *Living Values: An Educational Program* (LVEP) is to provide guiding principles and tools for the development of the whole person, recognizing that the individual is comprised of physical, intellectual, emotional and spiritual dimensions.

LVEP is a partnership among educators around the world. This program is supported by UNESCO, sponsored by the Spanish Committee of UNICEF and the Brahma Kumaris, in consultation with the Education Cluster of UNICEF, New York. LVEP is part of the global movement for a culture of peace in the framework of the International Decade for a Culture of Peace and Non-Violence for the Children of the World.

Methodology

LVEP started with an "Educational Program [which] grew out of an international project begun in 1995 by the Brahma Kumaris to celebrate the 50th Anniversary of the United Nations. Called "Sharing Our Values for a Better World. Twenty educators from around the world gathered at UNICEF Headquarters in New York City in August of 1996, identified 12 universal values to better prepare students for lifelong learning.

LVEP is currently being implemented in 67 countries at over 4000 sites. … The number of students doing Living Values Activities at each site varies considerably, some involve 10 students while others involve 3000.

In the five studies cited above, indicators have been identified for the purposes of measuring:

- Quality of Life (CPRN 2002, 2001)
- Health System Performance (CPRN 2003)
- Community Assets (Hertzman et al, 2002)
- Global Human Values (UNESCO, 2003)

Other studies have measured:

- Community health (Jacksonville, 1993)
- Community livability (Hamilton, 1996)

This examination of indicators is merely a sample from a vast panoply of indicators that have emerged from a growing interest in the metrics of communities, that can show us how to observe, develop and/or restore the health

of communities. A common intention in identifying indicators is to answer in some way, “What do we know about [the capacity for healthy functioning of] our community?”

Without overwhelming the reader, it is proposed, that the sample is sufficient to demonstrate the commonalities that emerge across different taxonomies as well as the differences in taxonomies that come from the use of different lenses. The five taxonomies related to the studies are identified below. (Note, that each indicator is followed by a reference to a set of summary charts, set out in Tables 2-5,6,7 and 8 below).

Indicator Taxonomies

Mendelsohn (2002) sourced 163 survey studies to inform a further study of Canadian quality of life. He clustered his interpretation of those studies into these 12 groupings.

		Table Ref. 2-
1.	The Canadian Identity	7-2
2.	The Canadian Identity in the Shadow of the United States	7-4
3.	Canadian Identity and the World	7-4
4.	Trade Liberalization, Globalization, and Productivity	8-5
5.	Language, Ethnicity, and the Canadian Identity	6-1
6.	Social Values	7-6+
7.	What do Canada’s Regions Owe One Another?	6-6
8.	What do Generations Owe Each Other?	6-6
9.	Voluntary Activity	7-5
10.	The Canadian Social Contract and the Welfare State: What do Canadians Say They Owe Each Other?	7-6
11.	The Social Contract and the Federal System	7-7, 7-4

Building on Mendelsohn’s study, Maxwell (2002) reports that the subsequent focus groups identified Canadian Quality of Life indicators as follows.

	Table Ref. 2-
1. Political Rights and General Values	7-4+
2. Health	6 -(1-6)
3. Education	5-4 +
4. Environment	8-7
5. Social Programs/Conditions	7-6
6. Personal Well-being	5-6
7. Community	7-(2-6)
8. Economy and Employment	8-5
9. Government	8-4

In another research report, Maxwell (2003) identified these values for an accessible healthcare system:

	Table Ref. 2-
1. Access based on need	8-6
2. Universal coverage	8-6
3. Payment based on ability to pay	8-5
4. Responsive to individual need	6-2
5. Quality care	8-5
6. Accountable and transparent systems	8-4
7. Efficient forms of delivery	8-5
8. Value for money	8-5
9. Prevention and wellness	8-7

The Early Development in Vancouver: Report of the Community Asset Mapping Project (CAMP, 2002) used the EDI tool to identify capacities in young children in the following five developmental area (see Appendix x for the indicators associated with each area).

	Table Ref. 2-
1. Physical health and well-being	6-2+
2. Social competence	7-2+
3. Emotional maturity	5-3
4. Language and cognitive development	5-2+
5. Communication skills and general knowledge	5-3, 6-2+

In addition the CAMP studies created location maps which quantified and located indicators in the population which were grouped as follows:

	Table Ref. 2-
A. Population count of all children (2 maps)	6-1
B. Vulnerable and EDI tested children by capacity (12 maps)	6-2
C. Household Economics (7 maps)	8-5
D. Social Assistance/Challenges/Participation (8 maps)	7-6
E. Child development services (8 maps)	6-6
F. Education resources (10 maps)	8-5, 7-5
G. Literacy, numeracy indicators Grade 4 (5 maps)	5-4

The global values shared across cultures, that were identified in the Living Values An Educational Program (LVEP,2000) were:

	Table Ref. 2-
1. Cooperation	8-2
2. Freedom	8-3
3. Happiness	5-3
4. Honesty	7-2
5. Love	5-2, 7-2
6. Peace	5-4, 7-4
7. Respect	7-3
8. Responsibility	5-4

9. Simplicity 8-7
10. Tolerance 7-7
11. Unity 7-8

Patterns to Taxonomies?

It is evident in simply reviewing the taxonomies that a thick, rich set of indicators exist to describe community capacity. With an ever growing list of indicators developed by multiple studies, at varying levels of scale and scope, the challenge is to discover if patterns exist amongst the indicators and what can we learn from the patterns that tell us about community?

Indeed Maxwell (2002) states well the practical, applied need to discover such patterns in order to "know if … quality of life is getting better, worse or staying the same (p. 18)." She describes the challenge to create a prototype for a report card that will "give
Canadians the means to hold their leaders accountable for policy and program decisions that may have an impact on quality of life in Canada (p.18)."

She goes on to suggest that "the integration of existing quality of life indicators could be realized by pooling some of the financial and human resources dedicated to the research and application of the individual models in the search for a single generic model, which by design would permit local adaptation. This single model would by mandate link jurisdictions (community through city and province to a national perspective), geography (coast to coast to coast), and disciplines. In effect, this would lead not only to the creation, but also, more importantly, to the use of a common language, framework and set of indicators by all those interested in quality of life in Canada – including citizens, all levels of government, non-governmental organizations, researchers, academics and the media (p.18)."

Patterns of Taxonomies: Integrating the Literature Review

In an effort to propose a schema that would meet the needs that Maxwell expresses so passionately, an integration of the taxonomies of indicators described above is laid out in four integral/spiral charts found in the following tables. These charts also effectively act as a prelude to the Findings and Conclusions set out in the following sections.

Table 2-

5. I - Subjective
6. IT - Objective
7. WE - Inter-subjective
8. ITS - Inter-objective

Each chart proposes the relationship of the indicator to the spiral framework and identifies the methodology (from the studies above) used to obtain data. In such

a manner, the charts effectively tie together the review of the five research studies with the review of the three literature domains:

- Values Frameworks
- Epistemologies of Community
- Taxonomies of Indicators

Table 2-5: I- Subjective Indicators

Spiral Dynamics V-Meme Level	Integral Model Level	Example of Spiral Value	Indicator	Source	Methodologies Used
Beige	1	Instincts & habits	♦	♦	♦
Purple	2	Rites of passage, Language	♦Language and cognitive development + ♦	♦ EDI	♦ Expert Observation
Red	3	Self-expression	♦Emotional maturity ♦Communication skills and general knowledge + ♦Happiness ♦Love	♦ EDI ♦ EDI ♦ LVEP ♦ LVEP	♦ Expert Observation ♦ Expert Observation ♦ Action Research ♦ Action Research
Blue	4	Meaning, purpose	♦Education + ♦Literacy, numeracy indicators ♦Peace ♦Responsibility	♦ Maxwell (02) ♦ CAMP ♦ LVEP ♦ LVEP	♦ Focus Groups ♦ Survey ♦ Action Research ♦ Action Research
Orange	5	Personal success	♦	♦	♦
Green	6	Caring, compassion			
Yellow	7	Flexible, integrated	♦	♦	♦
Turquoise	8	Wholeness			♦

Table 2-6: ITS- Objective Indicators

Spiral Dynamics V-Meme Level	Integral Model Level	Example of Spiral Value	Indicator	Source	Methodologies Used
Beige	1	Life survival skills	♦ Language, Ethnicity, and the Canadian Identity ♦ . Health (1-6) ♦ Population count of all children	♦ Mendelsohn ♦ Maxwell (02) ♦ CAMP	♦ Survey ♦ Focus Groups ♦ Census
Purple	2	Life Protection	♦Responsive to individual need ♦Physical health and well-being + ♦Vulnerable and EDI tested children by capacity	♦ Maxwell (03) ♦ EDI ♦ CAMP	♦ Action Research ♦ Expert Observation ♦ Census, EDI
Red	3	Strength	♦	♦	♦
Blue	4	Regime, Discipline	♦	♦	♦
Orange	5	Research & Develop.	♦	♦	♦
Green	6	Group Protection	♦ What do Canada's Regions Owe One Another? ♦ What do Generations Owe Each Other? ♦ Child development services	♦ Mendelsohn ♦ Mendelsohn ♦ CAMP	♦ Survey ♦ Survey ♦ Census
Yellow	7	Health System	♦	♦	♦
Turquoise	8	Person Wholeness			♦

Table 2-7: WE- Inter-Subjective Indicators

Spiral Dynamics V-Meme Level	Integral Model Level	Example of Spiral Value	Indicator	Source	Methodologies Used
Beige	1	Survival	♦	♦	♦
Purple	2	Bonding, Family/Clan	♦The Canadian Identity ♦Community ♦Social competence ♦Communication skills and general knowledge + ♦Honesty ♦Love	♦ Mendelsohn ♦ Maxwell (02) ♦ EDI ♦ EDI ♦ LVEP ♦ LVEP	♦ Survey ♦ Focus Groups ♦ Expert Observation ♦ Expert Observation ♦ Action Research ♦ Action Research
Red	3	Power	♦Respect	♦ LVEP	♦ Action Research
Blue	4	Order, truth	♦The Canadian Identity in the Shadow of the United States ♦Canadian Identity and the World ♦Peace	♦ Mendelsohn ♦ Mendelsohn ♦ LVEP	♦ Survey ♦ Survey ♦ Action Research
Orange	5	Productivity, effectiveness	♦Voluntary Activity ♦Education resources	♦ Mendelsohn ♦ CAMP	♦ Survey ♦ Census
Green	6	Communitarian	♦The Canadian Social Contract and the Welfare State: What do Canadians Say They Owe Each Other? ♦Social Programs/Conditions ♦Social Assistance /Challenges	♦ Mendelsohn ♦ Maxwell (02) ♦ CAMP	♦ Survey ♦ Focus Groups ♦ Census, Survey
Yellow	7	Flexibility, integration	♦Social Values ♦The Social Contract and the Federal System ♦Political Rights and General Values ♦Tolerance	♦ Mendelsohn ♦ Mendelsohn ♦ Maxwell (02) ♦ LVEP	♦ Survey ♦ Survey ♦ Focus Groups ♦ Action Research ♦
Turquoise	8	Wholeness	♦ Unity	♦ LVEP	♦ Action Research

Table 2-8: ITS- Inter-Objective Indicators

Spiral Dynamics V-Meme Level	Integral Model Level	Example of Spiral Value	Indicator	Source	Data Gathering Methods Used
Beige	1	Survival	♦	♦	♦
Purple	2	Observe Customs	♦Cooperation	♦ LVEP	♦ Action Research
Red	3	Command, control	♦Freedom	♦ LVEP	♦ Action Research
Blue	4	Order	♦Government	♦ Maxwell (02)	♦ Focus Groups
Orange	5	Strategy, competition	♦ Trade Liberalization, Globalization, and Productivity ♦ Economy and Employment ♦ Payment based on ability to pay ♦ Quality care ♦ Efficient forms of delivery ♦ Value for money ♦ Household Economics ♦ Education resources	♦ Mendelsohn ♦ Maxwell (02) ♦ Maxwell (03) ♦ Maxwell (03) ♦ Maxwell (03) ♦ Maxwell (03) ♦ CAMP ♦ CAMP	♦ Survey ♦ Focus Groups ♦ Action Research ♦ Action Research ♦ Action Research ♦ Action Research ♦ Census ♦ Census, Survey
Green	6	Equality	♦Access based on need ♦Universal coverage	♦ Maxwell (03) ♦ Maxwell (03)	♦ Action Research ♦ Action Research
Yellow	7	Integration	♦Environment ♦Prevention and wellness ♦Simplicity	♦ Maxwell (02) ♦ Maxwell (03) ♦ LVEP	♦ Focus Groups ♦ Action Research ♦ Action Research
Turquoise	8	Global Dynamic			♦

Summary: Measuring Community Capacity; A Taxonomy of Indicators

From the foregoing integration of the indicators from the five studies, it can be seen that the integral analysis deepens our understanding of values by seeing the connections across the studies. Each study provides descriptors that contribute to a richer more comprehensive, integrated values map than any one could do on its own. The integral framework, in turn provides the common language to talk about values from different sources, different scales and different locations.

Methodology

Research Methods

The basic constructs for the integral/spiral methodology are discussed above in the Literature Review of integral and spiral frameworks. The Research Method used for the pilot project was based on aspects of six previous integral/spiral studies of community in the United States (Beck, 2003); Hemsworth, UK (Cooke, 2001); Berkana Online Community of Conversations (Hamilton, 1999); Seattle Neighbourhood (Ruder et al, 2002); Europe (Cooke et al, 2002); and Globally (Tonkin, 1999-2002)

Aspects of Appreciative Inquiry (Cooperider et al, 1999) were used to frame the survey questions. The survey questions were developed from similar question sets developed by Beck et al(1994, 2002), Hamilton (1999) and Ruder et al (2002). They are discussed below in the Findings section.

The data from the general population was collected by a third party research company, CV Marketing, hired by the City of Abbotsford to conduct a survey focused on Arts and Recreation. This survey consisted of 26 questions, plus the 6 related to this research study, which were appended at the end of the survey (for a total of 32 questions). This main survey document is confidential to the survey company, and available as a separate document.

The data from the ACF Board was collected by confidential email to the researcher.

The researcher used Excel and SPSS to analyse the quantitative data. The qualitative survey responses were first analysed by an ethnographic code book, developed by the researcher (Hamilton, 1999; Beck, 1994; Ruder et al, 2002; Beck et al, 2002)
The Code Book is a detailed summary of the signifiers for each meme code. A signifier is a phrase, concept, and/or sentence that reflects the values, mindset and/or expectations of a survey response. (The Code Book developed for this project is available as a separate document.) The qualitative data was then themed.

Participants: Community

A random sample of Abbotsford residents was undertaken by telephone survey, by CV Marketing. The criteria for the sample were defined as follows by the data collection agency (Olsen, 2003):

> We produced our survey sample using a completely random-systematic pattern of the Abbotsford telephone directory. This allows coverage throughout all last names and thus should give all ethnicities an equal opportunity to participate (they may self-select themselves not to). Gender was 45% Males 55% Females and we directed our efforts to get this proportion (actual in Abby is about 49.7% Males / 50.3% Females). Respondent's age typically follows actual population proportions fairly well and, for this

survey, are within ± 5-8% of the "true" age distributions of Abby (using 2001 census - the age categories are somewhat different from ours but you can follow their basic shape).

The number of interviews completed were 202, which according to CV Marketing provided a statistical measure of validity of “6% error 19 times out of 20”.

Participants: ACF Board

An email survey of the ACF Board was conducted.
The number of surveys distributed was 14. The number returned was 9-11 (varying by the question). The ACF sample was not included in the random population sample.

Limitation/Delimitations

The limitations of this study are circumscribed by the following considerations:

1. size of population sample
2. exclusive use of the English language for surveying
3. less than 100% participation rate of the ACF Board
4. funding restrictions limiting the scope of the work (completed on a voluntary basis by the research company for the 6 survey questions, and by the researcher for all the analysis, interpretation and reporting work)
5. time restriction from start of pilot project in mid-December, 2002 to end of January 2003
6. possible effects on participant responses and response rates because of the location (at the end) or length of the survey.

The delimitations of the survey are bounded by the location of the study in Abbotsford; and the use of a single data gathering method.

Ethical Considerations

This research project adhered to the guiding ethical principles as prescribed by Royal Roads University Research Ethics Policy (RRU, 2000), including considerations for:

- Respect for Human Dignity
- Respect for Free and Informed Consent
- Respect for Vulnerable Persons
- Respect for Privacy and Confidentiality
- Respect for Justice and Inclusiveness
- Balancing Harms and Benefits
- Minimizing Harm
- Maximizing Benefit

Findings

The key Findings of the Abbotsford Pilot Project are set out below, followed by Conclusions and Recommendations.

Participation Demographics

There were 202 respondents to the telephone survey. 55% were female and 45% were male (Figure 4-1); 15% were age 18-30, 47% were 30-54, and 38% were 55+ (Figure 4-2). These facts are both relevant to the UR quadrant of the AQAL model and provide basic distribution information that would allow detailed analysis of the Abbotsford data in terms of each of the age and gender groups. It was one of the financial and time limitations of this pilot project, that this was not done; however the data exists for the cross-tabulations to be completed at an appropriate time in the future.

Figure 4-1: Gender Distribution

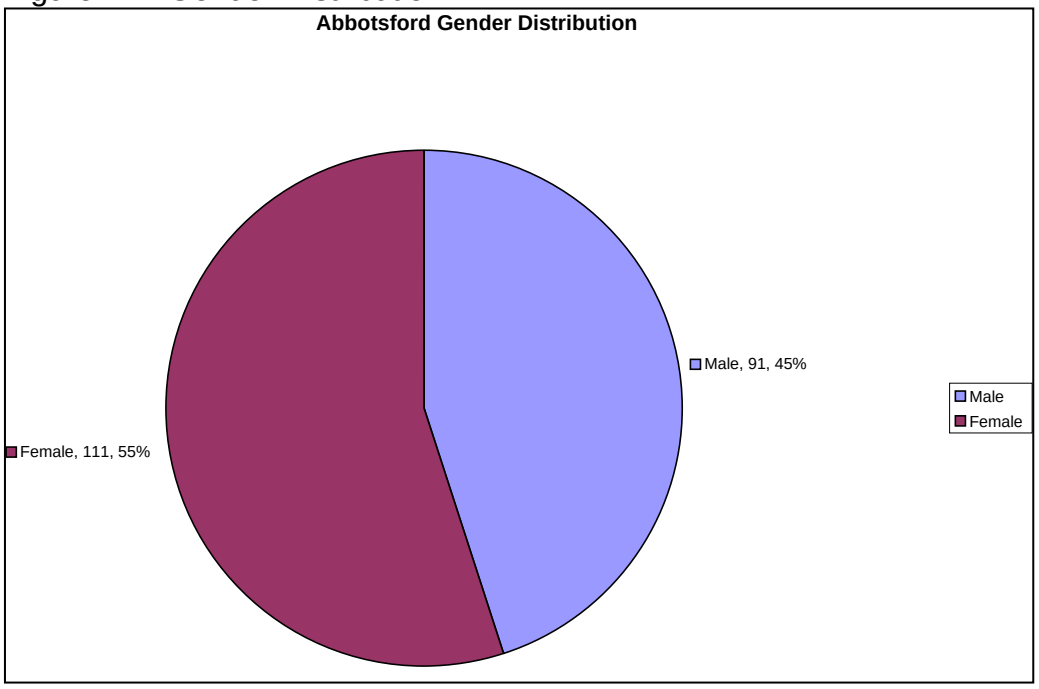
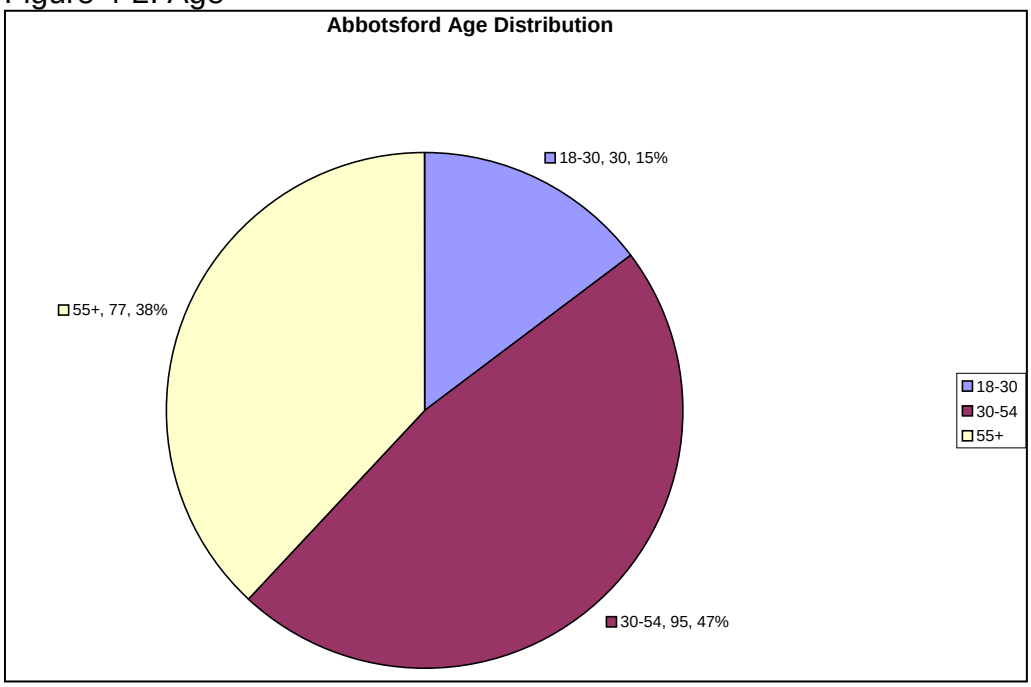


Figure 4-2: Age



How Do You Describe Community?

To the multiple choice question, **"**Which of the following broad statements is closest to a description of this community", respondents indicated an overwhelming preference for describing community in terms of "a place of Culture, Family & Relationships: church; shared beliefs; shared stories".

The responses to the question are indicated in brackets preceding each option:

- (16%) A place for Personal Intentions & Development : Emotional, Intellectual, Spiritual
- (13%) A place to share Individual Traits & Behavior: Health, Physical capabilities, Ethnic background; shared physical traits (eg. age, gender, ability)
- (53%) A place of Culture, Family & Relationships: church; shared beliefs; shared stories
- (11%) Your Work, Professional, Association, Civic
- (6%) Other – combinations of 2, 3, or 4 of the above options."

This seems to corroborate both Wight's (2002, p.11) contention that " place … is … inseparable from being human". It also create strong support for the reasons that Sandercock suggests story telling, interpretation, play and visualization are powerful data collection processes for qualitative, narrative, and action research methodologies for learning about community.

What Assets Does Abbotsford Possess?

Respondents were asked three open ended questions:

1. What do you think of if you are asked to define community?
2. What does community mean to you? What is important about it?
3. Overall, what makes the community you identified great?

The responses to each of the questions are shown in Figures 4-3,4,5 below.

Figure 4-3: What do you think of if you are asked to define community?

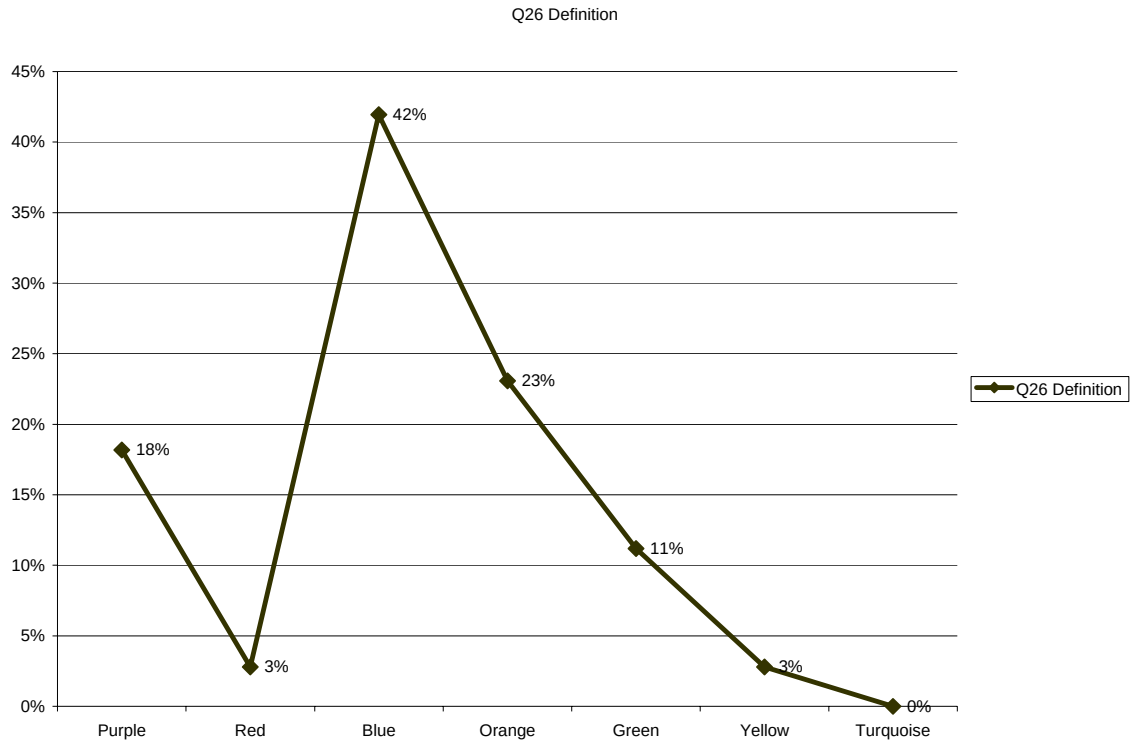


Figure 4-4: What does community mean to you? What is important about it?

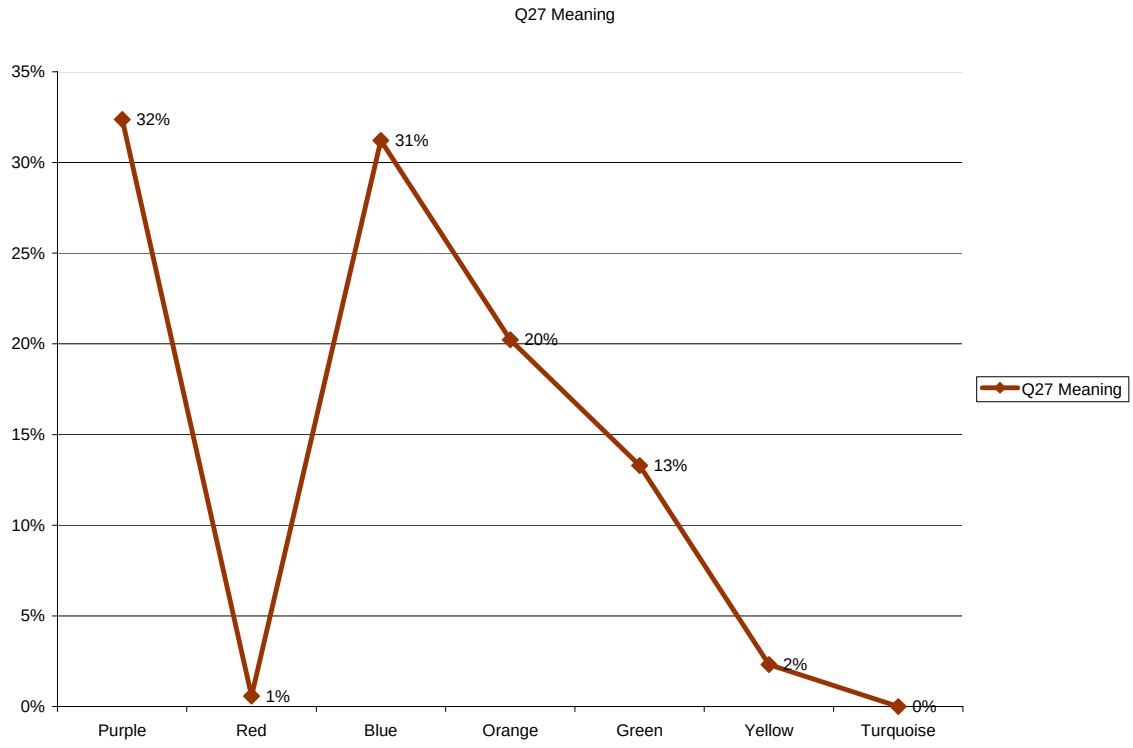
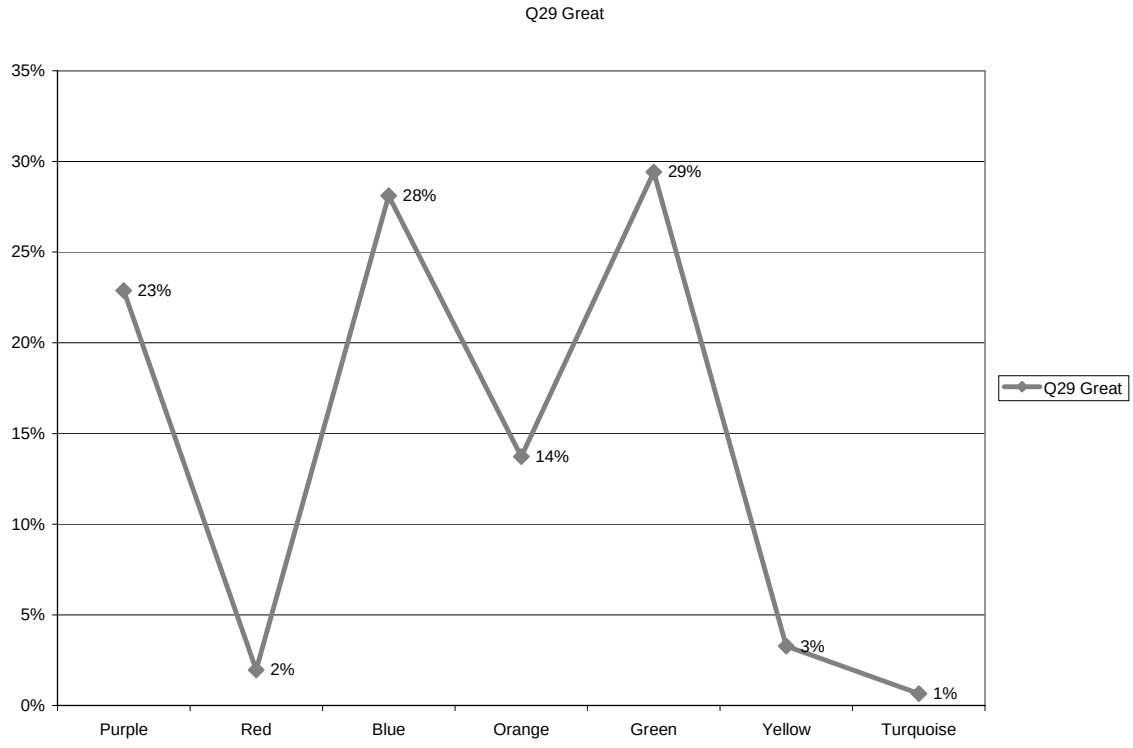
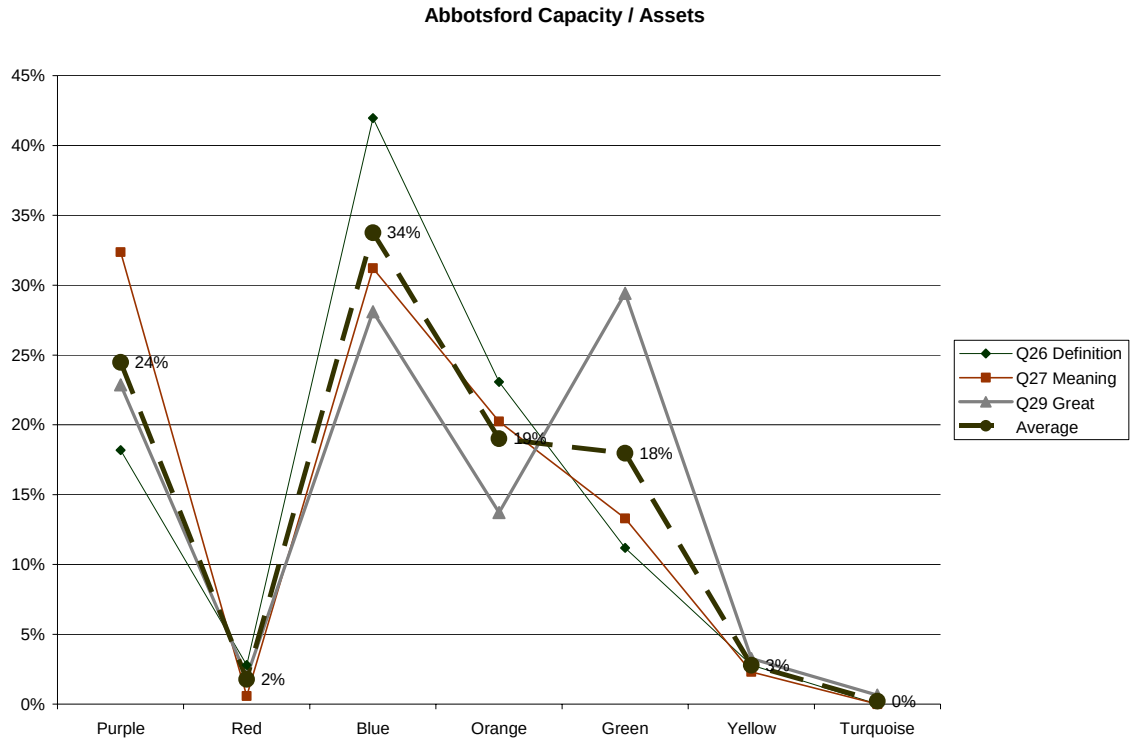


Figure 4-5: Overall, what makes the community you identified great?



The quantitative data (per cent responses in each x axis value category), indicated strong underlying patterns in the answers to these three questions, therefore, from these three charts, with a framing of "fuzzy logic", an average response was produced to create a combined view of Abbotsford's assets (see Figure 4-6).

Figure 4-6: Abbotsford's Capacities/Assets (Combined Response)



The combined response indicates distinctly strong peaks at the purple (24%) and blue (34%) value sets, with a very deep valley in the red (2%) value set. The orange (19%) and green (18%) values were moderate with low yellow (3%) and no insignificant turquoise (<1%) responses.

This data indicates the values underlying the community assets (described in the next section) had strong foundations in traditional kinship bonds (purple) with even stronger capacities in order and management. Given the researcher's direct knowledge of the community, and subsequent discussions with Abbotsford leaders, residents and some city hall directors, this profile may be explained by the influence of two strong cultures within the city: the Christians (with approximately 100 churches counted in 1990 (Riggins, et al, 1991)) and the Sikhs. The ethnic composition in 1996 (Abbotsford, 2003) was noted as 10% German (represented by a large immigration of Mennonites starting in the 1930's (Riggins et al, 1991); Dutch (6%); Indo-Canadians (10%) (represented by a large immigration of Sikhs). Each of these communities were attracted by the rich agricultural conditions of the Fraser Valley and contributed their agricultural skills

to founding and developing a successful local economic base. (Abbotsford is a major centre of production, processing and distribution for dairy, poultry, eggs and berries). Thus, there is strong evidence, that the strong family bonds and management capabilities of influential cultures were foundational to the city's beginnings and are a backbone of much of its strengths.

By the same token, the strength of these two memes (and some of the cultural prohibitions that arise from them) might account for the very low expression of the red meme. It is possible that, because the Red meme is a value set with a special focus on individual expression, the huge strengths of purple family traditions and blue order and management might very well override Red preferences.

On the other hand, the moderate strength of orange (strategic, planning) and green (acceptance, diversity) could be interpreted as naturally derivative from the people and wealth organizing capacities of blue values. They might also represent the in-migration of other cultural views from urban growth migrations from the larger urban centre of Vancouver (100 km to the west) and other parts of Canada.

In terms of Eddy's relevant life conditions, Abbotsford is an interesting study of the convergence of distinct factors from the cosmosphere (the earth, water, air qualities that create the prolific farmland); the biosphere (the plant and animal growth that naturally flourish in the area); and the anthroposphere (the sociological, anthropological, philosophical conditions that were attracted to the area). Furthermore, because Abbotsford is contained within a legislated boundary that is not only defined by the city, but by the province (the Agricultural Land Reserve) the population and location for habitation is still of a size that it is possible to notice the influences of the multiple feedback loops from the interacting life conditions. Within the lifetime of some of Abbotsford's founding citizens the city may have been (or still may be?) a model of Eddy's (2003) frontier village, rural-urban and small urban development types. There is a tendency to assume that vestiges of sub-urban typology may exist, because of Abbotsford's proximity to Vancouver. However, the 1996 census (Abbotsford, 2003) indicates that a full 82% of the population works in the City or within the immediately adjacent cities in the valley (within half hour drive).

And although, Abbotsford is certainly not populous enough (120,000) to be considered a large urban centre (by Census standards), according to the 2001 Census, Abbotsford is noted as the third most culturally diverse city in Canada. Thus it appears that, though small in size, Abbotsford may be a living laboratory for Sandercock's definition of a cosmopolis.

Abbotsford Capacities/Assets: Key Themes

The qualitative data from the three questions discussed above was themed to identify the key responses related to each quadrant and to each spiral value category. Table 4-1 summarizes these themes.

Table 4-1: Summary of Community Assets by Quadrant and Spiral Value

Spiral Colour & %	Q1 UL	Q2 UR	Q3 LL	Q4 LR
purple 24%	♦ feel safe ♦ friendships ♦ I'm acknowledged ♦ welcomed ♦ say "hi" ♦ accepted ♦ honesty ♦ kindness	♦ responsive people ♦ less stressful ♦ talk on the street ♦ closeness ♦ long term resident ♦ comfort ♦ agricultural feeling ♦ good health	♦ neighbours ♦ loyalty of friends ♦ arts traditions ♦ family values ♦ good to raise kids ♦ grandchildren ♦ lived here all my life ♦ remember our past ♦ close-knit ♦ genuine nice people ♦ spirit of pride	♦ elders share experience ♦ my home ♦ farming country ♦ agricultural roots ♦ agricultural support ♦ lots of trees ♦ safe ♦ neighborhood ambience ♦ easy to meet people
red 2%	♦ love Abbotsford ♦ passion for living ♦ good humour	♦ outdoor recreation ♦ freedom to relax	♦ great for sports	♦ sports for youth ♦ proximity to fishing ♦ mountain biking
blue 34%	♦ practise my faith ♦ worry free ♦ respect ♦ kindness	♦ feels safe & stable ♦ ethnic culture ♦ quality of life ♦ cleanliness	♦ hospitable ♦ well mannered ♦ little racism ♦ religious community ♦ bible belt ♦ vibrant church music & arts ♦ religious freedom ♦ good reputation ♦ hometown atmosphere ♦ high moral beliefs ♦ law abiding	♦ quiet ♦ peaceful ♦ small city in the country ♦ Block Watch ♦ crime prevention ♦ law & order ♦ police friendly ♦ education ♦ hospital service ♦ Senior's Social Club ♦ lots of churches
orange 19%	♦ interested in others ♦ progressive thinker ♦ good business planner	♦ great recreation ♦ where I make a living ♦ professional skills	♦ people work hard ♦ good work relationships ♦ reasonable entertainment ♦ variety of activities/events	♦ good employment opps. ♦ no Vancouver traffic ♦ airport ♦ good transportation ♦ good standard of living ♦ cheaper cost of living ♦ easy access to shopping variety ♦ gym & sports

				facilities ♦ excellent parks & recreation ♦ good public & private schools ♦ marvelous library ♦ access to good lawyer & doctor
green 18%	♦ sense of cohesion ♦ spiritual support ♦ emotional support ♦ feel appreciated ♦ caring ♦ tolerance ♦ cooperation	♦ care re health issues ♦ accepting differences	♦ organized, warm, friendly ♦ care for civil freedoms ♦ togetherness ♦ helping each other ♦ sharing ♦ mosaic ♦ melting pot ♦ inclusive ♦ ethnic diversity ♦ different heritage ♦ people same wavelength ♦ harmony ♦ consideration ♦ art performances ♦ support in drug recovery	♦ huge volunteer base ♦ variety of churches ♦ this is a giving place ♦ support homeless ♦ heritage sites ♦ wine & fairs ♦ food banks ♦ new Mayor ♦ working towards common goal
yellow 3%	♦ cooperation	♦ relaxed	♦ livable community	♦ work together on environment
turq <1%	great potential	talented people	life balance from arts	growing
coral 0%				

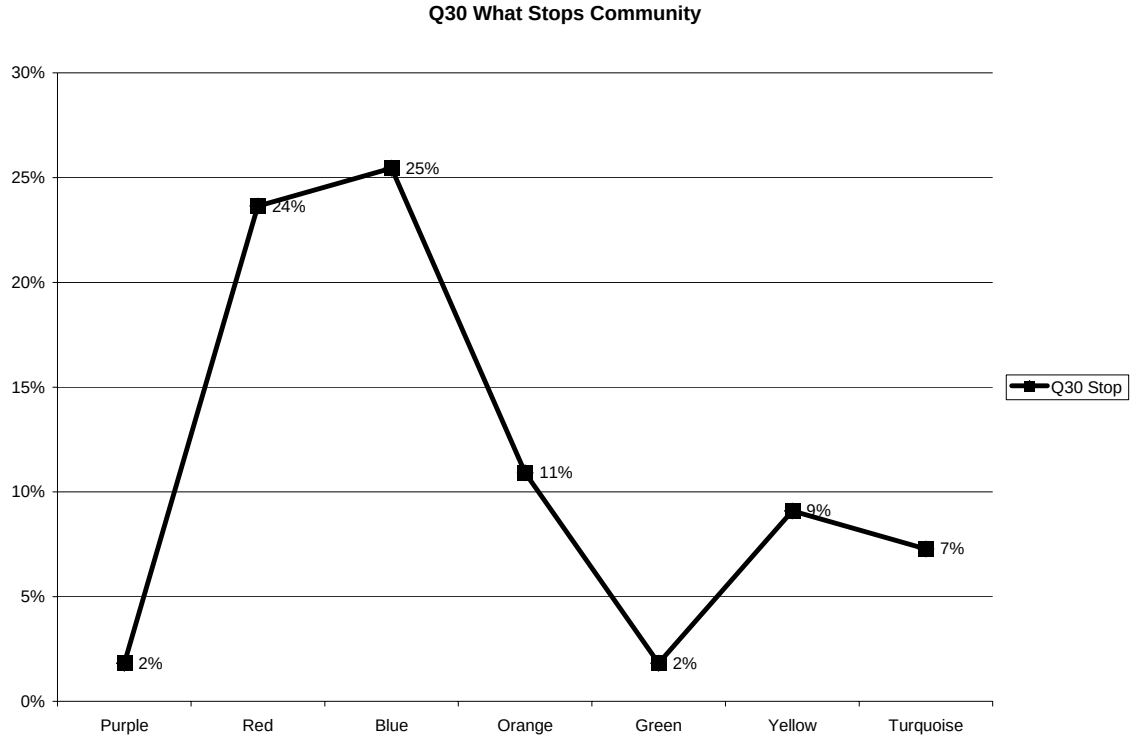
The themes that emerged from these responses describe a community in a way that integrates capacities in the subjective (UL) and intersubjective (LL) and objective (UR) and interobjective (LR) quadrants. Thus a picture emerges, describing the lived reality of Abbotsford residents, that matches Wight's (2002, p.3) AQAL picture of place as spanning "exterior, interior, communal and individual … a key venue for the integration of 'it's' and 'we' with the 'I' of the beholder – in both material form and non-material consciousness."

What Stops Community?

The literature identified a number of barriers and blockages to community (eg. Wight's (2002) lack of UL input into the planning process; Sandercock's (2000) diversity in the cosmopolis; Eddy's (2003) disconnects in the flow of energy).

In an effort to understand what blocks community in Abbotsford, respondents were asked, “What stops community from happening or thriving?”. Responses were charted as shown in Figure 4-8.

Figure 4-8: What Stops Community?



The graph of responses is notable in its contrast to the responses discussed above, related to Abbotsford’s assets. The values of the purple (2%) and red (24%) memes are virtually inverted. Interestingly blue (25%) is also relatively high with moderately low values for orange (11%), yellow (9%) and turquoise (7%) and very low green (2%).

What could account for such a pattern? The researcher suggests that on this graph, the low purple is a natural outcome of the high purple value on the asset graph – purple (family bonds and traditions) is foundational to this community, so it does not stop it.

The other results may come about as a result of the “shadow” side of the value sets described in Figure 4-6. As Sandercock (2002) and Fisher (2003) describe in their reviews of fear, for every investment in a set of values, there exists a fear of loss of that value and/or the fear of expression of differing (the “other’s) values. The psychological literature, as summarized by Wilber (2000b) describes the shadows and/or pathologies that emerge from the suppression of the natural expression of emerging values.

Thus, it is possible that the low expression of red assets in Table 4-6 results from the family "squeeze" of purple and the "ordering" pressure of blue belief systems. Because red is not allowed sufficient healthy outlets, it turns into unhealthy expression (see Table 4-2) which is cited by people with dominant purple and blue as "stopping community". Another reason might arise from the interaction of Eddy's (2003) intersections of Abbotsford sphere's of influence with Vancouver and Surrey, who have exerted increased pressure on unhealthy expressions of red behavior, driving people from those urban centres to Abbotsford, where less organized forces exist to counteract it.

This then, seems to account for the relatively high result for blue (24%) stopping community. Because Abbotsford has such a high perception of red problems, the usual forces to counteract it are not deemed to be effective; ie. police, city hall, city staff, government. Respondents cited "mentality in 1960's … stagnation … stodgy & restrictive local government" as indications that inappropriate awareness and strategies were being brought to bear on the red "shadows".

By the same token those residents who are aware of the pressures exerted by the influences of the blue belief systems seem to point at the restrictive roles that churches, belief systems and small thinking might play, citing divisions from "class … small town thinking , and religion" (see Table 4-2).

The researcher interpreted the low value for green as resonating strongly with the low value for purple. Many of the bonding capacities that first emerge in the family circle of purple are later expressed at a community-wide level at green. Thus it is not surprising to see that few green values are perceived to stop community.

However the higher values of yellow and turquoise were of interest, because they indicated to the researcher, that perhaps Abbotsford was resistant to the early introduction of values at this level, and had not developed a strong enough capacity at orange or green to sustain these values. This shows up in expressions of concern about lack of responsibility and resistance to "growing too fast" without commensurate planning (ie. orange) capacities (see Table 4-2).

One final comment needs to be made about data, not shown on the graph or included in Table 4-2. The researcher coded responses to this question (n= 22, 20%), that represented blockages whose cause originated external to the geographical boundary of Abbotsford. Examples are air pollution, the proposed SE2 plant, and provincial/federal funding cuts. The researcher considered that these blockages arise in the context of a larger fractal; ie. the bio-region and social context of Abbotsford. Thus they would show up on a larger scale map, like the GIS bio-regional maps proposed by Eddy (2003) or referenced by CAMP (2002) and were not included in the Abbotsford data.

Nevertheless, taken in conjunction with the yellow and turquoise data, these results indicate the chaotic conditions that exist at the outer boundaries of the community (in all four quadrants). Furthermore, many of the data descriptors from the respondents provide surprising parallels to the descriptors used by both Sandercock and Ury to identify the cause of conflicts in community (as shown in Table 2-3).

Abbotsford Blockages: Key Themes

Using the same theming process as used with Table 4-1 above, the data from this question was summarized into key themes as set out in Table 4-2. In addition the negative data that had been identified from the questions on Definition, Meaning and Greatness was added to the qualitative responses to the "What stops community question." Table 4-2 summarizes this data by quadrant and spiral value. (Findings shows the final theme words that were selected to describe community barriers, for the "Spiral Flower" presentation map, described below.)

Table 4-2: What stops your community from happening or thriving? Q 30 +(Q 26, 27, 29, 31 = displayed in Negative Inner, Negative Outer cols.)

Q30 Spiral Level & %	Q1 UL	Q2 UR	Q3 LL	Q4 LR	Negative Left Quads	Negative Right Quads
purple 2%	♦ scared of juveniles downtown	♦	♦ people aren't close ♦ bad kids	♦ gangs ♦ home invasions	♦ nobody cares ♦ no community spirit ♦ getting old ♦ not happy ♦ pushy people	♦ not enuf festivals ♦ cultural black hole ♦ arts cuts to schools ♦ gravel pits ♦ gravel trucks on road
red 24%	♦ not law abiding	♦ drug addiction ♦ violence	♦ cover up ♦ not talking about crime	♦ drugs & people ♦ drug trafficking ♦ crime ♦ organized crime ♦ young offenders ♦ juvenile delinquency ♦ Hell's Angels ♦ prostitutes ♦ noise on streets ♦ low moral standards ♦ shootings	♦ boring	♦ infested with drugs ♦ lot of junkies ♦ need more walking trails ♦ bad & dangerous in certain areas
blue	♦ people not	♦ old	♦ stagnation	♦ lack of	♦ isolation of	♦ bible belt

25%	growing ♦ narrow-mindedness ♦ closed-minded ♦ negative attitudes ♦ lack of interest ♦ judgment ♦ old ideas ♦ indifference ♦ apathy ♦ small-town mentality ♦ old fashioned	Councilors	♦ mentality in 1960's ♦ racism ♦ class of people gone down ♦ boundary between elite 7 others ♦ class dividing ♦ small town thinking ♦ religious superiority ♦ old fashioned ♦ won't get involved ♦ not cohesive ♦ too many ethnic backgrounds ♦ not accepting new ppl.	police ♦ unions ♦ religion ♦ opposition to tax increase ♦ not enuf sports ♦ churches ♦ stodgy & restrictive local govt.	ethnic groups ♦ demoralized attitudes ♦ lackadaisical ♦ insulated ♦ racial prejudice ♦ people cliquey ♦ treated as outsider ♦ unsafe ♦ prejudice ♦ cultural discrimination	♦ losing small town appeal ♦ overpopulated ♦ ruled by the churches ♦ too built up ♦ too many people
orange 11%	♦ narrow political views	♦	♦ community leaders ♦ Mayor ♦ different agendas ♦ bickering ♦ political play	♦ pubs open after 9pm ♦ lack of comty activities ♦ increase in taxes ♦ not enuf funding ♦ lack of jobs	♦ not open ♦ politicians	♦ stuck working ♦ growing too fast ♦ bedroom city ♦ overdeveloped ♦ ugly ♦ sprawling ♦ streets s/b cleaned ♦ not great shopping ♦ no big stores ♦ government not investing in outlying cities ♦ need more job opps ♦ Airport dead ♦ too close to airport ♦ need Senior's centre ♦ new Mayor

						does not contact us ♦ small city syndrome ♦ need new hospital ♦ too many box stores ♦ too many shopping malls ♦ too many traffic lights in too few blocks ♦ housing project @ Mill Lake ♦ building on mountains ♦ planning committee's unfinished road projects ♦ bus service not planned ♦ rapid growth ♦ SE2
green 2%	♦	♦	♦	♦ hard to coordinate multiple senior groups ♦ lack of interaction of sectors	♦ undertaken care of ♦ not involved enuf ♦ not listening to constituents ♦ not enough volunteering	♦ few local events ♦ disparity between wealth and poverty
yellow 9%	♦ older generation not accepting ♦ avoiding responsibility ♦ apathy	♦ age	♦ no support for diversity ♦ people won't help	♦	♦	♦ longterm enviro issue
turq 7%	♦	♦	♦ too busy life	♦ no plans ♦ too many housing developments ♦ too many neighbourhoods ♦ growing too fast ♦ metropolitan	♦	♦

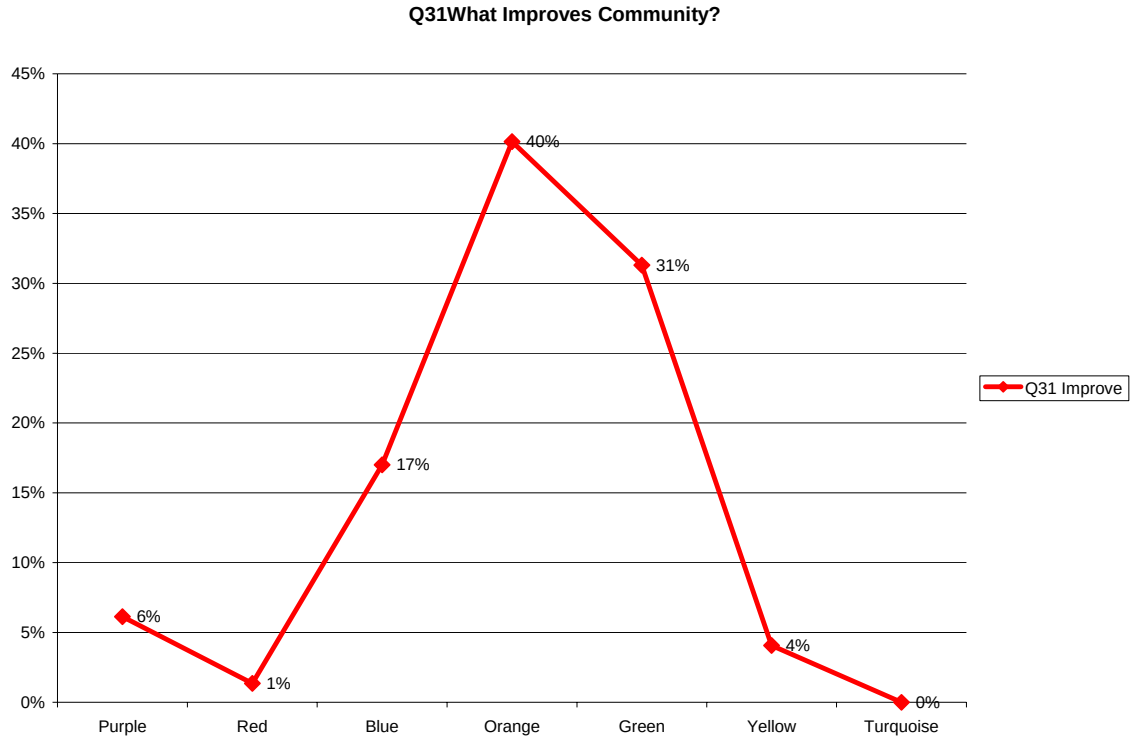
				• enviro destroying landscape		

What Improves Community?

The last insight into the values of Abbotsford, came from the responses the question, "If you were in charge of your community for a day, and could do anything you wanted to make your community better, what would it be?" This question not only tapped into the respondents', capacities for expanding the values of community but also their energies for change.

The responses are set out in the Figure 4-9 below. Once again the graphing of the data provided some interesting perspectives that the literature helps us to interpret. The respondents' views of community improvements were clustered at the orange (40%) and green (31%) values sets, indicating an overwhelming view that improvements are wanted in the strategic, planning, and improved infrastructure capacities (orange) and the community-wide celebration and expression of diversity (green) in various ways.

Figure 4- 9 : What Would Improve Community?



The key themes of the responses are summarized in Table 4-3. Though the data from this question requires further validation, the indications of particular "wants" resonate with the literature discussion above, concerning multi-quadrant value frameworks, "where complex, adaptive human intelligences form in response to the stress and strain forged by life conditions" (Beck et al 1996). Given the opportunity to describe what they wanted, the residents were able and willing to identify improvements in all four quadrants (Wilber, 2003).

Table 4-3: Community Improvements: Key Themes

Spiral Blue Orange Green	Q1 UL	Q2 UR	Q3 LL	Q4 LR
	♦ Public forums ♦ Better education ♦ Music in schools ♦ Invention Convention ♦ Weekend Library	♦ Facilities for kids & seniors ♦ Listening ♦ Clean up ♦ Get to know races, ages, genders ♦ Homeless shelters ♦ Plant tree ♦ Air/Water Pollution Ed.	♦ Teen club ♦ Multi-cultural activities ♦ Block parties ♦ Festivals ♦ Museum ♦ Support Salvation Army 1/2way house	♦ Children's commty centre ♦ Low cost housing ♦ Bus Service ♦ Speed traps ♦ Traffic planning ♦ Larger sidewalks ♦ …no SE2

How Do Community Leaders See Abbotsford Differently Than General Population?

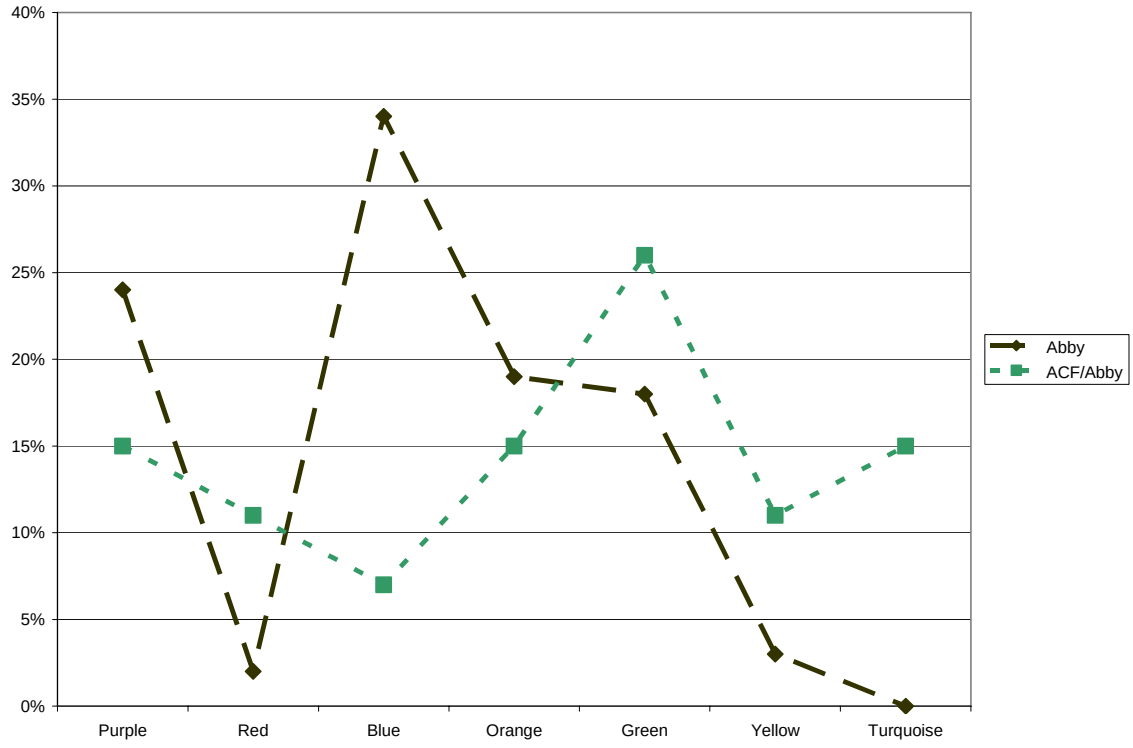
A second part of this Pilot Project, was to survey the ACF Board, using the same questions as the general population survey.

The volume of responses (n=9 – 11, varying by question) from the ACF Board was too low to preserve the confidentiality of respondents and to generate a complete set of charts and tables to compare across all the questions reviewed above. However the responses to the three questions on Capacity yielded a profile that could be compared to the Abbotsford Asset Chart (Figure 4-6 above). Figure 4-10 shows the differences in the two response sets.

It appears that, the striking difference in the two graphs, provides a ready insight into the differences between the two population samples. By definition, the members of the ACF Board were current or past leaders of Abbotsford, with a mean age in the range of 30-54. In general, they had lived in Abbotsford for 10 years or more. Thus they had an experience of the city that gave them privileged insights into the capacities, limitations and potentials of the city. Nevertheless, when the Board members perceived the differences between their views and the general population, they were initially surprised to see such a gap in the two sets

of responses. The researcher, after discussing the results with the Board and with Beck (2003), proposes that the Board might be projecting their own capacity as leaders onto their view of community. (The researcher is reminded of results obtained in prior research with groups, sub-groups and individuals in the Berkana Community of Conversations showing distinctly different patterns between groups (Hamilton, 1999)).
The researcher is now curious if the city staff (and/or councilors) might have different patterns than the general population, which would bias the reported views (and lived reality?) of the residents, and thereby skew planning and financing decisions.

Figure 4-10: Comparison of Abbotsford Population to ACF Board: Community Assets/Capacities



Conclusions

Integrating Lenses, Values and Indicators in One Meta Framework

The qualitative Methodology of the telephone survey elicited a massive amount of data that at first blush, seems difficult to integrate. However, returning to the values framings, described in the Literature Review under the Integral and Spiral Frameworks, it is possible to bring much of the data together in one meta framework (Hamilton, 1999; Ruder et al 2001).

A single Spiral Integral Values Map (see Figure 5-1) was created in order to present the data to the ACF Board at a retreat. The single map brings together all the data included in Figures 4-6 and 4-8, and Tables 4-1 and 4-2.

In order to frame the data in a non-academic manner, a metaphor of a four petalled flower was used to make key learning points about the data (Ruder et al, 2001), that enabled the Board to understand and use the map in exploring how the research had answered the question " What do we know about our community?"

The key points summarized on the map are:

1. There are many different ways to foster community. The four petals (quadrants) of the flower show how survey responses cluster into four different but essential categories. Like this flower, community is made up of all four clusters. In the case of Abbotsford the LL petal is viewed as almost 3 times larger than any of the other three petals (53% vs 16%).

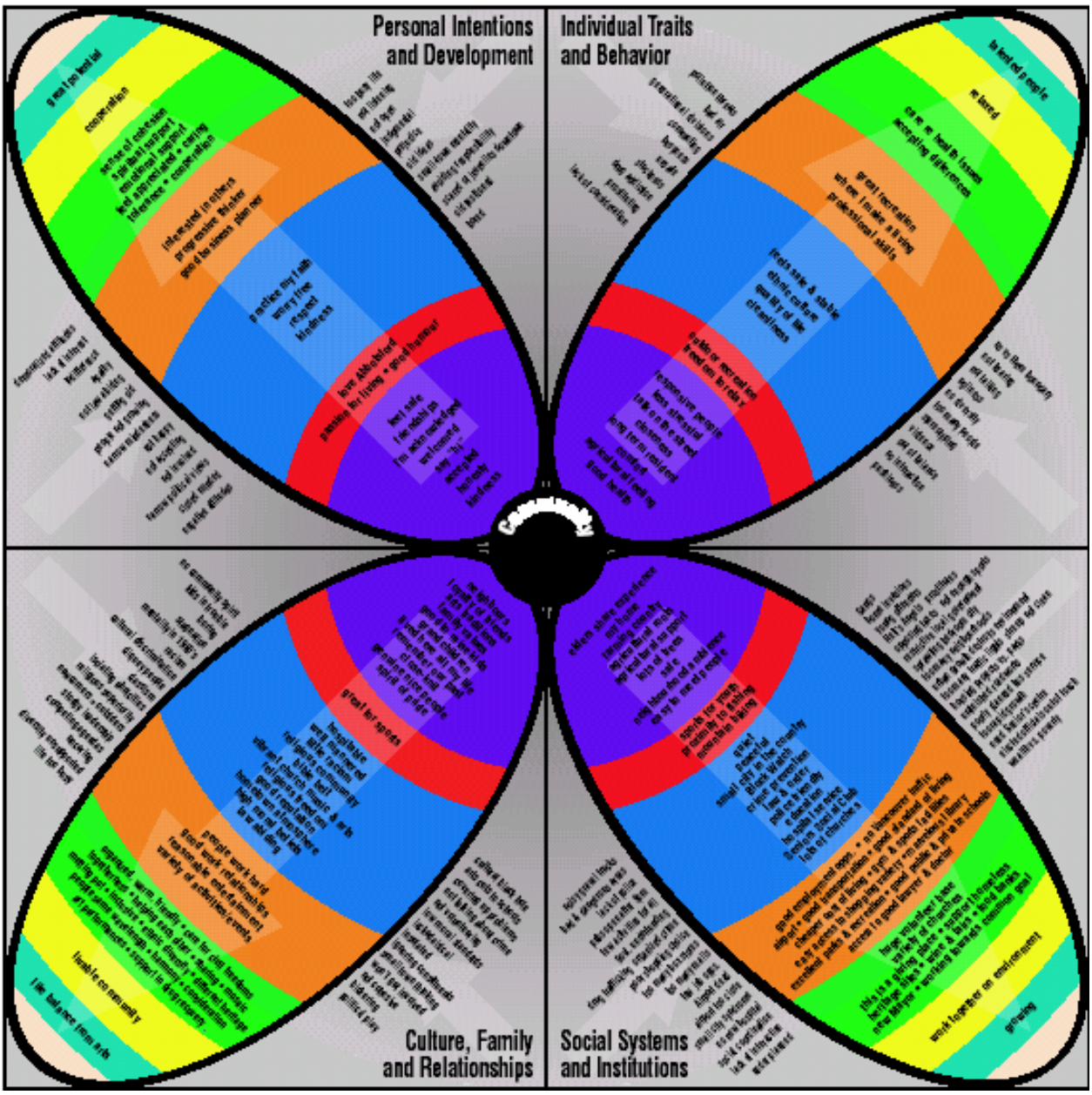
2. Within the petals of the flower (quadrants) of community are those capacities that help make community work. If these flourish in an integrated manner, community will grow and thrive. Arrows in the background of each petal illustrate the push for the petal to bloom more fully. The arrows indicates the natural direction and sequence that values emerge (Beck et al, 1996; Wilber, 1996, 2001a, 2001b; Hamilton, 1999).

3. In the gray background surrounding the petals are those barriers that prevent the flower from blooming larger. The background arrows pushing against the petals represent these negative forces. These correspond to the barriers, blockages and shadows to community values (Sandercock, 2000; Fisher, 2003; Wilber, 2001b).

4. This flower is a multicolored rainbow of community values. Each of the colours represents a set of values that are crucial to ensuring that the flower of community is as full and vibrant as possible. Consider these community values like multiple layers of petals – each layer is a different colour that creates an award winning Flower Show masterpiece. The positive contributions of each color are (Beck et al, 1996; Ruder, 2001; Hamilton, 1999):
   - ***Purple*** harmonizes the values of kinship and familial traditions that bond people together most tightly.
   - ***Red*** speaks to the pure unrestrained energy of pleasure and enjoyment in community.
   - ***Blue*** honors commitment and order to life and work, a sense of direction for a greater good, stability, and even recognition of duty to creating and sustaining it.

- ***Orange*** strives towards achieving great things together with strategic and goal oriented plans.
- ***Green*** shares those elements that are about care and sensitivity to others, with an egalitarian perspective that celebrates diversity.
- ***Yellow*** meshes responses about flexibility, spontaneity, and knowledge as a spur to integrating community development.
- ***Turquoise*** hints at aspects of community that are about wholeness and global connections.
- ***Coral*** splashes represent what we might create in the future with all our good works for the common good. (Hamilton et al, 2003)

Figure 5-1: Spiral Flower Values Map of Abbotsford



Qualitative and Quantitative

The meta-map combines the qualitative themed data (in the word descriptors) with the quantitative volume of response (in the width of the value colours).

In this particular version of the map the capacities/assets were shown in a balanced set of quadrants; however, given the 53% weighting in the response to the question “How would you describe community?”, it seems apparent that the

quadrants in the map are not balanced. (It was one of the financial limitations of this study that further versions of the map were not constructed at the time of the pilot test.) The researcher surmises also, that with further analysis, the pattern of memetic values in each quadrant of the map would also not be symmetrical.

Nevertheless for the purposes of allowing the ACF Board to work with the data to engage with the capacities and barriers in each quadrant, the data and the metaphor was indeed thick, rich and generative.

Other Versions of the Meta Map

A series of meta maps could be constructed from any of the data; eg. maps reflecting age, gender, barriers, improvements. Such maps could be multi-dimensional, allowing overlays and cross-referencing.

Integral – Holographic

The four quadrants of the map, each have unique characteristics defined by the two dimensions of Subjective/Objective and Intersubjective/Interobjective. However, from an examination of the data from this pilot project, one characteristic that appears to be shared with all four lenses is the holographic nature of each lens. The writer surmises that this comes from the indistinguishable connections that exist between I/It (eg. mind/brain); We/Its (eg. belief/organization); and the I/We (eg. personal development/cultural context); and It/Its (eg. child/parent). Wheatley (1999, p. 111) and Isaacs (1999, p. 58) both talk about the holographic nature of relationship – that "I am in the world and the world is in me" (Isaacs,1999, p. 58). Wheatley observes that quantum physics has explored the nature of holons that emerge from relational interconnectedness of parts, that become inseparable because the degree of merger causes new "wholes" or "holons" to arise. Wilber (1996) in fact derived twenty tenets that govern such holons (borrowing the word from Arthur Koestler [vi].

Through these explanations it is possible to see why the Integral model is a powerful model of community. It means that no matter what lens we use to know community and no matter what methodology we select from a given lens, we are likely to see data from some (sometimes all) of the other quadrants. This is readily visible in the Abbotsford prototype – where the telephone survey data of open ended qualitative responses, identified data that was clearly related not only to the left hand quadrants of the subjective/intersubjective world of community, but also to the right hand objective/interobjective lenses/quadrants. This is not a shortcoming, but rather an affirmation of the value of using multiple methods to examine something so complex as community. One data gathering method can elicit thick rich data; however much of the same data can be triangulated and/or validated by the use of other methodologies from other quadrants.

A Common Language for All Scales

When we set out to study community with an intentional integral/spiral approach we can expect to discover more than most other methodological approaches can ever hope to find out, even if they use multiple methodologies. The reason for this is because the integral/spiral frameworks provide a common language to integrate the results from multiple methodologies (Wilber, 2003).

In other words, we can see that other data bases can be translated into a common integral/spiral "language". In same way that Tables 2- 5,6,7 and 8 integrate the indicators from the five research studies, the Abbotsford survey results, could be cross-referenced to existing:

- census data
- GIS surveys
- School District data
- University College data
- Health Region data
- Agricultural surveys
- Private sector polls
- etc.

Nesting and Meshing Maps

It is the contention of this researcher, that this pilot project demonstrates how necessary such a common language is to develop the "report card" that Judith Maxwell (CPRN, 2002) describes. The spiral/integral values map of Abbotsford could be replicated on any level of scale to leaders, neighbourhoods, cities, bio-regions, or countries, thus showing the flexibility, comparability and adaptability of the common integral/spiral language.

Research in other domains has already demonstrated the utility of the values maps for individuals, groups, organizations, communities, bio-regions and countries (Tupper, 2003;Smith, 2002; Reams, 2002;Reynolds, 2003;Hamilton, 1999; Fisher, 2003, Beck et al 2002).

The researcher visualizes that technology can provide the capability to nest, mesh and/or hyperlink multiple databases to allow a "weather mapping" approach to mining and summarizing data and mapping the complexity of land/bio/mind-scapes that Eddy (2003) proposes are at play in the converging spheres of influence of the modern city.

Moreover, the researcher speculates that the meso-scale role that communities and cities would play in such mapping processes, would show the powerful influences they have on the forces at play in our modern world.

Dynamic Data

One thing is certain however elegant the map: the map is not the territory. Communities (and all other levels of scale) are far too complex and dynamic ever to be fully mapped. Nevertheless, this pilot project demonstrates that data that is

sourced from experts, can be richly informed by data sourced from the general population. They are astute observers of their own immediate life conditions. As Maxwell, proposed there is an important role for data from ordinary citizens that broadens our expert opinions. Furthermore, the researcher has already designed other surveying approaches; eg. closed ended survey questions that would speed the analysis and publication of results (Hamilton, 2003). As Maxwell (CPRN, 2002) so aptly visualized the outcome of collaboration:

> "efficiencies could be realized by pooling some of the financial and human resources dedicated to the research and application of the individual models in the search for a single generic model, which by design would permit local adaptation. This single model would by mandate link jurisdictions (community through city and province to a national perspective), geography (coast to coast to coast), and disciplines. In effect, this would lead not only to the creation, but also, more importantly, to the use of a common language, framework and set of indicators by all those interested in quality of life in Canada – including citizens, all levels of government, non-governmental organizations, researchers, academics and the media."

Application of Research

Two small applications of the research have already informed the ACF decision process:

- assisting the Board to develop a vision for the next 20 years
- how to assess the integral/spiral relationship of grant requests for 2003.

In both cases the multi-quadrant, multi-value framework for creation and review allowed a dynamic systems view of the community. As more leaders and organizations learn about the map, they are attracted to discover how it might inform their own directions and intentions. The researcher has already brought the research to the attention and review of:

- federal political representative
- city hall staff
- mayor
- university college.

SWOT Analysis

The survey responses and mapping process are particularly applicable to strategic planning. A SWOT analysis is virtually derived as follows:

Strengths: Analysis of the three questions on capacities (meaning, definition and what makes community great). These are the petals of the flower (and forces of growth, health and vibrancy).

Weaknesses: Analysis of "what stops community" identifies the weaknesses of community. These are the grey background

	on the flower map (and the forces blocking health and vibrancy).
Opportunities:	Analysis of "how could we improve community".
Threats:	Analysis of threats originating outside community (which are identified in the negative responses to capacities and the externally originating barriers to community.

In responding to an RFP from another Fraser Valley designed to complete a survey for input into a strategic planning process, the researcher applied a similar methodology as described here, but redesigned the survey to be completely closed ended questions.

Conflict Resolution in Community

The convergence of the pilot project data identifying," what stops community", with the descriptors for the causes of conflict used by Sandercock and Ury, shown in Table 2-3, suggest that better informed approaches to resolving conflict in community could be developed. Ury's "Third Side" seems to be a reasonable approach, suggesting the three major roles should aim at Prevention, Resolution and Containment. Reynolds (2003) research in a national organization seems to suggest that such an approach would produce major improvements in professional conflict resolution practice, with the likelihood of developing a long term framework for application in community.

Who Else Might Be Interested in the Research?

There are many organizational clusters who might be interested in a MLM process and the data it would generate. Some examples are:

1. Individual Community Foundations – for the same purposes as ACF
2. Vancouver Foundation – VF funds other Foundations in BC plus provides Foundation for Vancouver.
3. Community Foundations of Canada – to integrate their recommendations for social planning agendas.
4. United Way
5. Vibrant Communities movement – quality of life in communities.
6. Municipal Urban Planners eg. GVRD, City of Winnipeg, etc.
7. Universities, University-Colleges
8. School Districts
9. Health Regions
10. Federal interests in Community Development eg. CAMP (2002)
11. Credit Unions and banks for understanding local markets
12. Private enterprise for understanding markets at all levels of scale
13. United Nations
14. UNESCO/UNICEF

Recommendations: Moving From Pilot Project to Long Term Research Commitment

Pilot Project Delivers

The literature integration and pilot project have proven a number of things:

1. the value of an integral/spiral framework for mapping community
2. the capacity to conceptually integrate multiple sources of data into one framework that shows the commonalities and/or disconnections in the data
3. the demonstration of a common language – an integral/spiral language to express and translate between methodologies, lenses, frameworks and indicators for multiple users
4. the multiple interests of many community stakeholders who would benefit from an integrated framework
5. the application of community mapping to: strategic planning; analyzing group differences; community conflict management
6. the potential to conduct comparative research, using the integral/spiral framework to study different communities
7. the role of the meso level of values mapping gives us context for comprehending micro ecologies (individual/group) and contributes to the understanding of macro ecologies (bio-region, the world)
8. the richness of community in the context of villagizing the globe (Wight, 2003)

Future Research

The Pilot Project Methodology and Findings also raise other questions for further study; for example:

1. What further insights could be gained from further cross-tabulations of data; eg. gender, age, ethnicity, etc.?
2. How would Findings change if data were collected in non-English surveys and/or with translators?
3. How would surveys of city staff, councilors and other sub-groups compare to results from random population samples?
4. What community of integral planning practise can be developed from creating conferences with researchers about value signifiers and/or indicators?
5. How can we study diversity within integral/spiral frameworks?
6. How can we use integral/spiral based scenario planning to explore national and/or bio-regional policies like immigration, resource development, etc.?
7. How can we evaluate and implement conflict resolution approaches, based on the “Third Side” ?

8. How can we develop effective change processes/interventions appropriate to the value landscapes of communities?
9. How can we respond to imbalances in community health, from the comparative study of multiple communities?
10. How can we create a technology that easily maps the four quadrant view of the data from the graphed data?
11. How can we create a technology that builds on the multiple data bases proposed by Eddy's theory to create a learning laboratory for community?

Long Term Goals

The time has come to move from a one city values mapping project to developing the infrastructure that would allow us to strengthen, deepen, widen and regularly "map the weather system" of our values. The time has come to expand the application of an integral/spiral common language to a wide cross country audience as visualized by Maxwell (2002). The time has also come to expand the pilot project on a bio-regional and national level and to link the values map to other streams and threads of data.

The Abbotsford Pilot Project is the beginning a long term research process, described by the "code name" Maple Leaf Memes (MLM). As MLM is a multi-phase, long term project, some key goals to achieve could include:

- Stage 1: 2003
    - Distribute report on prototype in Abbotsford
- Stage 2: 2003
    - Locate potential collaborators, partners, participants
    - Develop relationships with collaborators, partners, participants
    - Develop a research institute or research chair
    - Obtain funding for research
    - Obtain funding for maintenance of infrastructure
    - Develop data gathering technology/ infrastructure
    - Test data gathering infrastructure
- Stage 3: 2004
    - Start to collect data nationally, semi-annually
    - Connect with GVM globally
- Stage 4: 2005 +
    - Refine, report out and apply GVM
    - Research on applications in Canada

We conclude this report, by inviting those who are inspired to pursue related research interests, to join a community of integral/spiral practice and collaborate to explore the questions raised by this pilot project.

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