Discovering Integral Capacities in the Global Village
Through Values Meta-Mapping

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Abstract

Integral models provide a values-based framework for creating a meta-map of capacities in the global village. Patterns in personal, family and social values derive from geo, bio and noetic developmental processes that co-create urban life conditions. Assumptions derived from the dynamic values patterns, create feedback loops that affect the practise of regional planning, city planning and other professional communities of practise. The meta-mapping process creates a common language to describe and understand the relationship of values to social capacity; managing increasing diversity; and diagnosing and remediating neighbourhood conflicts. It also allows the integration of multiple existing data sources and indicators. A Pilot Project conducted in Abbotsford, BC, Canada, meta-maps the integral values of a random population sample. Findings demonstrate the integral 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 demonstrates the potential for spiral integral meta-maps to describe increasingly complex capacities in the global village. Values relationships offer insights into resolving blockages and opening up energy flows for increasing capacity. The study recommends the expansion of the research to a bio-regional and national level.

The Global Village: 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, the ACF Board asked themselves what became the Research Question for this pilot project:

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

Although Abbotsford is less than 10% of the size of Canada's largest urban centres, it is a prototypical Global Village. The Canadian census 2001, named 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), 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).

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. So the researcher's underlying interest was to understand the current capacity of the city, and how it could be developed in a healthy way. Moreover, 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.

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

1. 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.

2. MLM is 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).

This paper describes the constructs behind the Abbotsford Meta-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 Global Villages 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.)

Assumptions About the Study of the Global Village

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

1. The literature uses different descriptors for what this article is considering as the same phenomenon; specifically Community, City, Cosmopolis, Global Village. Although in some contexts these words relate to different levels of scale, for the purposes of the article we use the terms interchangeabley. (Stevenson & Hamilton (2001); Sandercock (2002); McLuhan and Powers (1989).
2. Community develops as a result of individuals and groups organizing in the context of our Life Conditions. (Hamilton, 1999, 2002).
3. Community is a living system. (Hamilton, 1999)
4. The factor of Life Conditions is another way of describing the fact that our communities exist in contexts and/or environments. (Wackernagel and Rees, 1996).
5. 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).
6. 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).

7. The study of complexity informs the study of community (and vice versa) (Stevenson & Hamilton, 2001).
8. Because of globalization and the accelerating rate of scientific, technological, communications and transportation change, 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
9. Community development expands capacities for change & opportunity. (Smyre, 2002).
10. Most Life Condition indicators have focused on bio-physical, observable properties (eg. factors tracked by census data ; and land use planning). (Wight, 2000)
11. 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)
12. 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).

Literature Review

The literature review explores models and studies that show how values and capacity emerge from the dynamic interconnections of life conditions and complex adaptive capacity in human systems. Three domains of literature contribute to understanding these constructs:

1. **Frameworks for Researching Community Values** examines frameworks for examining values in the context of community.

2. **Developmental Capacity in the Urban Region** reviews the significance of developmental waves of increasing complexity in the urban context and how to meta-map the development.

3. **Limits to Communities of Practise in the Global Village** considers the relationship between those charged with managing the global village (and their worldviews, planning capacities, and professional practises) and those who live in it.

1. Frameworks for Researching Community Values

Overview

Hamilton (2003b) notes that "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")… value seems to emerge at different levels of scale and complexity (individual, group, society, globe). A discussion of each scale follows.

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 – generally, 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, when these have been shared and accepted by enough people, 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 (as cited by 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

Hamilton (2003b) summarizes the research of Graves (1971, 1981), Beck and Cowan (1996), Wilber (1996, 2000a, 2000b, 2002), Wade (1996) and others, who have developed meta-models of wave patterns of values development in groups and organizations (as well as individuals). The wave patterns share the characteristics of:

- alternating between individual and group focus
- increasingly complex structures and patterns of relationship emerge over time
- being transcendent and inclusive of the value patterns that have emerged in earlier waves; ie. they are holonic
- influencing life conditions in which they exist and as well as being sensitive to changes in life conditions

Goodall et al (2003) note that “lack of organisational planning in any quadrant can seriously inhibit an organisation’s ability to change.”

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 all four of the primary lenses (subjective, objective, intersubjective, interobjective) that are mentioned by Hamilton (2003b).

Hamilton (1999) examined the natural emergence of capacities from a self-organizing online community system, where much of the “sense making” capacity from sound, sight and body language were not available. Nevertheless her research showed distinct patterns, structures and processes emerged from the interaction of the agents in the system. The online community acted like a living system that survived, connected with its environment and re-generated. The community had a distinct identity (and sub-identities), relationships and information exchanges.

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 system (CAS) noting these characteristics:

> “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. ...

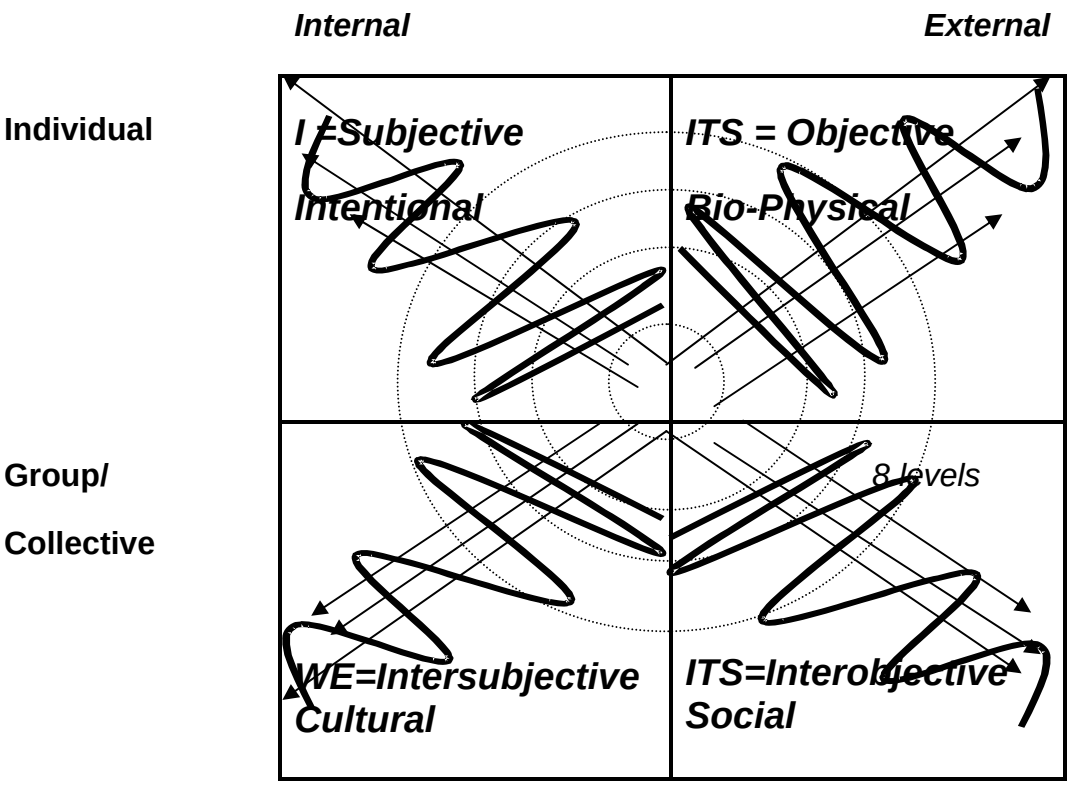
"It is suggested by the authors that CAS are holonic in nature, as individuals (human CAS), or as groups of human CAS such as families, clans, organizations and communities. "

Hamilton and Stevenson (2001) 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
- potentially affected by weak signals
- field sensitive

Hamilton (2003b) argues that a map of community, based on Ken Wilber's (1996) AQAL (all quadrants, all levels) model of reality (see Table 1-1) provides an integrated meta-map of values that encompasses subjective/objective and intersubjective/ interobjective values (see Appendix B for a table summarizing the meta-map of values). Wilber (2003, Part 1, p.13) relates each quadrant to the values of 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). The four quadrant map also includes an all levels dimension of development, that spirals outward in four directions from the centre of the map. Therefore, in effect, the Integral AQAL Model also encompasses the Spiral Dynamics Model (Beck et al 1996) discussed above.

Table 1-1: The Integral Model of Values



Graves specifically identified the values that emerged from his research as belonging to a model that he described as an "Emergent, Cyclical, Double-Helix model of bio-psycho-social development" (Beck et al, 1996, p. 48) alternating between 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). Stevenson and Hamilton (2001) 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.

Hamilton (2003b) maintains that Integral (and Spiral Dynamics) research 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. She notes further that "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)".
Beck (2000) 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."

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.

2. Developmental Capacity in the Urban Region

Overview
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, schools of thought have started to emerge in the studies of (urban) geography and urban and regional planning that are developing a body of theory and research using these same integral lenses. Hamilton (2003b) has
also proposed that integral approaches provide a powerful meta-language to talk about change.

This section examines leading edge hypotheses in Integral Geography, Integral (Urban) Planning and the meta-patterns they observe.

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	Life Environment

	Botany etc.	(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 2.2 : 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 influence 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 2.3.

Table 2.3: Regional Planning in the Integral Model (Wight, 2000)

	Internal / Subjective	***External / Objective***
Individual	I = Intentional ***Aesthetic?***	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.

Summary:
Eddy and Wight make convincing arguments for applying the integral meta-maps to the life conditions within which the Global Village exists, embracing its entire ecological context.

3. Limits to Communities of Practise in the Global Village

Overview
Our final review of literature critiques professional practices applied in the global village through: Placing, Placemaking and Planning; Seeing Cities as Communities of Difference; Managing Conflict; and Framing a Community of Practise.

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 consciousness map at the orange/green transition point where strategic planning upshifts into communicative action. To explain, Wight lays out the Planning approaches that have emerged at different stages of consciousness (see Table 3.1).

Table 3.1: 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 opens 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 [orange] 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 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 (eg. Abbotsford's emergence as the Canadian city with the third "highest proportion of visible minorities of Canada's urban centres " surprised many residents and city leaders, learning this for the first time in the local media.)

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 (2000) 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.

Managing Conflict

Sandercock (2000) openly acknowledges that her third option (for responding to values challenges), of creating opportunities for dialogue, is a therapeutic approach, which she starts to defend from the psychological literature. 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 resonates with 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. But Ury describes a commensurately larger role repertoire to address issues (see Table 3.2). Sandercock's proposed interventions related to dialogic healing seem to be related to the centre cluster of conflicts marked with an (*) in Table 3.2. (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 3.2: 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 seems 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 have outlined an approach to methodologies in Hamilton (2003b), 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).

Summary of Literature Review
Our literature review has examined the value of integral/spiral frameworks for meta-mapping; the significance of unfolding developmental complexity in the cosmopolis; and the recognition that there are limitations to the current communities of planning and managing practice in the global village. This review provides the background for:

- meta-mapping four quadrants of capacity in the global village – subjective/objective and intersubjective/interobjective
- meta-mapping eight developmental levels of capacity in each quadrant
- framing the pilot research project
- providing a springboard for recommendations for further research.

The Pilot Project

Methodology

The Pilot Project used an integral AQAL methodology.

Wilber (2003b) elucidates a key benefit of an integral All Quadrants/All Levels (AQAL) methodology : "The reason AQAL … has had such a rapid acceptance in many of those fields is that, based on honoring human capacities across a full range, [AQAL] 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. "

Data Gathering
The Data Gathering Methods used in the Pilot Project were a telephone survey and one email survey.

The Research Method and Survey Designs were 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). Respondents were told the reason for the survey was "to conduct a confidential survey regarding people's attitude towards various aspects of their community. These results will be used as the basis for the City's future planning" (Hamilton, 2003a).

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 based on (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:

A random sample of Abbotsford residents was interviewed by telephone survey, by CV Marketing in the month of December, 2002. The criteria for the sample were defined by the data collection agency in conjunction with the City of Abbotsford (Olsen, 2003) in Appendix A. 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".

An email survey of the ACF Board was conducted by the researcher in January, 2003. 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.

The limitations, delimitations and ethical considerations for the study are set out in Appendix A.

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; 15% were age 18-30, 47% were 30-54, and 38% were 55+. 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.

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 percentage 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 Structures

- (6%) Other – combinations of 2, 3, or 4 of the above options."

These questions were the only closed ended questions used in the survey and gave a very clear picture of how residents related to the four quadrants of community experience. This seems to corroborate Wight's (2002, p.11) contention that " place … is … inseparable from being human". It also creates strong support for use of qualitative, narrative, and action research methodologies, suggested by Sandercock (2000) for learning about community. Her experiments with story telling, interpretation, play and visualization as powerful data collection processes provide effective windows into the LL quadrants.

This perception of community contrasts strongly with the City's tax distribution (Abbotsford, 2003b). In its 2003 Tax Benefit Statement the City reported the following allocation of tax monies on a monthly basis. (It should be noted that some of the allocations could be attributed to more than one quadrant, however the writer interprets that the reallocations from all of the quadrants except LR (interobjective) would be reallocated to LR, thus increasing the LR allocation even further).

- <3% UL (Personal Intentions). This was identified as arts, culture, libraries and museums.
- 9% UR (A place to share Individual Traits & Behavior: Health, Physical capabilities, Ethnic background; shared physical traits). This was identified as recreation facilities, parks and trails, fitness programs.
- 12% LL (A Place of Culture, Family, Relationships)
- 76% LR (Workplace, Professional, Association, Civic Structures)

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 as charted by Spiral Codes are shown in Figures 4.1,2,3 below.

Figure 4.1: What do you think of if you are asked to define community?

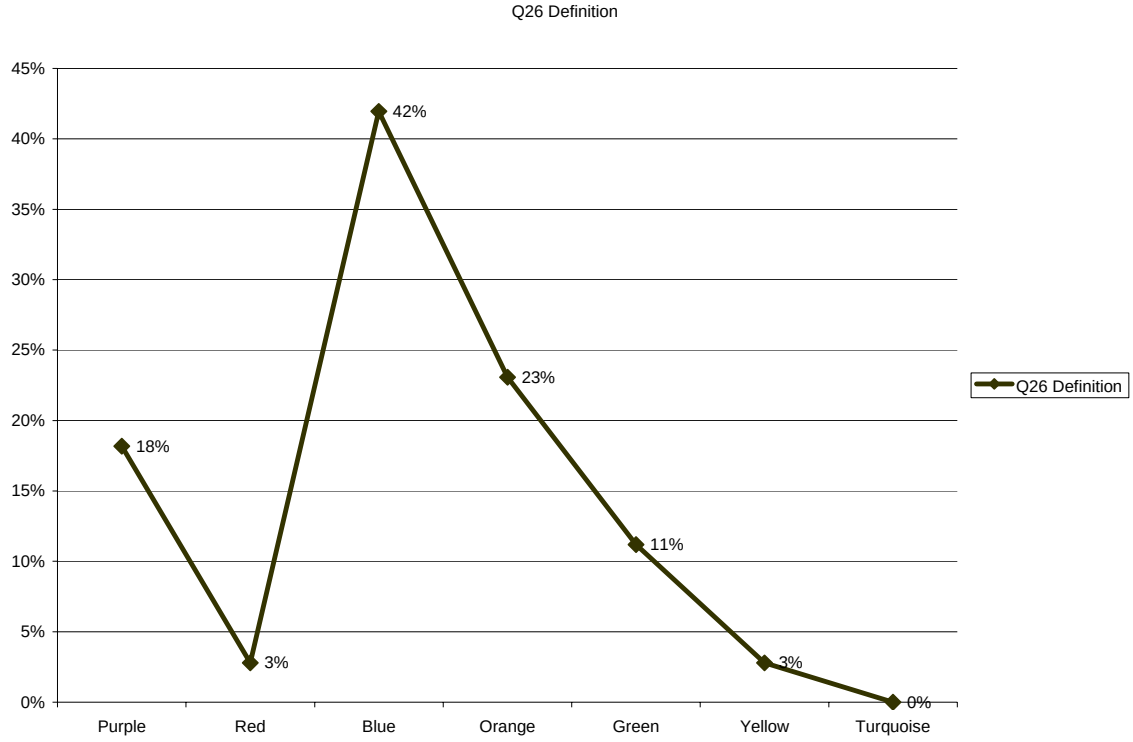


Figure 4.2: What does community mean to you? What is important about it?

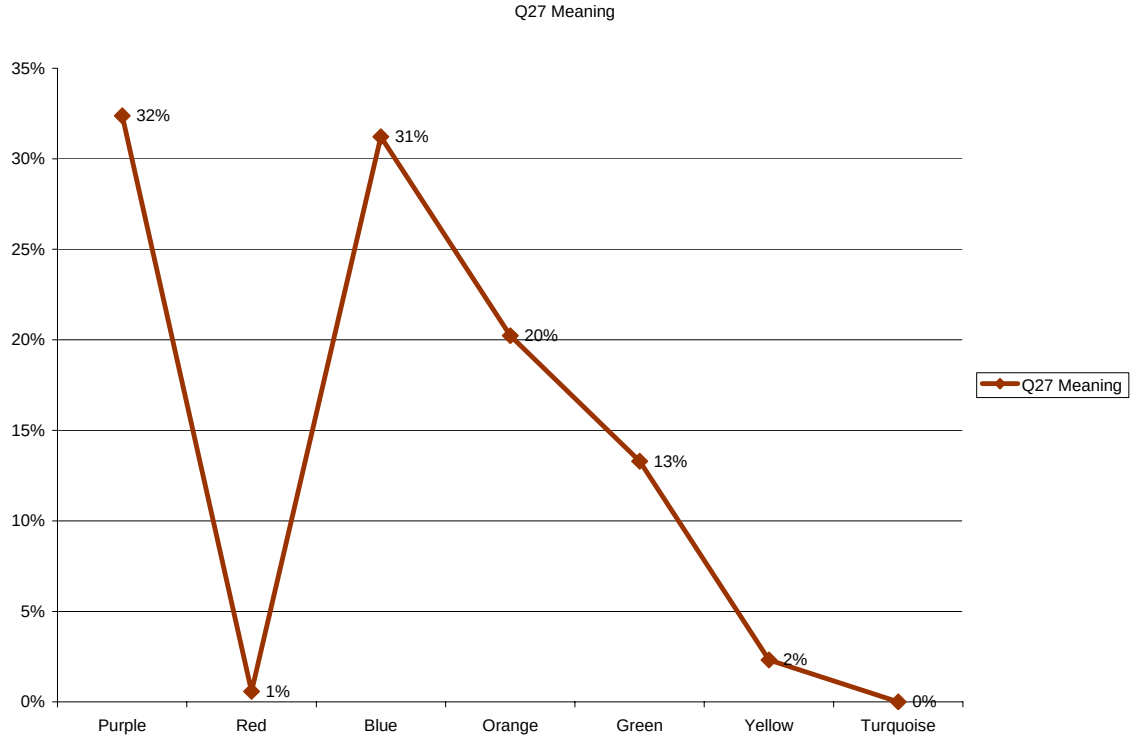
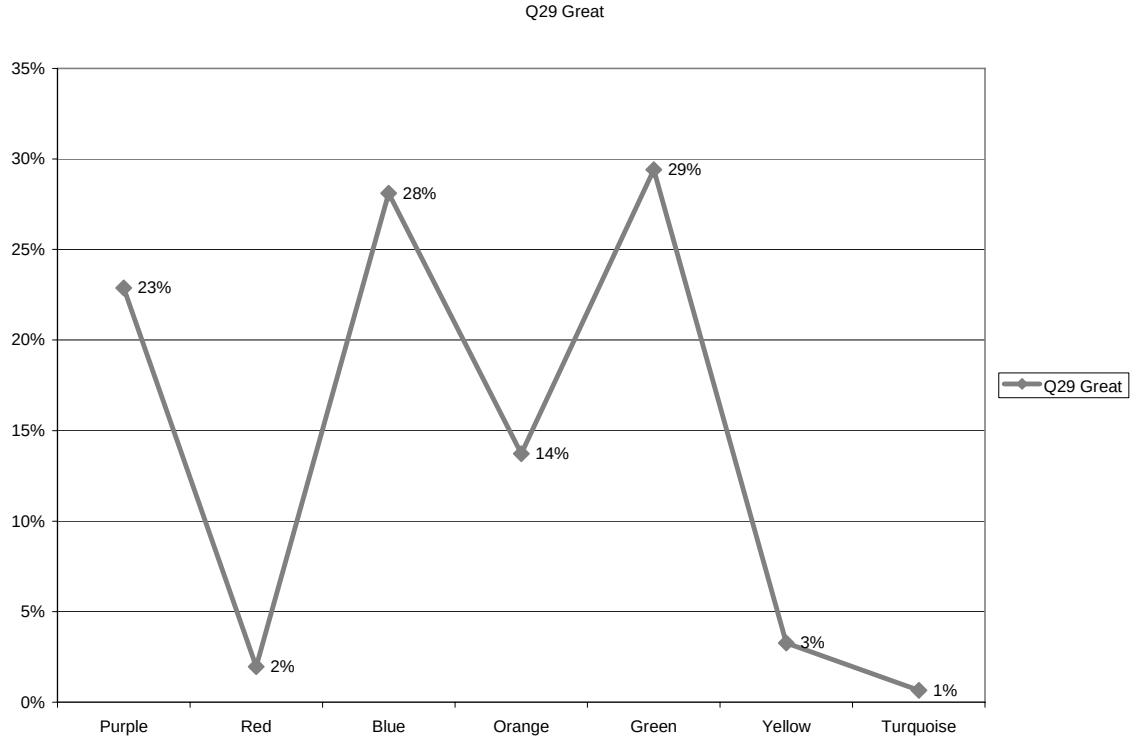


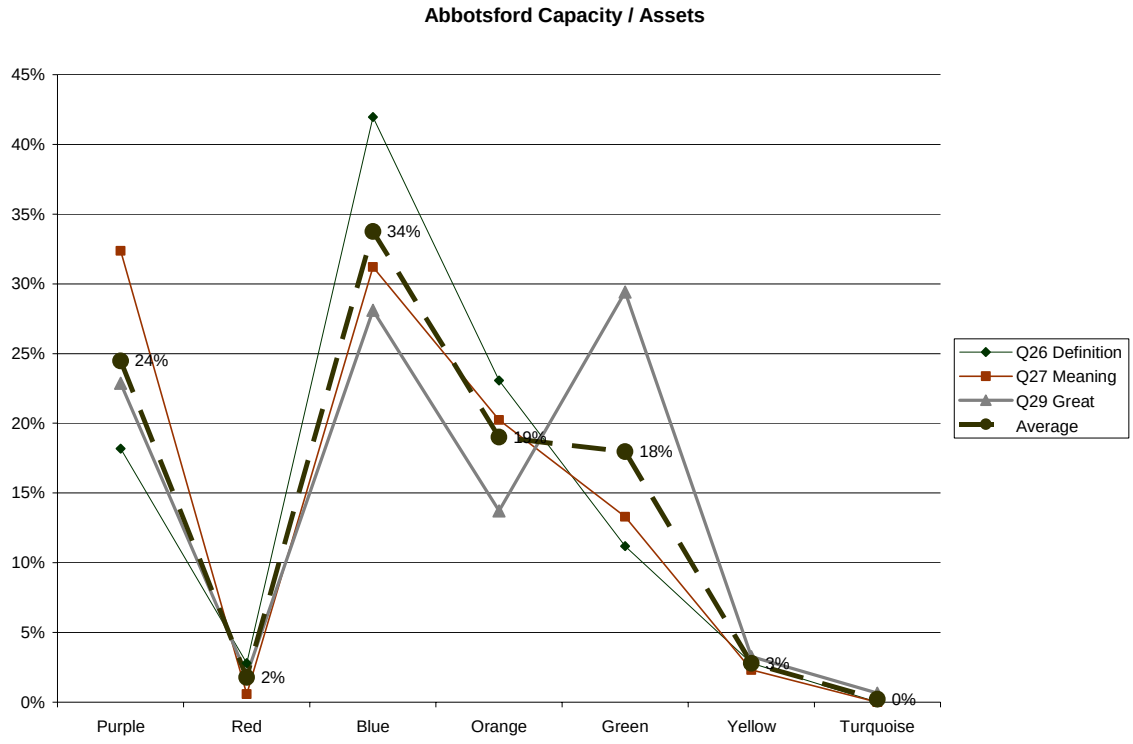
Figure 4.3: Overall, what makes the community you identified great?



The quantitative data (percentage response to each question in each x axis value category) includes all responses to each question, and clearly shows the weighting relationship amongst the responses). The answers to the three questions also show strong underlying patterns across the response options.

For the purposes of drawing a simplified map from these three charts, to be used at the ACF Retreat, an average response path was produced to create a trial view of a combined view of Abbotsford's assets (see Figure 4.4).

Figure 4.4: 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. The high peaks and low valleys seem to exemplify Sandercock's (2000) community of differences.

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 (blue). 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 belief-based cultures within the city: the Christians (with approximately 100 churches counted in 1990 (Riggins, et al, 1991)) and the Sikhs. The roots of these belief cultures was still reflected in the language-based ethnic composition in 1996 (Abbotsford, 2003). City records indicate that first languages were:10% German (represented by a large immigration of Mennonites starting in the 1930's (Riggins et al, 1991); 6% Dutch; and 10% Indo-Canadians (represented by a large immigration of Sikhs). The researcher speculates that each of these communities were attracted by the rich agricultural conditions of the Fraser Valley and contributed their agricultural skills and traditions to founding and developing a successful local economic base. (Abbotsford is a major centre of production, processing and distribution for dairy, poultry, eggs, berries and horticultural plants). 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 the purple and blue memes (and some of the cultural prohibitions that arise from them) might account for the very low expression of the enjoyment and expression of pleasure in community, represented by 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 success of the foundation of people and wealth organizing capacities of blue management values. The orange and green values might also represent the influence of 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 expressions 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. Since the founding of Abbotsford's predecessor villages (Huntingdon, Mount Lehman, Bradner, Village of Matsqui, District of Abbotsord, Sumas) the urban developments have passed through the stages represented in Eddy's (2003) models of 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), indicating its urban growing character.

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 and another take on a "community of difference" (2000).

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. (Appendix B summarizes the value sets used in developing the codes and themes).

The themes that emerged from these responses (see Table 4-4) describe a community in a way that integrates capacities in the: subjective (UL) (eg. honesty, kindness, respect, interested in others, tolerance) and intersubjective (LL) (eg. loyalty of friends, close knit, great for sports, bible belt, hometown, law abiding, organized, ethnic diversity) and objective (UR) (eg. freedom to relax, clean, safe, where I make a living) and interobjective (LR) (eg. farming country, proximity to fishing, law and order, gym & sports facilities, easy access to shopping, huge volunteer base, food banks) 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 interior, communal exterior, 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."

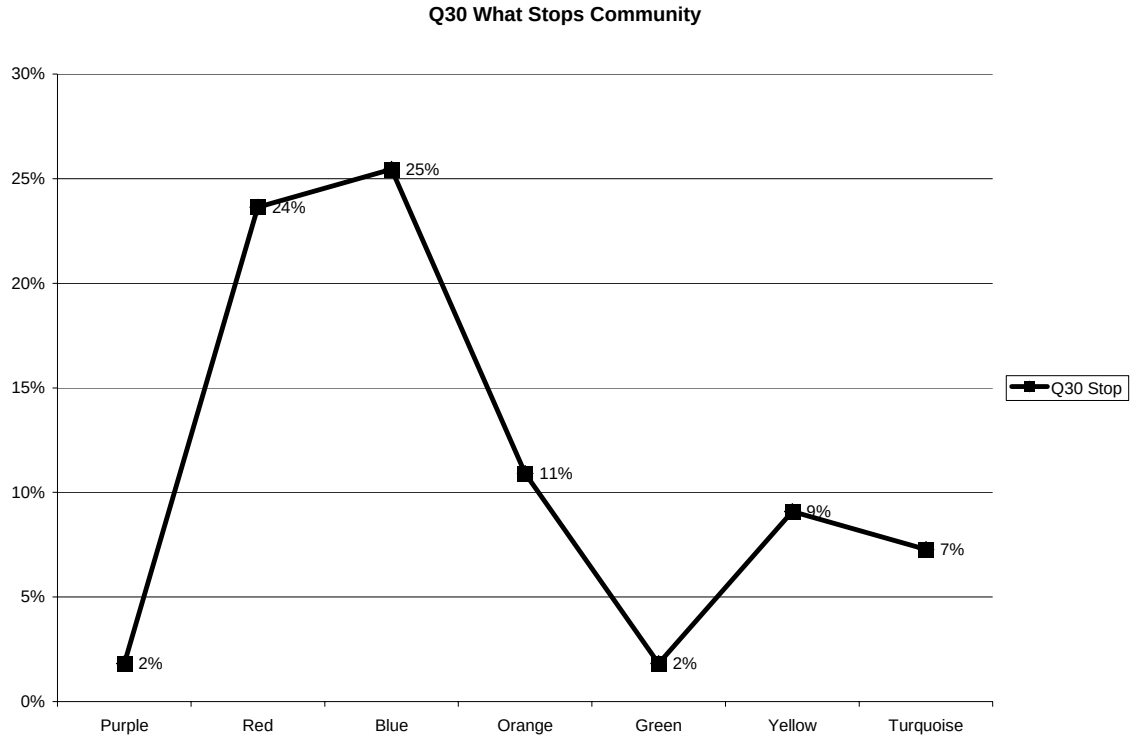
What Stops Community?

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 4.7.

Abbotsford Blockages: Key Themes
Using the same theming process as used with Assets/Capacities above, the data from this question was summarized into key themes. 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." The theme words were selected to describe community barriers, for the "Spiral Flower" presentation map, described below.

Figure 4.7: 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 – family relationships (2%) and red – energetic expression of community (24%) memes are virtually inverted. Interestingly blue – order/management (25%) is also relatively high with moderately low values for orange - planning (11%), yellow - systems (9%) and turquoise - holistic (7%) and very low green - communitarian (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 capacities 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, such as substance abuse and prostitution, which are 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 (larger cities to the west of Abbotsford within a 100 km radius), 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 rules based, institutionalized, 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" .

The researcher interpreted the low value for green (communitarian values) 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 residents are resistant to the early introduction of values at this level, and have 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.

One final comment needs to be made about data, not shown on the graph but are included in the theme analysis. 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 (and very much citizen-opposed) Sumas Energy 2 (SE2) plant, just across the international border with the USA, 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 Hertzman et al (2002) and were not included in the Abbotsford data.

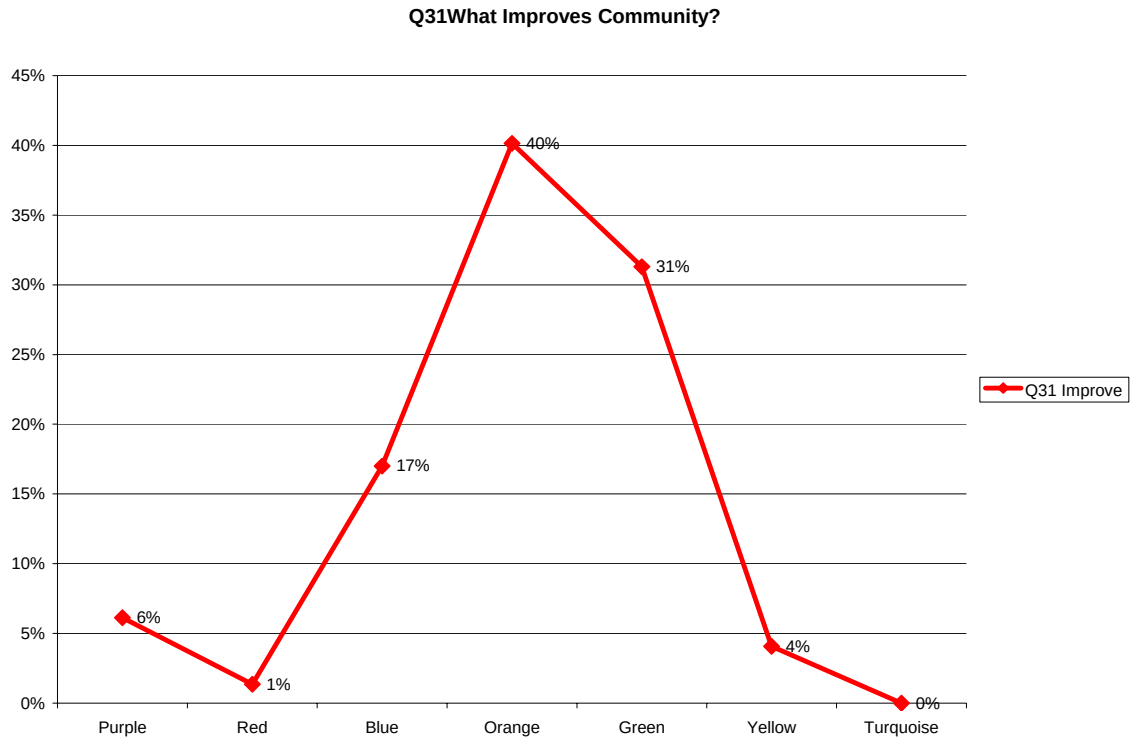
Nevertheless, taken in conjunction with the yellow and turquoise data, these results indicate the chaotic conditions that exist at the outer boundaries of the community (in all four quadrants). Furthermore, many of the data descriptors from the respondents provide surprising parallels to the descriptors used by both Sandercock and Ury to identify the cause of conflicts in community (as shown in Table 3.2).

What Improves Community?

The last insight into the values of Abbotsford, came from the responses to 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 4.8 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 4.8 : What Would Improve Community?



The key themes of the responses from the blue, orange and green memes are summarized in Table 4.1. 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). The residents appear to want more appropriate management (blue), better planning and the building of specific capacities like improved bus and traffic infrastructure (orange) and more opportunities to celebrate and learn about the differences in community (green). Given the opportunity to describe what they wanted, the residents were able and willing to identify improvements in all four quadrants (Wilber, 2003).

Table 4.1: Community Improvements: Key Themes

Spiral Blue Orange Green	**Q1 UL "I" Subjective Experience**	**Q2 UR "IT" Objective Behavior**	**Q3 LL "WE" Intersubjective**	**Q4 LR "ITS" Interobjective**
	♦ Public forums ♦ Better education ♦ Music in schools ♦ Invention Convention ♦ Weekend	♦ Support for kids & seniors ♦ Listening ♦ Clean up ♦ Get to know races, ages, genders	♦ Teen club ♦ Multi-cultural activities ♦ Block parties ♦ Festivals ♦ Museum ♦ Support Salvation Army 1/2way	♦ Children's commty centre ♦ Low cost housing ♦ Bus Service ♦ Speed traps ♦ Traffic planning ♦ Larger sidewalks

	Library	♦ Offer homeless shelter ♦ Plant tree ♦ Educate re Air/Water Pollution	house	♦ …no SE2

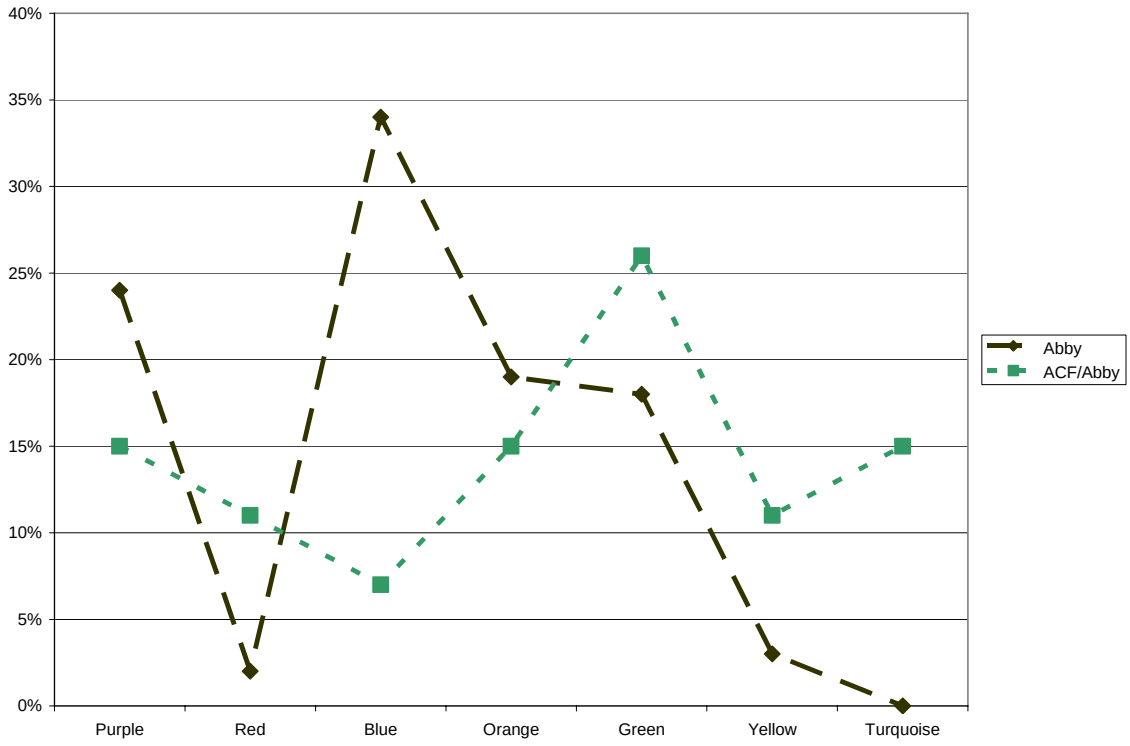
How Do Community Leaders See Abbotsford Differently Than General Population?
A second part of this Pilot Project, was to survey the ACF Board, using the same questions as the general population survey.

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 4.4 above). Figure 4.9 shows the differences in the two response sets.

However, 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 leaders and 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 4.9: 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 4.4 and 4.7, and Appendix B.

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 residents the LL petal is viewed as almost 3 times larger than any of the other three petals (53% vs 16%).

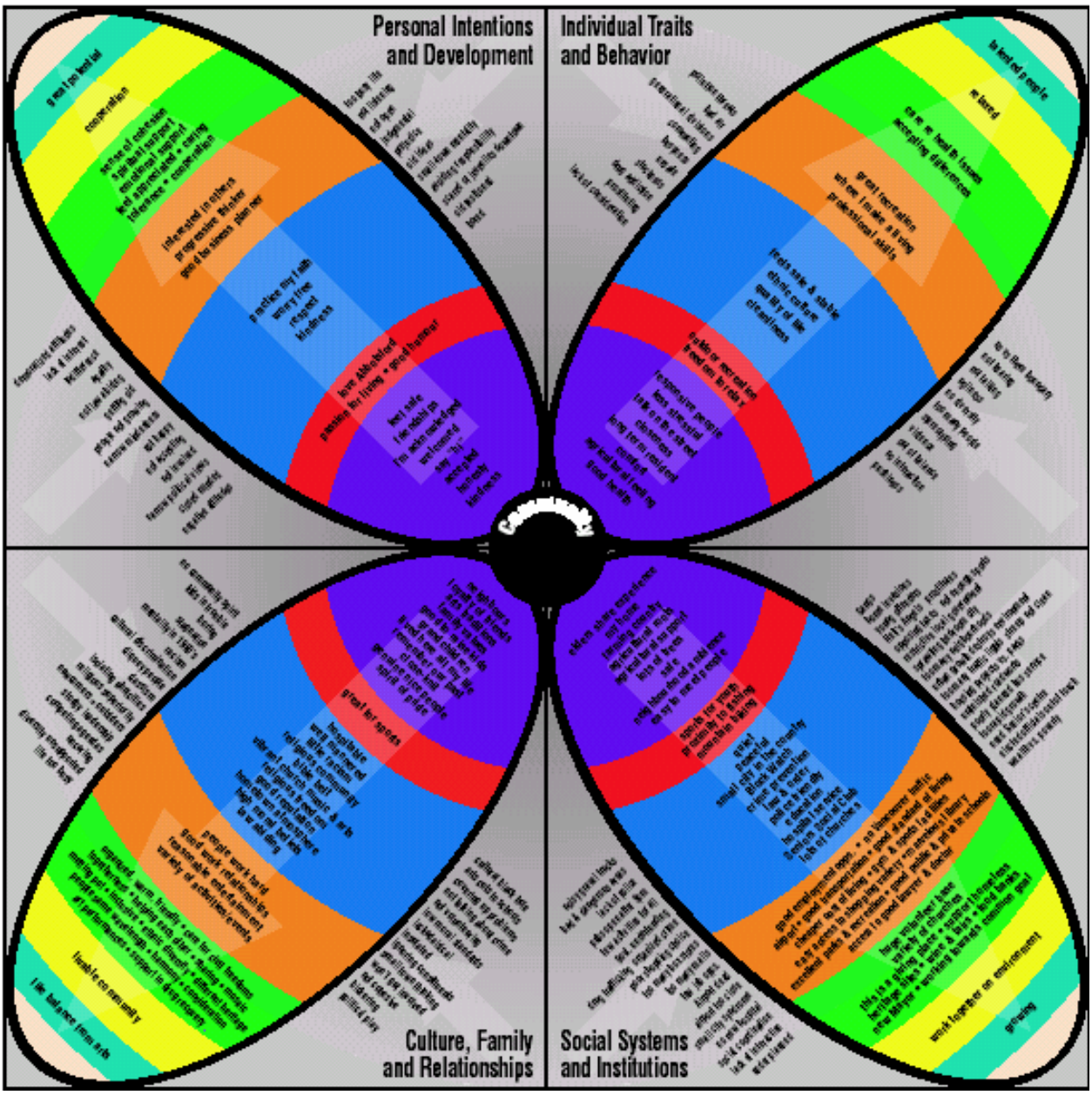
2. Within the petals of the flower (quadrants) of community are those capacities that help make community work. If these flourish in an integrated manner, community will grow and thrive. Arrows in the background of each petal illustrate the push for the petal to bloom more fully. The arrows indicates 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.)

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.

The percentage data value (width of the colour) of each of the value sets (memes) is reported in Columns 3 and 4 in Table 4-4. The use of the percentage weightings on map allows the reader to see the weights and the relationships between the meta-values, identified by the respondents. This is useful for understanding the current and historical dynamics of values in play in the city. It is also useful for comparing to the City's allocation of tax dollars to maintain and develop the city, that is shown in Column 5, Table 4-4.

An application of the map patterns by the Foundation is described below.

Table 4-4: Comparison of Respondent Values and Abbotsford City Tax Allocations

Spiral Colour Code **1**	**Key Value** **2**	**Responses Values Assets** **3**	**Responses Values Blocks** **4**	**Abbotsford City Tax Allocations 2003** **5**
purple	**Personal Safety, Family Traditions**	24%	2%	0%
red	**Power**	2%	24%	>9%
blue	**Order, Public Safety**	34%	25%	40-42%
orange	**Success**	19%	11%	48-58%
green	**Communitarian**	18%	2%	<3%
yellow	**Systems**	3%	9%	0%
turq	**Holistic**	<1%	7%	0%
coral	**Universal, Common Good**	0%		0%

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. Data collected at different time frames could also be compared in a dynamic, longitudinal study.

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).

Through these explanations it is possible to see why the Integral model provides a powerful meta-map 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 AQAL 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 AQAL frameworks provide a common language to integrate the results from multiple methodologies and data gathering methods (Wilber, 2003).

In other words, we can see that other data bases can be translated into a common integral/spiral "language" (Hamilton, 2003b). In the same way an AQAL meta-map can integrate the indicators from existing databases and research studies, which offers the possibility of deepening understanding through cross-referencing to:

- 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 the principles of how a spiral/Integral values map of Abbotsford could be replicated on any level of scale from individual leaders, to neighbourhoods, cities, bio-regions, or countries, thus showing the flexibility, comparability and adaptability of the AQAL approach. These maps would be time series and fractal in nature.

The researcher visualizes that technology can provide the capability to nest, mesh and/or hyperlink multiple databases to allow a multi-leveled, hyper-linked GIS style "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. (Hertzman et al (2002) utilized GIS mapping at a level of complexity that is prototyped in Appendix C.)

Moreover, the researcher speculates that the meso-scale role that communities and cities play in multi-scale maps, would turn out to be integral to understanding the dynamics of powerful energetic forces at play in the geo, bio, Noetic worlds.

Expert vs Non-expert Data

This pilot project demonstrates that data that is sourced from experts, can be richly informed by data sourced from the general population. The general population are astute observers of their own immediate life conditions. As Maxwell (CPRN, 2002), proposed there is an important role for data from ordinary citizens that broadens our expert opinions. This also seems to be a corroboration of Wenger's (1998) inclusion of both meta-paradigmatic and complex adaptive approaches to learning in communities of practice. In other words, experts need local, emergent participation to ground their practice. As Maxwell (CPRN, 2002) so aptly visualized the outcome of collaboration:

> "a single generic model … 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

Three small though significant applications of the research have already informed the ACF decision process:

- assisting the Board to develop an expression of their vision and values for the next 20 years
- how to assess the Integral/spiral relationship of grant requests for 2003
- how to apply Board values to an operational policy issue.

In all cases the AQAL, eight value framework for creation and review allowed a dynamic systems view of community values and related capacities. 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 discussed the research

with: federal member of parliament ; city hall staff; mayor; university college; Greater Vancouver Regional District (GVRD).

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 for input into a city strategic planning process, the researcher applied a similar methodology as described here, but redesigned the survey to be completely closed ended questions (thus allowing SPSS analysis).

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 3.2, 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. The Abbotsford values meta-map suggests tensions exist between the holders of different values sets eg. green-communitarian vs blue-over-management; and between the general population and ACF leaders. Further evidence of disparities awaiting resolution show up in the comparison of the values map and the City's tax allocations (Table 4-4).

Who Else in the Global Village Could Benefit from 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; including Vancouver Foundation.
2. Community Foundations of Canada – to integrate their recommendations for social planning agendas.
3. United Way
4. Vibrant Communities movement – quality of life in communities.
5. Municipal Urban Planners eg. GVRD, City of Winnipeg, etc.
6. Universities, University-Colleges
7. School Districts
8. Health Regions

9. Federal interests in Community Development eg. CAMP (2002)
10. Credit Unions and banks for understanding local markets
11. Private enterprise for understanding markets at all levels of scale
12. United Nations
13. UNESCO/UNICEF

Summary Conclusions:
The Global Village has capacities in four spheres: subjective, objective, intersubjective and interobjective, each at eight levels of development. The Literature Review and Pilot Project have demonstrated how to complete a comprehensive inventory of these capacities by use of a meta-map which conveys the relationships amongst the complex, adaptive, interconnected, dynamic qualities of these capacities. The Pilot Project has shown us:

1. the value of an Integral/spiral framework for mapping community
2. the capacity to conceptually integrate multiple sources of data into one meta-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 (Hamilton, 2003b)
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; developing communities of professional practice
6. the potential to conduct comparative research, using the Integral/spiral meta-framework to study different sub-groups within the community; and different communities within a region
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, country, world)
8. the richness of community in the context of villagizing the globe (Wight, 2003)

Recommendations: Moving From Pilot Project to Long Term Research Commitment in the Global Village

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. How could further analysis of the theme data relate to the threads/lines/streams that Wilber proposes are the subsets of the four quadrants (also charted by Hamilton et al (2001)); is theme data the source for threads/line/streams within each quadrant?

5. What community of Integral planning practise can be developed from creating conferences with researchers about value signifiers and/or indicators? Is this a way to validate and improve inter-rater reliability?
6. How can we study diversity within Integral/spiral frameworks?
7. How can we use Integral/spiral based scenario planning to explore national and/or bio-regional policies for the Global Village like immigration, education, economic development, resource development, etc.?
8. How can we evaluate and implement conflict resolution approaches for the complex Global Village, based on the "Third Side" ?
9. How can we develop effective change processes/interventions appropriate to the value landscapes of Global Villages?
10. How can we respond to imbalances in inter community health, from the comparative study of intra community health in multiple communities?
11. How can we create a technology that easily maps the four quadrant view of the data from the graphed data; eg. hyperlinked spider grams at each meme level?
12. How can we create a technology that builds on the multiple data bases proposed by Eddy's theory to create a learning laboratory for the Global Village?

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 values in the Global Village. The time has come to expand the application of an Integral/spiral common language to regional and 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 meta-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. 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 paper, 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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Appendix A

DATA SAMPLE CRITERIA (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).

Limitation, Delimitations & Ethical Considerations

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 the physical City of Abbotsford.

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

Appendix B: 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, Order** ♦ 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 & by- 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

From Hamilton (2003b) as adapted from: Beck, D., Cowan, C., "Spiral Dynamics", Blackwell Publishers, 1996, p. 332-333, Stevenson and Hamilton (2001)

Appendix C: GIS Prototype Map