THE ACCESSIBLE & INCLUSIVE CITY

AN ACADEMIC PAPER SUBMITTED TO THE WORLD URBAN FORUM

Presented by:

JONATHAN ROSS /TDH STRATEGIES
(http://www.tdhstrategies.com)

Researched by:

Kyle M.P. Nelson, B.A.
Faculty of Urban Geography
University of British Columbia

APRIL, 2005

Table of Contents

Abstract

There are thousands of variables that must act in concert with one another within the ideal conceptualization of an accessible and inclusive city. By this same logic, there are an immeasurable amount of difficulties and obstacles that people with disabilities encounter in contemporary urban environments.

Rather than map out the finite intricacies of these collective experiences, this paper will argue that the key to achieving true accessibility and inclusiveness in the modern city comes from combining the socialization of disability with tackling tangible obstructions within the built environment. The development of such a dualistic strategy allows for the urban liberation of mind, body and soul for people with disabilities.

Using Canada's experiences as a backdrop, the paper will build its case using historical conceptions, theoretical perspectives, and contemporary realities and case studies.

Servicing Disability

People with disabilities have historically been mistreated by societies that have placed priority on uniformity and sameness, and worshipped physical health and beauty. In particular, the rise of industrial capitalism from the eighteenth and nineteenth centuries onward places a heavy emphasis on competitiveness, productivity, ability and achievement, relegating people with disabilities to the outside of the capitalist mode of production, the engine which fuels social order.

In fact, attempts by people with disabilities to lead a conventional lifestyle have commonly required individuals to "repress their pariah status and the patronizing attitudes of the able-bodied, and to internalize the values of the so-called normal world." (Gadacz, 1994: 3). This act is situated at the core of the struggle for identity that every person with a disability must fight on a daily basis.

Traditionally, there have been two primary means of framing the parameters of disability: individualizing and socializing. The former classification is characterized by blame attribution, and the notion that characterizes disability "as an individual, physiological, condition which can somehow be treated or cured" (Imrie, 1996: 28) irrespective of the socio-cultural, political or physical environment. This has been the dominant methodological approach to theorizing and managing disability.

When disability is individualized, it is considered as an internal trait within individuals which limits them. Individualizing disability falls within the servicing paradigm, which is founded upon an expectation of responsibility being placed on people with disabilities to do their best to accept their circumstances, to work to improve them, and if lucky to maybe overcome them, but not to burden others with their conditions

Thus, any obstacles encountered in mobility, education or vocation are considered as inevitable. The justification for this argument is framed within a cause and effect type of relationship, where servicing providers/agencies exist and subsequently act only when a deficit or problem has been identified.

By this same logic, however, the servicing stream of treatment is designed to confer benefit on the controllers and administrators of provision just as it is directed towards assisting people with disabilities. Problems are identified and classified, services and programs are constructed, target "clients" are established, and determination of eligibility takes on, as maintained by some social theorists, the characteristics of a recruitment exercise.

Higgins (1992) aptly demonstrates how convoluted and complex this kind of a process can be:

> "One school district ostensibly used the following procedure for identifying students as educationally handicapped: A teacher referred a student to the principal who typically referred the case to the school appraisal team, composed of the principal, the teacher of the referred student, a special education teacher, and a psychologist from the district office. If the team decided that the referral was warranted, then it recommended assessment by a school psychologist and/or other professionals (with notification and approval by parents). Once the assessment was obtained, the team might take no further action, very infrequently directly place the child into some kind of educational program or refer the case to the district-wide "eligibility and placement committee." The committee, composed of the students' parents, the administrator in charge of special education, the school nurse, the psychologist who was "carrying" the case, the teacher who made the referral, and a special education teacher who would potentially work with the child, might recommend that the child remain in the regular classroom or receive some kind of special placement" (pp. 156-157).

This kind of bureaucracy is just as easily applied to the determination of eligibility for a government assistance program as it is within a school district. The common link lies with the fact that the evaluation process only serves to exacerbate the individualization of disability by focussing entirely on an individual's difficulties in the context of deficiency. Instead of finding strengths, the servicing paradigm only looks for weakness.

The approach tends to be out of touch with how people with disabilities view themselves. In a study conducted by Nick Watson of the University of Edinburgh, where fourteen men with disabilities and fourteen women with disabilities were interviewed twice over a six-month timeframe, oppressive practices in daily experience failed to play a significant role in determining sense of identity for the majority of participants (Watson, 2002: 514). Watson's findings determined that self identity was not immutable, but rather a product of autonomy and choice.

Evolving the Medical/Clinical Hierarchy

The servicing paradigm is also completely out of step with the International Classification of Functioning, Disability and Health (ICF), which refers to disability as "the interrelationship between body functions, activities and social participation, while recognizing that the environment provides either barriers or facilitators" (Social Development Canada). With such expansive criteria, a disability can be physical, sensory, or mental, could have emerged from birth, developed in childhood, or taken shape later in life, and has the ability to produce varying effects, from difficulty in achieving full employment to experiencing social rejection.

The ICF was developed by the World Health Organization in 2001 as a seven-year effort involving some 65 countries. The ICF has since been accepted by 191

countries, including Canada, as the international standard to describe and measure health and disability. As a classification, it emphasizes health and functioning rather than one's disability, updating an earlier definition introduced in 1980, where "disability began where health ended; once you were disabled, you were in a separate category" (World Health Organization, 2002: 4). In updating and expanding the terminology, there are two key philosophical shifts to note.

First, the ICF now takes into consideration one's ability to function as a contributing member of society. From a public policy perspective, this is a far greater research tool for measuring a person's capabilities, regardless of the particular impairment he or she is stricken with. Secondly, it acknowledges that every human being has the capability of deteriorating health, thereby universalizing the likelihood of developing a disability. Disability does not discriminate, which in turn makes it an issue applicable to the entire human condition rather than specific to a minority of the population. As evidenced by this quote from British Columbia Royal Commission on Health Care and Costs (1991), "[d]isability is somewhat of an equal opportunity situation. At any given time in our life any one of us could join this elite group." In this sense, disability has the power to serve as the great equivalency between people.

Stubbins (1988) describes the interaction between people with disabilities and those in related fields of servicing like rehabilitation/medical professionals or service agency personnel as perpetrating power relationships that provide scant opportunity for self-determination or personal autonomy. In fact, Stubbins goes one further and refers to disability as "big business" (pp. 22-23) that supports an oversized and bloated bureaucracy. This system of manufactured need and treatment is "fashioned by a system underpinned by a dualistic structure which reinforces the dependent and marginal status of disabled people through the

ideologies of expertism and clientism" (Imrie 56). In other words, the livelihoods of a professional class of "experts" are dependent on defining the problems, agenda and social realities of people with disabilities in a manner that addresses self-preservation as much as it does the interests of those they are involved with.

Servicing has always relied on professional dominance where credentials, ideology and authority solidify control over access to and control over resources, programs and benefits for people with disabilities (Gadacz 6). This regime of restriction is fostered by the stratification of service providers into a "hierarchy of help" (Higgins 164) of which people with disabilities often find themselves at the bottom of. As described by Higgins, staff with the least authority, training, credentials, prestige and pay are typically the closest to actual service provision, and that "managing some portion of the agency and its staff is a goal that lower level providers" generally strive to achieve (Ibid). Within this chain of command, there exists a disconnect between the "clients" and those situated at the top of the professional pecking order.

This medical-clinical view of disability relies on doctors, health care professionals and medical specialists to define the extent of possibilities in the life of a person with a disability. This relationship validates the professionals while at the same time automatically invalidating the individual, serving to place "an undue emphasis on clinical diagnosis, the very nature of which is destined to lead to a partial and inhibiting view of the disabled individual" (Brisenden, 1986: 173). The medical-clinical view of disability (e.g. sick, passive recipient of care, social incompetence, unproductive in work) has been embedded within industrial societies for hundreds of years. The resistance to ascription in favour of recovering one's self, however, has provided much of the basis for a new social model for considering disability.

Community Capacity Building

Socializing disability shifts the focus away from concentrating on physiology "in order to view more critically the society in which individuals and their impairments are contextualized" (Parr & Butler, 1999: 4). Understanding is situated against a wider perspective encompassing social and political relations of empowerment, which entails challenging certain assumptions and re-examining relationships, both between individuals and between the disabled community and society as a whole. With this shift in societal roles, however, come the attached responsibilities for people with disabilities of sharpening social and political skills to "play more conscious and assertive roles in the construction of their own social environments" (Gadacz 88). This is the basis for gaining full citizenship.

Philia is a national Canadian dialogue on citizenship through which communities are challenged "to welcome and encourage the contributions of people who have traditionally been marginalized" (Philia (a)). Philia regards the role of citizen as one of the most important societal functions, and defines citizenship to consist of three key components: rights, responsibilities and access:

- Rights of belonging, of access to justice and due process, of mutual recognition and approval of our distinctiveness, uniqueness and differences both as individuals and groups.

- Responsibilities to respect and care for each other; to commit to the well being of the community, to contribute to the health and vitality of our communities, to engage in creating a vital society.

- Access to the forums, institutions, associations and public spaces where citizens meet, discuss, share, work, contribute, play and socialize. (Philia (b))

This is an important interpretation of citizenship, because it places equal weight on the give and take of what being a citizen is all about. Just as people deserve to

be welcomed and included, they also have an inherent societal duty to contribute and share with their fellow citizens.

Building inclusive communities requires a process that entails "learning how to build up and at the same time tear down existing structures" (Gadacz 20). This follows the logic of Giddens (1979), who identifies a more balanced approach to social inclusion as acknowledging the capacity of individuals to contemplate and take action, while at the same time understanding that structures do not exist independently from them.

For communities to foster dynamic participation, engagement must originate from the bottom-up in a process that welcomes community participation and leadership, but also takes ownership over both the problems and the solutions. This is what forms the essence of building community capacity. Easterling (1998) defines community capacity as "the set of assets or strengths that residents individually and collectively bring to the cause of improving local quality of life" (47). Engagement, however, is often not as easily obtained just by interest or will alone.

For people with disabilities, citizenship is often reduced or prevented for a number of reasons:

- There is no belief in having something to contribute
- There is no expectation to contribute
- There are physical barriers which prevent contribution
- Contribution is seen exclusively as an action, as doing something. (Philia (c))

A crucial aspect of the community-building process is the ability to practice self-creation within the wider environment. It is for this reason that the emergence of a social movement was necessary to reappropriate and restructure social reality for people with disabilities.

The Independent Living/Disabled Consumer Movement

The filter of independence for people with disabilities is not gauged in physical/biological terms, but rather in a socio-economic sense. Thus, independence is not a measure of whether an individual requires assistance, but rather by the quality of life that can be achieved with or without aids or external support.

Social exclusion comprises of three fundamental principles:

- Being denied access to the valued goods and services in society because of one's race, gender, religion, disability etc,
- Lacking adequate resources to be effective, contributing members of society; and
- Not being recognized as full and equal participants in society (Saloojee)

Social exclusion is a way that people with disabilities can "give voice and expression to the way in which they experience globalization, the way in which they experience market forces and the way in which they experience liberal democratic society" (Ibid).

Social inclusion, on the other hand, is promoted by policies:

- That reduce economic, social and cultural inequities with the population
- That recognize, value, and support the contributions of all community members to the economic, social and cultural life of a society
- That are grounded in shared values/principles and common commitments while respecting and accommodating appropriately the diversities within a society (Clutterbuck & Novick, 2003: 8)

Within urban environments, the politics behind the policy making process necessitates a base of support in order to inspire any sort of progress or change. In the case of the disability movement, the principles of empowerment serve as a

unifying force amongst disparate organizations. Through the 1980s, a new collaborative approach led to the emergence of cross-disability representation, which bestowed purpose and influence to what was previously a muddled patchwork of single-disability orientations.

The independent living/disabled consumer movement has two objectives: independence and integration with the community. Independence refers to a comparable degree of control and self determination in day-to-day living to what is generally available to able-bodied individuals. Integration means the amalgamation of daily living processes with the rest of the community and society as a whole. As argued by Gleeson (1997), inclusive ethical frameworks within cities can be reconstituted on sociospatial principles that emphasize the fact that social difference is dependent on creating human environments that are able to satisfy the needs of all who occupy them.

Independent living is a purposefully non-descript concept that represents "a framework for viewing the world…a model for the way people want to live" (Gadacz 83). While this ambiguity applies differently to each individual situation, it entails the management of daily parameters founded upon the principles of dignity of risk, freedom of choice, self determination, consumer control and bearing responsibility (Ibid). Thus, there is no prescribed path or model for independent living.

A central value of the independent living/disabled consumer movement is one of reconnection to sociality, and disconnection from objectification. A paradigm shift between empowerment and acquiescence "can be understood as the difference between what it means to be a 'producer' and a 'consumer' of goods and services" (Gadacz 60). Being active and engaged within one's

surroundings/environment requires people with disabilities to function as a hybrid of these two roles.

The consumer as producer must learn how his or her immediate contexts are socially constructed in order to determine in what ways it impinges on their lives (Derksen, 1980: 22). In this way, people with disabilities do not attempt to deny or distance themselves from their disabilities, but only to become an active participant in the act of consuming. Take for example the consumption of health care services, where without a critical perspective from the person with a disability receiving the treatment, the act itself can be seen as an acceptance of the status quo, blinded by the deeper causes behind the reality of the subservient, disabled role.

One of the most tangible embodiments of this type of independence comes from the sovereignty of consumerism. Penz (1986) declares that "what is to be produced, how it is to be produced, and how it is to be distributed are to be determined by consumer preferences as revealed through consumer choices in free markets" (10). This doctrine has much more traction today then it did when first put forward, simply by the fact of the power of the disability consumer segment of the market.

The accommodation of disability has traditionally been framed as an act that should be driven by an adherence to equality, fundamental rights, and moral obligation. While this type of reasoning might truly reflect a genuine compassion that exists towards people with disabilities, there are powerful arguments that can be used to advance accessibility and inclusive proposals from a business perspective that only considers the bottom line.

The marketplace dictates that gaining a competitive advantage is almost always the most expedient catalyst for change, and the emerging reality of disability is one of great opportunity on many different levels.

In November, 2001, the Government of Ontario commissioned a report for its Paths to Equal Opportunity initiative entitled The Business Case for Accessibility: How Accessibility-Awareness Strengthens Your Company's Bottom Line. Three conclusions were forwarded as the fundamental linkages between accessibility and competitiveness:

- Persons with disabilities give business a new competitive edge

- Attracting people with disabilities as employees and customers is a win/win strategy

- The business case for accessibility leads to the opportunity to create a business plan for accessibility, which allows companies to capitalize on the productivity and consumer spending power of this segment of the market. (Wilkerson, 2001: pp. 4-6)

According to the report, people with disabilities are responsible for an astonishing $25 billion in annual consumer buying power in Canada alone, and subsequently have an influence on a huge secondary market of friends and family (estimated to be between 12-15 million others) (Ibid). These kinds of figures tend to be powerful motivators when it comes to educating both public and private interests to the capabilities and subsequent needs of people with disabilities.

The Political Process

The forces of globalization are completely altering the relationship between local communities and national institutions, and the parameters of contemporary

living for Canada's population with disabilities epitomize a perfect case study of this evolution.

Between 1996 and 2001, virtually all of the nation's population growth was in the country's four largest urban regions. The extended Golden Horseshoe of southern Ontario, the Montreal region, the Lower Mainland of British Columbia and the Calgary–Edmonton corridor grew by 7.6 per cent and are now home to more than half of Canada's population (Statistics Canada). With this growth come the pressures of managing and maintaining such issues as immigrant settlement, affordable housing, spatial concentration of poverty, water and wastewater services and public transit delivery.

Since the early 1990's, the federal government has disengaged from social development, which has caused a chain reaction of devolving fiscal responsibilities, first to the provinces and then to municipalities. This has in turn caused great financial stress on the non-profit community service sector. From a contemporary public policy perspective, even though the Government of Canada has embarked on an ambitious New Deal for Cities and Communities, which aims to correct some of the infrastructure gaps that have been exacerbated over the past fifteen years, there still exists a severe shortfall of resources for Canadian municipalities.

With regards to people with disabilities, there has been a growing trend away from institutionalized delivery models towards the development of community-based services. This isn't to say that governments, particularly in Canada, have not attempted to design policy and programs for people with disabilities, as evidenced by the forthcoming accounting of federal disability policy. Rather, the removal of the government from the provision of certain forms of social support

represented a shift away from the 'servicing paradigm'[*] as applied to people with disabilities, allowing the independent living/disabled consumer movement to take a more active role in the lives of people with disabilities. The resulting community care represents the humanization of traditional forms of social support (Perske & Perske, 1980), which is argued to provide more attentive and better quality care at the local level, reduce restrictions placed on individual rights and freedoms, and most importantly, promote the reintegration of people with disabilities into the broader community.

Within Canada, disability advocacy tends to steer clear of hard or technical service provision (for example, equipment and devices, prosthetics, pharmaceuticals, transport systems, career training or housing), instead serving as a source of information regarding these and other issues such as consumer education, ongoing research and available programs, policies and services (Gadacz 129). The purpose of this approach is twofold; the ability to pursue an active role in the public policy process, and empowerment enabling the full participation of people with disabilities in the communities in which they live.

Before examining some tangible examples of inclusive and accessible initiatives at the municipal level, a review of political action by the Government of Canada is required. As noted by Gadacz, "the extent to which the independent living/disabled consumer movement has been successful in developing its particular approaches to equality rights and in reaching out to the general community might perhaps be reflected by [federal] government policy" (207).

---

[*] The servicing paradigm ignores the larger societal facts that oppress people with disabilities, instead focussing on the defects that are assumed to reside within them. Servicing stratifies relationships of inequality, actively making people unequal by creating a hierarchy of help.

In 1981, the Canadian government responded to the International Year of Disabled Persons with the establishment of an all-party House of Commons Special Committee on the Disabled and the Handicapped, which was established to undertake a review of all federal legislation pertaining to people with disabilities.

The committee released the Obstacles Report which forwarded 130 public policy recommendations encompassing human rights, income security, assistive devices, transportation and communications. One of the most significant impacts that the committee had on the lives of people with disabilities was their inclusion in the equality rights section of the Charter of Rights and Freedoms in 1982. This was a major development that served as an important catalyst to inspire further government progress within this policy stream.

In 1982, the Government of Canada confirmed participation in the United Nations Declaration of the International Decade of Disabled Persons. As one of the first actions undertaken under this new mandate, Social Services Ministers formed the joint Federal-Provincial Working Group on Disability to tackle the recommendations from the Obstacles Report. This effort devoted years to studying income support and earnings replacement programs, and worked simultaneously to and collaboratively with the Royal Commission on Equality in Employment.

The subsequent reports from both the Working Group and the Royal Commission (released in 1984 and 1985, respectively) resulted in the creation of the Status of Disabled Persons Secretariat, which was tasked with raising awareness and support for the full societal participation of persons with disabilities. This was followed by the creation of the Status of Disabled Persons

Secretariat in 1985, which was designed to "support federal initiatives that would influence positively the quality of life of disabled persons" (Gadecz 207).

In more recent history, all provincial governments joined the Government of Canada in recognizing persons with disabilities as a national priority for social policy renewal in 1998. This resulted in the joint release of the publication In Unison: A Canadian Approach to Disability Issues, which represented a major shift in the design of the federal government's policy framework for people with disabilities:

(Federal/Provincial/Territorial Ministers Responsible for Social Services, 1998)

In 1999 the Government of Canada followed up on the In Unison framework with the release of a report called Future Directions to Address Disability Issues for the Government of Canada: Working Together for Full Citizenship, which articulated a

17

broad agenda for addressing disability issues. Since the report, the government has made specific commitments in speeches from the Throne, in budget documents and in responses to reports from the House of Commons Subcommittee on the Status of Persons with Disabilities. An Office for Disability Issues has also been established.

From a powerful renewal within the disability community to substantial advancement in the crafting of national public policy, the embodiment of both of these processes has resulted in two groundbreaking localized Canadian projects designed to create collaboratively designed inclusive and accessible communities.

Cooperative Accessibility and Inclusion: Two Canadian Case Studies

A unified and proactive disability community and informed and engaged governments are that much more effective in their respective roles and responsibilities when cooperating to create locally designed solutions for accessibility and inclusion.

In November 2003, the Inclusive Cities Canada*: A Cross-Canada Civic Initiative* project was begun as a collaborative effort between five social planning agencies across Canada and the Federation of Canadian Municipalities' (FCM) Standing Committee on Social Infrastructure. There are two articulated objectives for the project

1) To strengthen civic capacity to create and sustain inclusive communities for the mutual benefit of all people

2) To ensure that work at the local civic level is acknowledged as being critical to a national urban strategy and that community voices of diversity are recognized as core Canadian voices (Inclusive Cities Canada)

The strategic direction for the cross-Canada initiative comes from a National Steering Committee with members drawn from the various partners: the Social Planning and Research Council of British Columbia, the Edmonton Social Planning Council, Community Development Halton, the Community Social Planning Council of Toronto, and the Human Development Council of Saint John, NB, all in collaboration with the Federation of Canadian Municipalities (FCM). The social planning partners have established Civic Panels to provide leadership and direction to the initiative locally. These panels are made up of municipal and community leaders.

This initiative builds on previous collaborative work between the Laidlaw Foundation, the FCM and several regional social planning councils. Community soundings were held in 11 cities in the fall of 2002 with community and civic groups. These consultations highlighted the common areas of vulnerability and exclusion in urban communities across Canada, as well as various distinct issues. The findings and recommendations for action are contained in the 2003 report, Building Inclusive Communities: Cross-Canada Perspectives and Strategies.

In a similarly community based manner, another project from British Columbia has recently been designed to create linkages of cooperation and progress between the federal government, provincial government, each municipality in the province, and the wide-ranging branches of the disability community.

The Accessible/Inclusive Cities & Communities Project (AICCP) was conceived through the introduction of a motion to Vancouver City Council by councillors Sam Sullivan and Tim Louis:

Establishment of 2010 Vision for British Columbians with Disabilities
(the complete text from the motion passed unanimously by Vancouver City Council on July 29, 2003)

Mover: Councillor Tim Louis
Seconder: Councillor Sam Sullivan

WHEREAS, the 2010 Olympic and Paralympic Games should benefit all British Columbians and provide long term legacies;

AND WHEREAS, citizens with disabilities support the creation of a vision for a province that welcomes and includes the participation and presence of all people with disabilities in all aspects of the community;

AND WHEREAS, by the year 2010, British Columbians want the world to appreciate British Columbia as a jurisdiction where the contributions of all citizens are enabled and welcomed;

THEREFORE BE IT RESOLVED THAT, Vancouver City Council send a letter to the Premier of British Columbia asking that the Government of British Columbia endorse the effort to create, in partnership with other municipalities in British Columbia, a 2010 Vision, and to take a lead role in its development;

AND BE IT FURTHER RESOLVED THAT, Vancouver City Council endorses the development of a 2010 Vision for British Columbians with disabilities;

AND BE IT FURTHER RESOLVED THAT, staff report back on options for how the City of Vancouver could participate in the creation of this 2010 Vision;

AND BE IT FINALLY RESOLVED THAT, Vancouver City Council write to all other municipal governments in British Columbia asking that they endorse the creation of this Vision, and ask for one member of their respective Councils to serve as a contact person. (City of Vancouver)

The motion was premised on two fundamental objectives:
1) To foster greater opportunities within the City of Vancouver and across British Columbia for people with disabilities.
2) To harness the 2010 Winter Olympic Games as a catalyst for the creation of such opportunities (Pratt & Ross, 2004: 7)

While there is a healthy and diverse disability infrastructure that already exists in the province, the motion attempted to create a new lens in which to consider the

broader implications of disability. New paradigms of opportunity and community have been created in British Columbia as a result of the Olympic Games being awarded to Vancouver, a fact that became abundantly clear after Councillors Louis and Sullivan engaged the public through a series of community meetings designed to expand upon their vision.

Central to their efforts was trying to find the right mix of services, supports and outcomes that would assist people with disabilities in achieving independence, productivity, integration, inclusion, and self-determination. As a result of these consultations, two streams of discourse emerged as identified priorities:

1) Accessibility Agenda – Accessibility objectives continue to expand as recognition of the burgeoning scope of disability continues to evolve. Correspondingly, the accessibility component was envisaged as encompassing strategies and solutions that would counteract the physical, attitudinal, and institutional barriers encountered by people with disabilities.

2) Citizenship Agenda – People with disabilities have both the capability and responsibility to exercise their citizenship. This concept of what it means to be a citizen relies on emphasizing belonging, rights, responsibilities, relationships and contributions over disability and handicap (Ibid).

"Accessibility" and "Citizenship" are the two pillars from which the AICCP derives its purpose. Understanding both the factors that contribute to creating an accessible community as well as the rights and responsibilities associated with being an active citizen are fundamental to any efforts directed towards improving the lives of people with disabilities.

The content that was derived from these public meetings provided enough impetus to proceed forward, and propelled Vancouver City Council to unanimously pass the motion on July 29th, 2003. The thrust of the resolutions

contained within the motion were clearly directed towards British Columbia as a whole, and thus in partnership with the provincial government, the motion was subsequently distributed to every municipal council in the province.

The AICCP was met with positive responses from municipal representatives, and has to this point been officially endorsed by over forty municipalities, with many others still expected to be formally involved. The widespread enthusiasm also generated significant interest from the federal government, and under the auspices of the tripartite urban development Vancouver Agreement, all three levels of government jointly contributed seed funding to get the project off the ground.

These two undertakings embody a revolution in terms of the way that people with disabilities are perceived and organized, as well as the quality of life they are able to lead. The social aspects of society and disability are the foundation from which all other progress stems, and both the Inclusive Cities Canada project and the AICCP build upon diverse networks of involved parties to affect change on a wide range of subject matter.

Both initiatives, however, embody only half of the equation for inclusive and accessible cities, as the built environments of contemporary urban centres provide consistent and tangible reminders of the physical limitations people with disabilities must match up against on a daily basis.

Disability and Urban Space

> "The key insight of radical social geographical analysis…is the view that oppression and exclusion arise from the sociocultural production of space. Radical - in particular, historico-geographical (cf., Harvey, 1989) - ontology sees society and space as mutually constitutive dynamics. Importantly, 'environment,' as the physical and social context of life, is assumed to be an artifact of human society, rather than merely a surface upon which materialities are rearranged. This spatial ontology thus problematizes the justice (or otherwise) of structures which produce space in capitalist societies" (Gleeson 206).

Through urban space and its existing challenges to full accessibility, people with disabilities face barriers to full and equitable inclusion in society (both physical and social) in contemporary urban environments. These physical and social barriers exist as a reinforcing system of exclusion predicated on the mutually reflexive nature of society informing the creation of urban space coupled with the ways in which built environments inform the paradigm of participation for contemporary society. For people with disabilities, what is experienced, documented and contested are the able-bodied majority's value structures, beliefs and notions of the world that dominate the ability to access and participate within the modern city.

Modernism: The Architecture of Limitation

Lewis Mumford's groundbreaking study *The City in History: Its Origin, Its Transformations and Its Prospects* (1961) describes the industrial city as a crowning achievement of technological accomplishment also identifies the shortcomings of conceptualizing modernity. Amidst the spectre of social, gender, racial, and cultural difference, unbridled urban industrialism proved to be insufficient in dealing with a multiplicity of socio-cultural needs. Imrie's assessment on this inadequacy is unmistakably critical, arguing that:

"[w]hile modernism, as a set of ideas and related socio-political practices, is not exclusively responsible for the construction of disablist cities, it can be argued that it has been the dominant force in the postwar reconstruction" (1996: 75).

Modernism, and the design aesthetic of modernization, emerged in the early 20th century as a retort to bourgeois influences, rejecting the excesses of power and extravagance by seeking to create a new formation of collectivism. By way of design, modernization attempted to represent liberation and universal freedom in order to overturn the exclusivity established by the past politics of the privileged.

Modernism as a theory, however, only served to implant segregated and mono-functional institutional forms (McGlynn & Murrain, 1994) which mirrored the profit over people mentality of the corporate economy. The emphasis of the built environment began to focus on function and structure rather than adornment. Mass produced industrial technology decontextualized urban environments from the needs of different body types, human behaviours, or accessibility requirements.

Herein lies the obvious contradiction of this movement, which included the likes of the Bakhaus school, the Tecton architects, Les Congres Internationaux d'Architecture, Archigram and the Ekistics school. While preaching the value of providing environments that were functional to all in the community, the results produced austere structures that attempted to advance the notion of universal laws of human habitation, underpinned by an engineering rationale premised on the idea that "pure, distilled, design could be produced…[as] absolute, singular, transcontexutal, and grafted from the essence of the human being" (Butler & Parr 26). In no uncertain terms, modernity sought to completely deny any differences in human experience and form.

One of the most influential voices within the modernity movement came from Le Corbusier, a Swiss architect made famous by his new age emphasis on industrial design. One dimensional in scope, Le Corbusier advanced a standard of perfection that minimized individuality. Reference this quote from Le Corbusier's work Decorative Art of Today (1925):

> "to search for the human scale, for human function, is to define human needs. They are not very numerous; they are very similar for all mankind, since man has been made out of the same mould from the earliest times known to us…the whole machine is there, the structure, the nervous system, the arterial system, and this applies to every single one of us exactly and without exception" (76).

This was a recurring theme in Le Corbusier's work throughout his career. The human body was viewed as an unvarying biological unit that had direct interconnections with the form of his architecture. Differentiation between the obese man and the thin man, the able bodied and people with disabilities, was a "practical impossibility of this dream of an individual sentient object, in all its intimate multiplicity" (Ibid 72). By distilling the human experience into a neatly compartmentalized solution, Le Corbusier was able to formulate systems of standards and measures to govern the built environment.

The embodiment of Le Corbusier's normality is represented in a diagram conceived in 1925 depicting the Modular, a device which used the proportions of the able body to enable architects to scale built spaces.
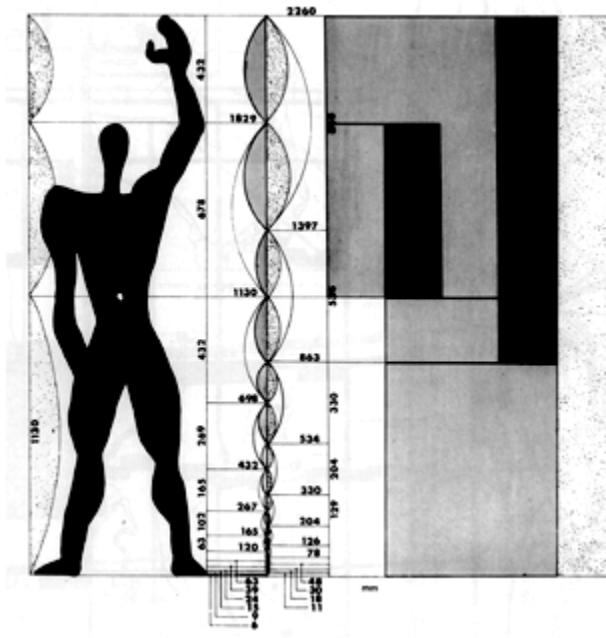
(Le Corbusier 1925)

As seen above, the model for the idealized human subject is one of an upright male, tall, strong and well proportioned, demonstrating no sign of any disability. This comprehension proved to become a standard in the modernism design movement, and subsequently, the basis for many contemporary urban environments around the world.

One of the most penetrating critiques of the modernist ideal is brought forward by O'Neil (1995), who identifies the movement's biggest irony as being its complete lack of interaction in determining its contexts and rationalizations. In other words, by failing to communicate with the average user of such architecturally designed structures, how could those employing this technique claim to understand the subjective experiences comprised from the community it was supposedly catering to.

It was this technocratic manner of hegemony which laid the foundations for ablest bias behind the design and construction of the modern city. The meaning of functionality has been perverted from its democratic intentions to symbolize

building utility and efficiency, concepts which can be attributed to the misguided belief that human beings are in anyway predictable or uniform.

Architectural Apartheid

Urban space and the built environments that constitute the city are not "naturalistic" (Imrie 12) in that the processes of space creation cannot separate, or detach, from larger socio-political processes and value systems. Social inequalities therefore can be seen as inscribed on the physical landscape of the city, manifesting in various sites of segregation embodying both social and physical dimensions.

Indeed, notions of barriers and urban segregation are complex and go much deeper than the superficial. Imrie argues that bounded or barriered spaces are "neither obvious nor straightforward," but rather contextualized by real and imaginary notions, fears, hopes, anxieties etc. regarding participation in, and access to, space (Imrie, 2001: 232). Imrie goes so far as to contest that an architectural apartheid can be evidenced through a lack of fundamental services to the disabled (lack of access to transit etc.) which culminate into an etching of ableist values on the spatial landscape (Ibid.).

The roots of social stratification within the built environment can be explained by Beck's (1997) 'reflexive modernisation' thesis, which demonstrates the inherent contradictions in the evolution of the modern city. Beck argues that while the age of Enlightenment in Europe forwarded values of reason, doubt and scepticism (all healthy elements within a democratic society), the Industrial Revolution crystallized the dominant values of the capitalist state into institutional forms such as the industrial corporation. The evolution of liberal democratic capitalism was fuelled by the Fordist principles of production that

emerged to sustain and subsequently regulate it at the beginning of the 20th century.

The institutions of industrial modernity codified certain truths that did not necessarily resonate with all segments of society; Beck refers to these as "constructed certitudes" (Beck 63). These certitudes can take the form of professional rules and regulations, conceptualizations of normative physical forms, or the erection of inaccessible public structures. Imrie explains spatial exclusion through an understanding of the built environment, which "has a physical inertia that resists change to the extent that many come to view city structures and spaces as almost fixed and immutable" (1996: 11). For example, a place of employment for a person with a disability will present difficulties because of a poorly designed built environment and/or the prevailing attitudes of management rather than reasons having to do with the extent of an individual's capability.

Accessibility within an urban environment, however, is not determined simply by the physical composition of structures. As described by Imrie:

> "[t]he notion of bounded and barriered spaces is neither obvious nor straightforward and can refer to a multiplicity of possibilities, including the perceptual and imaginary nature of space." (2001: 232)

For example, Laws (1994) underpins the capacity of socio-institutional spaces to define their inhabitants in her writings about the institutionalization of the elderly in the city of Toronto. The spaces in which elderly people are most commonly placed have a significant impact in the way the elderly are perceived and defined. From large suburban nursing homes to the segregation of lower rent residences designed in quiet, out of the way urban locations, these characteristics represent elements of difference from the rest of society. This

exclusion mirrors the experiences people with disabilities who have been institutionalized.

According to Beck (1997), this is just one example of "counter modernity," a socio-historical process which is characterized by the enshrinement of ideological and political beliefs. Beck's conceptualization of reflexive modernity directly refers to the social upheaval in the 1960's which served as a starting point for a host of social causes.

In the case of the disability movement, it is towards the end of the decade when, as suggested by Campbell and Oliver (1996), people with disabilities began to challenge:

> "dominant social perceptions of disability as personal tragedy…through the development and articulation of the social model of disability, which, by focusing on disabling environments rather than individual impairments, freed up disabled people's hearts and minds by offering an alternative conceptualization of the problem" (pp.20-21).

Socializing disability disregards solely emphasizing individual attributes, instead defining disability as "a product of the interplay between people who vary physically, mentally, and emotionally and their worlds" (Higgins 35). This approach in no way attempts to ignore the physical, mental or emotional capacities of a person with a disability, but rather identifies it as a beginning point of reference towards developing a more complete understanding of disability. In other words, the limitations of anatomy lose context without paying equal attention to associated attitudes, actions and arrangements.

In this regard, Gleeson (1997), who bases much of his theory on the combined works of Young (1990) and Fraser (1995), proposes that inclusive ethical frameworks be reformulated on sociospatial principles which advocate for

enabling environments that are able to satisfy the needs of all occupants through respect for social difference. Enabling environments operate upon an understanding of inclusive sociospatial relations that allows for security with material welfare while simultaneously acknowledging cultural individualism and collectivism.

The Socio-Spatial Meanings Behind Built Environments

The experiences of people with disabilities within the modern city are directly related to the spatial structure of the built environment, which according to Davis (1985) represents a reinforcement of dominant power relations. How land is used within a city is not only a reflection of political power, but also a determinant of whether space is democratically accessible. Thus, while the definition of disability has evolved over time, both in Canada and internationally, Gadacz (1994) correctly identifies the relationship between a person with a physical or mental impairment and the social physical environment around him or her as the fundamental basis for conferring meaning, regardless of official labels or designations (5). The essence of culturally imperialist values lies in the daily contexts experienced by people with disabilities interacting with their immediate surroundings.

Spatial restrictions on people with disabilities can take many forms, and place limitations upon social interaction in a variety different ways. The spatiality of disability (Butler & Parr, 1999) relates to the production of segregated spaces. For people with disabilities, this has been embodied by the concept of institutionalization.

Human interaction, particularly within an urban setting, is largely framed in reference to the situational context in which it takes place. As such, structures

which tend to selectively emphasize human differences have a significant impact on the manner in which individuals react and respond to each other.

This spatial exclusion can come from the obvious segregated spaces of the asylum or "other institutions [designed] to discipline, protect and/or control disabled people" and their interactions with the rest of society (Imrie, 2000 (a): 7). However, Imrie also argues that segregation can embody various forms, from "special schools, to day care centres and dial-a-ride bus services," all of which "serve to demarcate and segregate disabled people into distinctive and discreet services" (Ibid). The coding of these spaces is infused with values and identifying markers that send signals to the rest of society that people with disabilities are somehow inferior.

As detailed by Kallen (1989), these constructs produce a structural-functionalist stigma from which roles, standards and stimuli are codified. Knox (1987) classifies architecture, buildings and the wider built environment as anything but discrete because of the ability to explain "everything from people's perceptual acuity to their social networks" (361). Within every city, there exists a hierarchy of meaning, where form shapes space, and in turn, space is understood as providing the context for social relations.

Weisman (1992) notes that access to space is "fundamentally related to social status and power and that changing the allocation of space is inherently related to changing society" (6). These markers of privilege have been fostered by a steady contraction of public spaces within cities, as it is becoming increasingly difficult to justify making space without the capacity to consume (Turner, 2002). So, from a political standpoint, there is a reluctance to use downtown land for public activities that are not able to generate an appropriate level of revenue.

Banerjee (2001) argues that the privatization of public space creates the opportunity for like-minded consumers to associate with one another without the fear of having to interact with people from different social classes or walks of life. As described by Imrie and Hall (2001), real estate in the modern city is motivated by the most economically fruitful use of space, which seeks to minimize the inclusion of features deemed to add little to no value to property. Short term building efficiencies have been favoured over the longevity of accommodation, so that standardized industrial light fixtures or centralized air conditioning, for example, takes precedence over design features catering to user mobility.

Since the frantic pace of urban economic development experienced in the 1980s, development in the cities of industrialized nations has favoured attention towards consumption oriented experiences. That is, "[t]hose who are contributing to the revenue stream are welcomed" while "[t]hose who are different and…not there to spend money are not welcomed, and in fact…excluded" (Turner 543). O'Neil (1995) notes that this discrimination is a part of a larger phenomenon in the era of postmodernism, which has been marked by the dismantling of the welfare state, the decline of the public realm, the rise of non-elected actors in societal power schemes, and as mentioned, the privatization of public spaces.

Reasons for this spatial exclusion also include some of the problematics associated with the development processes. Imrie (2001) associates the relationship between the built environment and the western world's mode of capitalist accumulation as a recipe for building exclusionary spaces for people with disabilities, due to developers' disregard for the design needs of the disabled (234). In two separate studies, Imrie has looked at the socio-political

reasons why some urban architects and planners have successfully designed socially inclusive spaces for people with disabilities, while others have failed.

In his study of two shopping mall developments, Imrie (2001) concludes that there is no uniformity in design intention other then meeting the minimal standards set by law. In the study, Imrie demonstrates the spectrum of performance by contrasting a mall that is designed within the parameters of inclusion (achieving great gains as a result of including people with disabilities in both the political and spatial contexts of planning) with another other mall development that fails to meet this same standard specifically as a result of the forces of influence within the respective local political environment.

In Imrie's study of two townships (2000 (b)), local political and social movements impacted the design and political arrangements affecting disabled people's inclusion. The township in which disabled citizens were politically active saw greater gains in spatial and socio-political inclusion by exerting influence over town council and thus the built environment. The development process behind the second township entailed less direction and regulation for city council, which was seemingly hungry for investment at any cost (2000 (b) 217). It must be mentioned that the town that was successful in being inclusive had a politically savvy aging demographic which aided the cause of people with disabilities in terms of forwarding needs and requirements into the development process.

Municipalities and private development generally follow the policies established by law for minimum fulfillment, tending only to be exceeded when an active political or economic voice is heard. Even still, recognition of a political movement from the margin cannot gain full momentum and reach its full potential if the particular voice is not properly accounted for (as already detailed).

Technology and Disability

There are many that look to the advent of technology as the solution to the ills experienced by people with disabilities within the modern, capitalist city. With many theorists and observers, the development of sophisticated adaptive technologies is looked upon to level the playing field by liberating the social and economic constraints encountered in day to day living. Take for example this lofty assessment by Scherer (1993), who studied the application of technology to disability across the United States:

> "There is nothing wrong with disabled people that the proper environment can't fix…Technology can solve anything…" (84).

This view is quite a dichotomy from the application of technology within the rise of the corporate economy. As observed by Knox (1987), the self serving nature of the modernist ideals represented in contemporary urban environments has origins in the use of technology to ensure efficiency and cost savings in building projects. The rise of Fordist production modes employed the standardization of technology, which segmented labour into task dedicated divisions. Science and technology was a tool of corporate control used to reduce people into mere categorizations, which particularly served to further marginalize people with disabilities.

Technology can have a transformative and positive effect on disability, whether as a means to gain access to built environments or as a gateway to retrieve information. In fact, there exists such potential in the possibilities of application that laws, policies, institutional arrangements and social attitudes have become imbued with an innate faith for the development of a wide range of solutions (Gleeson, 1999: 99)

While overzealous expectations regarding the power of technology can serve as a blind spot for legislators, engineers or developers looking at applications in isolation, there is little doubt that many technologies have enhanced the autonomy of disabled people within urban built environments by levelling the playing fields of access. This suggests that the various limitations still thought to be embodied in the disability paradigm have the potential to be overcome through technological innovations.

Universal Design

The primary contemporary challenge for architects is to move away from conceptions of the built environment as fixed and unchanging by way of limited functionality. Indeed, re-conceptualizing people and places as "fluid, transformative or multidimensional" will serve as a technique to internalize the dynamic nature of society for future designs" (Imrie, 1996: 91), and in turn, enable a better design for all, not just people with disabilities. Empowerment, however, must occur at the community level where people with disabilities can inform the process of creating "structural contexts within which a form of emancipatory, liberating and self determined practise can occur" (Ibid 93). In particular, the specific experiences of movement (or lack thereof) are crucial to changing the physical landscape of a city.

While people with disabilities encounter obstacles in daily living that span the spectrum of characteristics, it is the physical barriers within the built environment that are often the most tactile and immediately encountered. Commercial and public buildings designed for public use continue to be inaccessible for wheelchair users or those with sensory impairments. High street curbs and street furniture provide continuous obstacles for people with disabilities trying to navigate their way through urban areas.

The pejorative attitudes embedded in architectural design have lead to a number of alternative ways of considering the built environment. The most expansive of these is Universal Design (UD), which emerged in the United States as a by-product of a range of research initiatives and practical applications.

As has been detailed, architectural theory has only recently begun to incorporate bodily and physiological diversity into design, a shift that has paved the way for UD to become a recognized standard. UD considers the body as a dynamic entity, and architectural design should therefore be able to anticipate changes in needs within the end users. This is a marked change from accessible design, which is considered demeaning in the way that it draws attention to a person's disability, which only tends to reinforce stigma and social exclusion.

The following are the accepted Principles of Universal Design, which were developed by the Center for Universal Design in collaboration with a consortium of universal design researchers and practitioners from across the United States. Funding for the project was provided by the U.S. Department of Education's National Institute on Disability and Rehabilitation Research:

PRINCIPLE ONE: Equitable Use
The design is useful and marketable to people with diverse abilities.

Guidelines:

> 1a. Provide the same means of use for all users: identical whenever possible; equivalent when not.
> 1b. Avoid segregating or stigmatizing any users.
> 1c. Provisions for privacy, security, and safety should be equally available to all users.
> 1d. Make the design appealing to all users.

PRINCIPLE TWO: Flexibility in Use
The design accommodates a wide range of individual preferences and abilities.

Guidelines:

2a. Provide choice in methods of use.
2b. Accommodate right- or left-handed access and use.
2c. Facilitate the user's accuracy and precision.
2d. Provide adaptability to the user's pace.

PRINCIPLE THREE: Simple and Intuitive Use
Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

Guidelines:

3a. Eliminate unnecessary complexity.
3b. Be consistent with user expectations and intuition.
3c. Accommodate a wide range of literacy and language skills.
3d. Arrange information consistent with its importance.
3e. Provide effective prompting and feedback during and after task completion.

PRINCIPLE FOUR: Perceptible Information
The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

Guidelines:

4a. Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information.
4b. Provide adequate contrast between essential information and its surroundings.
4c. Maximize "legibility" of essential information.
4d. Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions).
4e. Provide compatibility with a variety of techniques or devices used by people with sensory limitations.

PRINCIPLE FIVE: Tolerance for Error
The design minimizes hazards and the adverse consequences of accidental or unintended actions.

Guidelines:

5a. Arrange elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded.
5b. Provide warnings of hazards and errors.
5c. Provide fail safe features.
5d. Discourage unconscious action in tasks that require vigilance.

PRINCIPLE SIX: Low Physical Effort
The design can be used efficiently and comfortably and with a minimum of fatigue.

Guidelines:

6a. Allow user to maintain a neutral body position.
6b. Use reasonable operating forces.
6c. Minimize repetitive actions.
6d. Minimize sustained physical effort.

PRINCIPLE SEVEN: Size and Space for Approach and Use
Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

Guidelines:

7a. Provide a clear line of sight to important elements for any seated or standing user.
7b. Make reach to all components comfortable for any seated or standing user.
7c. Accommodate variations in hand and grip size.
7d. Provide adequate space for the use of assistive devices or personal assistance. (Centre for Universal Design)

Please note that these principles only address universally usable design, while the actual practice of design involves far more than consideration for usability. Urban planners must also incorporate other considerations such as economic, engineering, cultural, gender, and environmental variables into their design processes. These principles simply offer a framework to better integrate features that meet the needs of as many users as possible.

It is imperative that urban planners and design professionals are cognizant that technical solutions are merely one part of the answer to full accessibility, and that a deeper understanding of the values embedded in their disciplines and practices must be obtained to achieve comprehensive results.

> "UD is characterised by general principles that few would disagree with. They are meaningless, however, unless wedded to policies and practises that challenges the realities of property development and design dynamics. Economic and cultural rationales and values drive these realities and, in doing so, the needs of diverse users of the built environment are often overlooked" (Imrie & Hall 283).

Technical design improvements make gains in physical access issues but do not fully address larger socio-political processes that have historically marginalized and oppressed people with disabilities, hence the balanced and dualistic approach to accessibility and inclusion advocated in this paper.

The Internet as Emancipation

A rapid shift has occurred over the last few decades in the way in which we as a society share and exchange ideas and information. Internet technologies have reduced many of the limitations of physical space, and expansive access to worldwide databases of information has produced better educated and more engaged populations within urban environments.

Sheldon (2004) argues that for people with disabilities, the Internet is "changing the society in which we live" (155) through ready access to information and services, communication with others, forums for debate and outlets for self-expression. For many people with disabilities, the Internet represents a significant step forward in enabling self-empowerment.

Much in the same way that the creation of space is informed by larger socio-political processes, so is the creation of technology. Technology is neither formulated in a vacuum nor neutral in application, but instead shaped and contextualised within the social and economic paradigms in which it was created (Ibid).

It must be acknowledged that the relationship between the Internet and people with disabilities does have the potential to minimize social contact. Online service provision, for example, lessens dependence on others by delivering a myriad of services into people's homes. The segregation of disabled people in this fashion is a real threat, as governments and social agencies employ the Internet for cost-cutting and program slashing.

Acquiring "Vision" Through Technology: A Case Study

A study conducted in Northamptonshire, UK, by Matthews et al. (2003) examined wheelchair users and the real and perceived barriers they experience in accessing urban space calibrated to the able-bodied majority.

Matthews et al. argue that there is a need to offer a methodology where the perceptions and attitudes of wheelchair users towards an urban environment could be empirically measured by feelings of frustration and concern. The outcome was the creation of MAGUS, a Geographical Information System (GIS) that "informs about route access for wheelchair users in urban areas" (35). The resulting tool is used by wheelchair users as a navigational device and urban planners as an information system to ensure decision making is current and applicable.

Matthews et al. use an emancipatory research paradigm in addressing concerns over wheelchairs users' access to urban space, entailing the accounting of the "needs, perceptions and experiences of the users" (Ibid). Through questionnaires, focus groups and field trips, both quantitative and qualitative data was collected to determine what kind of physical barriers were experienced when accessing various sites within Northamptonshire.

In order to map the landscape with the values utilized in software, each terrain feature was given a relative value according to the level of impendence it embodied. Via a specially designed rating tool, a balance of real measurements of resistance were employed along with perceived notions of impedance and given weight according to the severity of various prohibitive barriers.

The data was put into a format that was compatible with existing data collections held by a majority of local authorities in Great Britain. As a result, a system was created to give wheelchair users access routes in which the lowest impedance to travel could be enjoyed. The provision of this data was then made accessible to the wider population via an extensive and easy to use interface.

The information that this tool is able to provide is of no small consequence to planners and architects, as key evaluation criteria will enable the minute documentation of the effects that design and development have on mobility. In this way, such a tool serves to foster an inclusive process where the vision of the disabled can challenge "ableist assumptions" to make visible the ways in which built environments are "hostile places" for people with disabilities (Ibid 44).

Convergence = Accessibility: A Case Study

Once empowerment is awakened within people with disabilities, it is only natural that it evolves into a more communal, holistic and integrated concern for the immediate environment in which one inhabits. If the independent

living/disabled consumer movement has fought for parity in terms of both consideration and action from the rest of society, then it would be short-sighted and selfish to once again perpetrate segregation by restricting concern purely towards self-interest. Dobell and Mansbridge (1986) explain that:

> "[s]ocial policy-making suffers, it is argued, when its major focus is seen to be exclusively the needy, the poor and the powerless. Instead, social policy should address the total community, and its objective should be the prosperity and well-being of all citizens" (28).

To that end, the British Columbian city of Coquitlam is a shining example of not only applying accessibility improvements to the benefit of all citizens, but also of how the use of technology can serve as a powerful tool in making these upgrades an expedient reality.

A riverside city named after the Coast Salish native word for a little red sockeye, Coquitlam is located to the northeast of Vancouver, and sits at the geographic centre of the Lower Mainland. Greater Vancouver is one of the fastest growing regions in Canada, and the City of Coquitlam is a vital component of that growth. Coquitlam's population increased by over 21% between 1986 and 1991, and again from 1991 to 1996. A further increase of 10.9% occurred between 1996 and 2001 (City of Coquitlam (a)).

Key to this expansion, however, has been the city's pledge to implement "open and accessible government…dedicated to providing services that enable all members of our community – businesses and residents – to prosper and grow within a safe and clean environment" (City of Coquitlam (b)). This is what is branded as 'the Coquitlam Advantage,' constituting the ability of community partners to transition from command and control to a team approach that places an specific emphasis on working outside of the box (City of Coquitlam (c)).

Coquitlam is currently engaged in a cutting edge project being carried out in concert with the Government of Canada, employing the wider use and development of information technology to break down traditional barriers to accessibility.

Falling under the 'Connecting Canadians' initiative launched by the federal government, the 'Smart Communities Demonstration Project' is an Industry Canada sponsored program designed "to use information communication technologies to provide easier access to community services" (Smart Choices Press Release). The City of Coquitlam, along with the neighbouring City of Port Moody, School District 43 (Coquitlam) and Douglas College, serves as one of the founding partners of the project.

The prevailing logic is that the internet is a valuable tool to expand the reach of service levels without dramatically augmenting costs, thereby increasing access options for residents. For those questioning the effectiveness of expanding community access through a medium that is not necessarily easily accessible to significant segments of the population, the overarching objective of the Connecting Canadians initiative forms the basis of the Government of Canada's agenda to make Canadians the most Internet-connected people in the world.

Coquitlam residents are encouraged to organize much of their involvement with the local community by means of a local web portal City Soup (http://www.citysoup.ca) jointly administered through the cooperation of business, government, community organizations and community members themselves. As of May 2003, if a community member wants to check the status of a pending building permit, sign up for aerobic classes at the local community centre, or find out the latest information of a local gas leak, a specially designed IP telephony communications system "converges widespread city departments

and facilities into a unified communications infrastructure that offers new levels of convenience, productivity, and performance for city employees and residents" (Nortel Networks, 2004: 1). The process of combining information, resources and access into one system was and continues to be a multifaceted endeavour, requiring a corporate partner in the form of Nortel Networks to take an active role in the evolution of community-based communications technology in theory and application.

Previous to the initiation of convergence through the Smart Choices program, most city departments relied on a mix of external telephony services from a variety of providers. While fire halls used their own private branch exchanges (PBXs), city regulation and permitting was administered through a different phone system. This hodgepodge of service sources proved to be not only complicated and time consuming for the city, but more importantly, inefficient and costly. A simple change to update certain departments with voicemail, for example, was a huge undertaking that still could not integrate uniformity across the system as a whole.

The results from the installation of the IP infrastructure have been staggering in their success. The City of Coquitlam is currently saving $500,000 a year, is able to more quickly and dependably respond to the diversity of communications requirements across different departments, and has dramatically increased usage, support and satisfaction with city customers (Ibid 4).

The following are tangible manifestations of what has already been accomplished with communications across the city divisions:

- The Leisure and Parks department is open 12 hours a day, and contact center agents are distributed in nine buildings across the city. With the new system, incoming calls can be automatically

routed to the most knowledgeable person anywhere, making it easy to provide fast response with 12-hour phone coverage. Call center managers now have excellent visibility into real-time activity and long-term trends, to better plan for peak periods, staffing, and training. "Parks and Recreation Services handles hundreds of thousands of calls a year," says Dave Stevens, Facility Manager, Leisure and Parks Services. "The Symposium Express Call Center technology allows us to provide prompt and more efficient service to those callers along with reporting to help us continuously improve our service in the future."

• The Operations department is open 24 hours a day to handle everything from permits and requests for filling potholes to more urgent inquiries such as non-working traffic signals or burst water mains. Now these calls are prioritized and sent to the most appropriate responder, even though Operations employees are located all over the city. A converged IP Telephony infrastructure has enabled the city to respond more quickly and reliably to the diverse communication requirements of the different city divisions, while providing seamless service and support to city customers.

• Collections/Taxation operates a call center for three months a year to support utility and tax collections. During the height of the busy period, callers can either remain in queue (or hear custom, informational announcements that save clerks' time), or mark their places in queue, so they don't have to wait in queue so long.

• The IT department uses computer telephony to take calls from anywhere in the city using a virtual login from any available phone. For example, customer service employees may be dealing with problems within a building and, while there, they can log into the contact center to take other calls. (Ibid 4-5)

What this project represents is a broader appreciation of accessibility issues and objectives from within local governance. As part of this prioritization, the City of Coquitlam sponsors an annual accessibility competition to recognize various sectors of the community that have embraced the agenda of inclusion. The Coquitlam 2005 Accessibility Awards, which recognize design and programs that encourage accessibility, are given out in six areas: architectural accessibility,

education access, employment access, leisure and recreation access, accessible and affordable housing and volunteer access.

The awards single out those businesses and community members who have undertaken measures to "address social as well as physical barriers for people with disabilities" (City of Coquitlam (d)). More than appreciating individual examples of achievement, the annual awards are aimed at creating better awareness for the importance of providing an accessible environment while simultaneously educating the citizenry of the wide range of locally available services mentioned above.

These are only the beginnings of the impact that the implementation of convergence has had upon the Coquitlam. Upcoming innovations such as computer-telephony integration (CTI) to provide yet more information to end users, a just-installed fibre WAN to enable schools, businesses and service providers access to increased value-added services, and a business incubator serving as a tool for economic development through a series of Internet-connected computers are all poised to maintain the City of Coquitlam as a cutting edge presence in advancing the technological accessibility of municipal services.

Conclusion

Within the context of modern cities, the principles of "Accessibility" and "Inclusion" are the yin and yang of improving the lives of people with disabilities, in that neither consideration is effective as an exclusive consideration.

Participation in the independent living/disabled consumer movement has acclimatized people with disabilities to frequent interaction with consumer organizations, a variety of enabling structures, and of course, government, developing the skills needed to participate in democratic decision-making at the individual, group, community, national and international levels.

This is the process of acquiring a distinct and unmistakable political identity that people with disabilities are able to use in managing self-determination. Because the disability movement is no longer satisfied with allowing bureaucrats and legislators to set the agenda by identifying their needs, disabled citizens have begun to understand and exercise the right to represent themselves in and amongst the community through direct interaction with the processes of public policy.

The acquisition of a distinct identity has in turn resulted in a more proactive and participatory constituency, which advocates for such tangible policy initiatives as integrated transportation, implementation of new technologies, physical accessibility upgrades within urban environments, viable employment opportunities, security income and safe and affordable housing (to identify just a few).

It is this progression of a dualistic and balanced approach which will continue to have the maximum impact on the lives of people with disabilities.

<div align="center">References</div>

Banerjee, T.
  2001   "The Future of Public Space: Beyond Invented Streets and Reinvented Places," Journal of American Planning Association, 67 (1): 9-24.

Beck, U.
  1997   The Re-invention of Politics: Rethinking Modernity in the Global Social Order. Cambridge, UK: Polity Press.

Brisenden, S.
  1986   "Independent living and the medical model of disability," Disability and Society, 1 (2): 6-13.

British Columbia
Royal Commission
on Health Care and
Costs
  1991   Closer to Home. Victoria: Crown Publications.

Butler, R. & H.
Parr. eds.
  1999   "New Geographies of Illness, Impairment and Disability" in Mind and Body Spaces: Geographies of Illness, Impairment and Disability. London: Routledge

Campbell, J. &
M. Oliver
  1996   Disability Politics: Understanding Our Past, Changing Our Future. London: Routledge.

Centre for
Universal Design "Principles of Universal Design," NC State University College of Design website, available at:
http://www.design.ncsu.edu/cud/univ_design/
princ_overview.htm

City of Coquitlam
(a)   "City Profile," City of Coquitalm website, available at:
http://www.coquitlam.ca/Residents/About+Coquitlam/
City+Profile/default.htm

City of Coquitlam
(b)   "Why Choose Coquitlam," City of Coquitalm website, available at: http://www.coquitlam.ca/Business/Why+Choose+Coquitlam/default.htm

City of Coquitlam
(c)   "Action Plan 2000: An Economic Development Strategy for the City of Coquitlam," City of Coquitalm website, available at: http://www.coquitlam.ca/NR/rdonlyres/49AE778F-3E00-47C2-837E-73D21495BC4C/0/EconomicDevelopmentActionPlan2000.pdf

City of Coquitlam
(d)   "2005 Coquitlam Accessibility Awards" City of Coquitalm website, available at: http://www.coquitlam.ca/Residents/Recreation+and+Community/Community+Involvement/2005+Coquitlam+Accessibility+Awards.htm

City of Vancouver
2003   "Establishment of 2010 Vision for British Columbians with Disabilities, " Philia website, available at: http://www.philia.ca/files/pdf/olympicresolution.pdf

Clutterbuck, P. &
N. Marvyn
2003   "Building Inclusive Communities: Cross-Canada Perspectives and Strategies," Inclusive Cities Canada website, available at: http://www.inclusivecities.ca/pdf/inclusive.pdf

Davis, M.
1985   "Urban Renaissance and the Spirit of Postmodernism," New Left Review, 151: 106-114.

Derksen, J.
1980   The Disabled Consumer Movement: Policy Implications for Rehabilitation Service Provision. Winnipeg: COPOH.

Dobell, A. R. &
S. Mansbridge
1986   The Social Policy Process in Canada. Montreal: The Institute for Research on Public Policy.

Easterling, D.
1998   Promoting Health by Building Community Capacity: Evidence and Implications for Grant Makers. Denver: The Colorado Trust.

Federal/Provincial/
Territorial Ministers
Responsible for
Social Services
1998   "In Unison: A Canadian Approach to Disability Issues," Social Union Framework Agreement website, available at: http://socialunion.gc.ca/pwd/unison/next_e.html

Fraser, N.
1995   "From Redistribution to Recognition? Dilemmas of Justice in a 'Post-Socialist' Age," New Left Review, 212: 68-73.

Gadacz, R.R.
1994   Re-Thinking Dis-Ability: New Structures, New Relationships. Edmonton: University of Alberta Press.

Giddens, A.
1979   Central Problems in Social Theory. Berkeley: University of California Press.

Gleeson, B.
1997   "Community Care and Disability: The Limits To Justice," Progress in Human Geography, 21 (2): 199-224.

Gleeson, B.
1999   "Can Technology Overcome the Disabling City?" in Mind and Body Spaces: Geographies of Illness, Impairment and Disability, pp. 98-118. London: Routledge

Hall, P. &
R. Imrie
 2001   "An Exploration of Disability and the Development Process," Urban Studies, 38 (2): 333-350.

Higgins, P.C.
 1992   Making Disability: Exploring the Social Transformation of Human Variation. Illinois: Charles C. Thomas, Publisher.

Imrie, R.
 1996   Disability and the City: International Perspectives. London: Paul Chapman Publishing Ltd.

Imrie, R.
 2000 (a) "Disabling Environments and the Geography of Access Policies and Practices," Disability & Society, 15 (1): 5-24

Imrie, R.
 2000 (b) "Responding to the Design Needs of Disabled People," Journal of Urban Design, 5 (2): 199-219.

Imrie, R.
 2001   "Barriered and Bounded Places and the Spatialities of Disability," Urban Studies, 38 (2): 231-237.

Inclusive Cities
Canada   "Inclusive Cities Canada: A Cross-Canada Civic Initiative – Background Paper and Project Overview, Phase 1," Inclusive Cities Canada website, available at: http://www.inclusivecities.ca/pdf/backgroundpaper.pdf

Kallen, E.
 1989   Label Me Human: Minority Rights of Stigmatized Canadians. Toronto: University of Toronto Press.

Knox, P.
 1987   "The Social Production of the Built Environment – Architects, Architecture and the Postmodern City," Progress in Human Geography, 11 (3): 354-378.

Laws, G.   "Ageing, Contested Meanings, and the Built Environment,"
 1994   Environment and Planning, 26 (11): 1787-1802.

Le Corbusier
1925   The Decorative Art of Today (translated by James Dunnett, 1987). Cambridge, MA: MIT Press.

Mathews, H., L. Beale, P. Picton, & D. Briggs
2003   "Modelling Access with GIS in Urban Systems (MAGUS): Capturing the Experiences of Wheelchair Users," Area 35 (1): 34-45.

McGlynn, S. & P. Murrain
1994   "The Politics of Urban Design," Planning Practice and Research, 9 (3): 311-320.

Mumford, L.
1961   The City in History: Its Origin, Its Transformations and Its Prospects. New York: Harcourt, Brace & World, Inc.

Nortel Networks
2004   "Convergence: City of Coquitlam Adopts Convergence for More Open, Accessible City Services," Nortel Networks website, available at:
http://www.nortel.com/corporate/success/ss_stories/collateral/nn107322-022404.pdf

O'Neil, J.
1995   The Poverty of Postmodernism. London: Routledge.

Penz, G.
1986   Consumer Sovereignty and Human Interests. Cambridge, UK: Cambridge University Press.

Perske, M. & R. Perske
1980   New life in the neighbourhood: how persons with retardation can help make a good community better. Nashville: Abingdon.

Philia (a)   "About Us," Philia website, available at:
http://philia.ca/about/about_us.htm

Philia (b)   "Caring Citizen," Philia website, available at:
http://philia.ca/Caring_citizen/caring_citizen.htm

Philia (c)   "Contribution and Community," Philia website, available at: http://philia.ca/themes/contrib-commun.htm

Pratt, P. &
J. Ross
    2004   "The Accessible/Inclusive Cities & Communities Project, Draft Report - January, 2005," TDH Strategies website, available at: http://www.tdhstrategies.com/downloads/aiccp.pdf

Saloojee, A.   "A New Way of Thinking? Towards a Vision of Social Inclusion," Canadian Council on Social Development website, available at: http://www.ccsd.ca/subsites/inclusion/bp/as.htm

Scherer, M. J.
    1993   Living in the State of Stuck: How Technology Impacts the Lives of People with Disabilities. Cambridge, MA: Brookline Books.

Sheldon, Alison
    2004   "Changing Technology" in Disabling Barriers – Enabling Environments, 2nd Ed., ed. by Swain, J., S. French, C. Barnes & C. Thomas, pp. 155-161. London: Sage Publications Ltd.

Smart Choices
Society of B.C.
    2002   "British Columbia's Smart Community Demonstrations Project Begins Development of Phase One," Smart Choices website, available at: http://www.smartchoices.ca/NR/rdonlyres/169F1486-4790-4029-99A6-352F780E5C79/0/Phase_One_Announcement.pdf

Social
Development
Canada   "Disability in Canada: Appendix A – Information on PALS," Social Development Canada website, available at: http://www.sdc.gc.ca/asp/gateway.asp?hr=/en/hip/odi/documents/PALS/PALS010.shtml&hs=pyp

Statistics Canada   "Growth Concentrated in Four Large Urban Regions," Statistics Canada website, available at:

http://geodepot.statcan.ca/Diss/Highlights/Page9/Page9_e.cfm

Stubbins, J.
    1988   "The Politics of Disability" in Attitudes Towards Persons with Disabilities, ed. by H. E. Yuker, pp. 22-32. New York: Springer Publishing Company.

Turner, R.S.
    2002   "The Politics of Design and Development in the Postmodern Downtown," Journal of Urban Affairs, 24 (5): 533-548.

Watson, N.
    2002   "Well I know it is going to sound very strange to you, but I don't see myself as a disabled person: identity and disability," Disability and Society, 17 (5): 509-527.

Weisman, L.
    1992   Discrimination by Design. Illinois: University of Illinois Press.

Wilkerson, B.
    2001   "The Business Case for Accessibility: How Accessibility-Awareness Strengthens Your Company's Bottome Line," Government of Ontario – Paths to Equal Opportunity website, available at: http://www.equalopportunity.on.ca/userfiles/item/23549/BusAccess.pdf

World Health
Organization
    2002   "Towards a Common Language for Functioning, Disability and Health: The International Classification of Functioning, Disability and Health," World Health Organization website, available at: http://www3.who.int/icf/beginners/bg.pdf

Young, I.M.
    1990   Justice and the Politics of Difference. Princeton, NJ: Princeton University Press.