influx

hastings corridor synthesis

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InFlux **Four Principles**

The four principles described below attempt to approach urban structure and strategic planning from a framework of interactive performance, as opposed to the more conventional form and typology based (Euclidian) frameworks. The abstract nature of our principles is both intentional and essential, to facilitate a shift to a (radically) new paradigm for urban planning and urbanization in the 21st century. While all are inherently interrelated, each perceives the process through a different lens. Consequently, each negotiates specific indicators/metrics, and each involves different behavioral shifts and resultant formal implications.

Gradation is more pattern orientated, looking at the nature of the interface (or threshold edge) between different conditions; and more specifically how the rigid boundaries of the normative compartmentalized system can be dissolved and liberated.

Resilience via Flexibility and **Dynamic Equilibrium** are the more performance orientated of the four, focusing on understanding system flows across all scales, and seeking flexible and adaptive responses. They create a framework that responds to change, yet is respectful of embedded memory.

The principle of **Self Sufficiency**, is more policy and process orientated. It creates a framework for empowering a local governance structure; favoring adaptive management, and collaborative environmental (and social) decision-making, within a bottom-up system of active participation. This is an essential condition if any of the above principles are to be translated from intent to implementation.

Resiliency Decreased perscription. Policy.
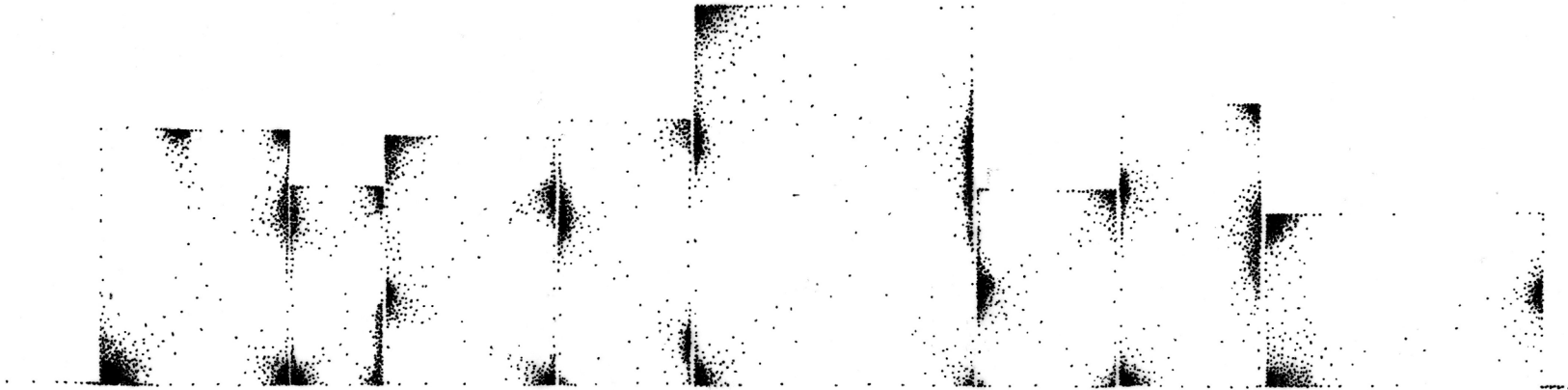
The **Resiliency via Flexibility** principle is a performance-based policy that aims to decrease formal, functional and systemic inflexibility, thereby increasing site adaptability across time.

The application of the concept of flexibility has significant implications at every scale. At the **human** scale, flexibility equates to diversity in age, family size, community and demographic structure. Within buildings, formal and zoning decisions should be considered in relation to their allowance of flexibility over time. Changes in resident family size and character, as well as transitions between residential and commercial should be possible within this framework.

At the larger scales of **block**, **neighborhood** and **site**, fwlexibility is required for resilient environments that can accommodate for changing systems over time. These include natural systems, climate change, technological advances and evolving patterns such as transportation and pedestrian networks. Flexibility in this context will be strongly related to adaptable performance-based zoning. Community involvement is necessary, as the process should ideally be driven by the local community vs the larger region.
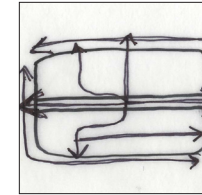
Resiliency Decreased perscription. Policy.
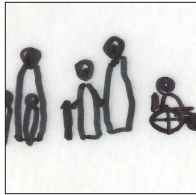
scale. **HUMAN**

Diversity, age, family size, community demographic structure.
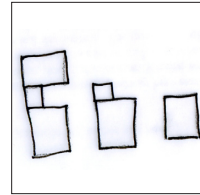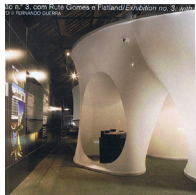
scale. **BUILDING**

Form allowing flexibility of use over time.

scale. **BLOCK**

Option for change: flexibility in zoning, bottom up community agreement on this.
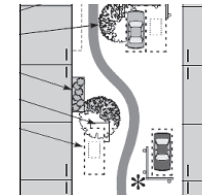
PRECEDENTS

Object resiliency

Low entry buses, with adequate sidewalk access facilitates the aging population.

Bank becomes motorcycle retail

Adaptation of building use, over time.

Woonerf

Cars do not dominate the street but are subordinate to child play, pedestrian and bike traffic. Different modes of transportation coexist in the same space.

Crosswalks and increased pedestrian crossing time accommodate children and the elderly.

Steven Holl: Fukuoka apartments and New York Museum
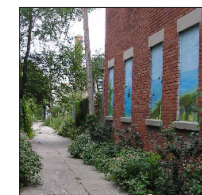
Flexibility of form over time.

Village Homes

Pedestrian access makes it is easier to walk than drive. No clear public-private delineation.

Public space activities highlighting human- building/ object relationship.
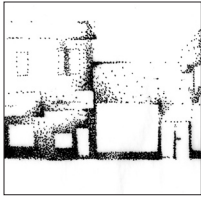
Gastown Drive-In

A parkade is temporarily converted into a drive-in, bike-in, walk-in theatre.

Ruelles Vertes, Montreal

Retrofitted alleys provide pedstrian links and discourage vehicular traffic, re-defining movement systems.
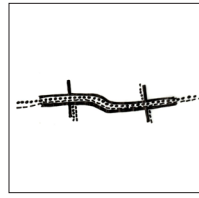
Resiliency Decreased perscription. Policy.

scale. NEIGHBORHOOD

Option for change: flexibility in zoning, bottom up community agreement.

scale. SITE

Flexibility for changing systems over time (natural systems, climate change adaptation, technological change, changing patterns re: pedestrian patterns).

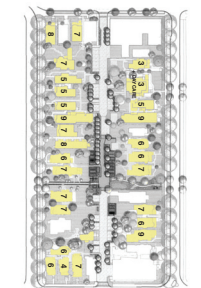## PRECEDENTS

Mole Hill

Preserved heritage buildings rehabilitated as affordable housing.
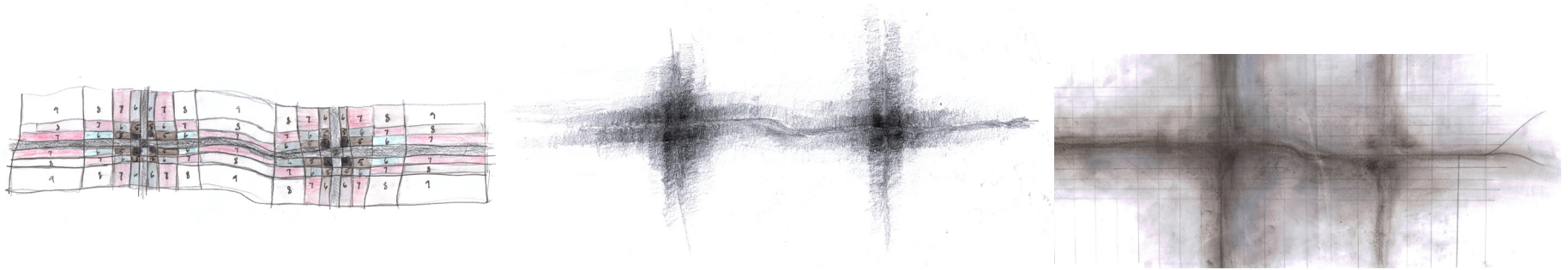
Increased density to 66 units per acre.

Portland street conversion

Reappropriating the street for flexible use.

Gradation **Dissolve rigid boundaries.**

"**to gradate**," to pass imperceptibly from one degree, shade or tone to another (*The American Heritage Dictionary of the English Language, Fourth Edition*. Houghton Mifflin Company, 2004. Accessed Sept 30, 2008).

The development of the Hastings Corridor within the context of **gradation** refers to the application of a conceptual pattern that will direct form-making decisions only when considered in light of site-specific circumstances. When applied to the site, the gradation is envisioned as a principle that allows for the integration of the dissimilar elements of the Hastings Corridor currently contributing to its systemic malfunctions.

The combining of the necessarily diverse array of forms, functions and systems within the study area will occur via the diffusion of their physical and conceptual edge conditions across each other. The gradation will aid in the development of a distinctive site character by influencing continuity of resident activity and performance across and within systems.

At the **human** scale, the application of gradation may have implications for the physical and psychological relationships between people, between people and objects, and between people and the site. At the interface between the private and public realms of the **building** and **parcel**, gradation will allow for greater diversity of experience via a reduction of prescriptive use. Gradated blocks will not only be defined by the streets bordering their edges, but will be more strongly related to patterns within the multi-systemic activities that take place within them. As applied to the larger **site**, the conceptual gradation will relate to the development of a zoning policy better equipped to respond to existing and expected nuances of use that are not adequately described by conventional bylaws. Also at the site scale, the conceptualization of the Hastings street right-of-way as a component of a larger gradation has significant implications for its design. As a part of a regional gradation, the study area has the opportunity to retain and strengthen its distinct character while remaining connected to its greater context.
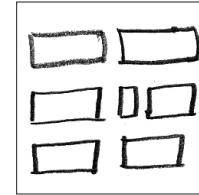
Gradation **Dissolve rigid boundaries.**
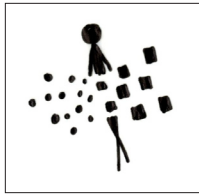
scale. **HUMAN**

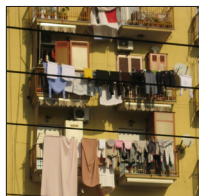Redefinition of the boundaries between public and private.
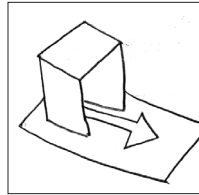
scale. **BUILDING**

Combination of diverse forms, functions and systems.

scale. **BLOCK**

Connections evolve through network metabolism. The integration between land uses allows for a mixture of public, private, commercial and residential spaces. Use also change over time.
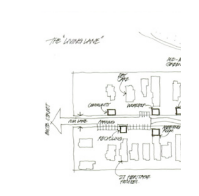
PRECEDENTS

Object gradation

Reinterpretation of physical and psychological relationships between people, between people and objects, and between people and the site.

Public-Private gradient

Reduced prescription of use allows for new and innovative use of space. The edge between public and private realm is an area with great possibilities.

Commercial gradation

Softer boundaries to zoning allow for layers of uses in places. For example, commercial activities can take place in residential or public settings.

Mole Hill, Vancouver

Interblock pedestrian connections. Lane is pedestrian oriented and provides green infrastructure. The needs of vehicles come last.
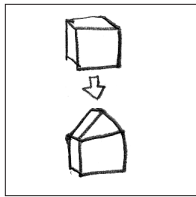

Waterfall Building, Vancouver

This unique building features commercial frontage, a public inner courtyard, an art gallery and private live/work dwellings.
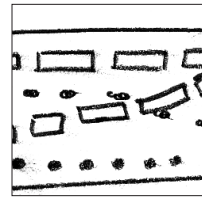

Granville Street, Vancouver

Public spaces above and below grade filter the solid separation of specific uses.
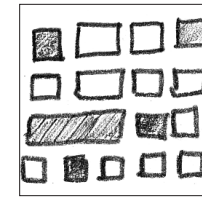
Gradation **Dissolve rigid boundaries.**

scale. **NEIGHBORHOOD**

Integration between zoning.

scale. **SITE**

Distribution of travel modes and traffic in and across streets. Different uses occupy the same space. Alternatives modes and paths provide flexibility and resilience.

scale. **REGION**

The street should function as a gradation, not a separation. Distinct character can exist within the larger context.

PRECEDENTS

Parkside Restaurant, West End, Vancouver

Fine dining establishment located beneath an historic Buchan Hotel in a residential area.

Cypress Bike Route, Vancouver

Blurs boundary between bike lane and cars as well as between north and south-moving traffic. Movement is based on interactions rather than signage and rules.

Highline, Manhattan

Adaptive reuse of transit as pedestrian circulation unites formerly disconnected blocks.

Arbutus Market

Adaptive reuse of a residential building for a commercial function. Uses change over time while form remains essentially the same.
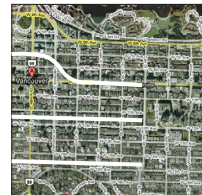
Broadway Corridor, Vancouver

Distributes traffic along parallel east-west routes. The street right-of-way is a component of a larger system, which also functions as a gradation.

# Dynamic Equilibrium Connecting and Balancing Systems.
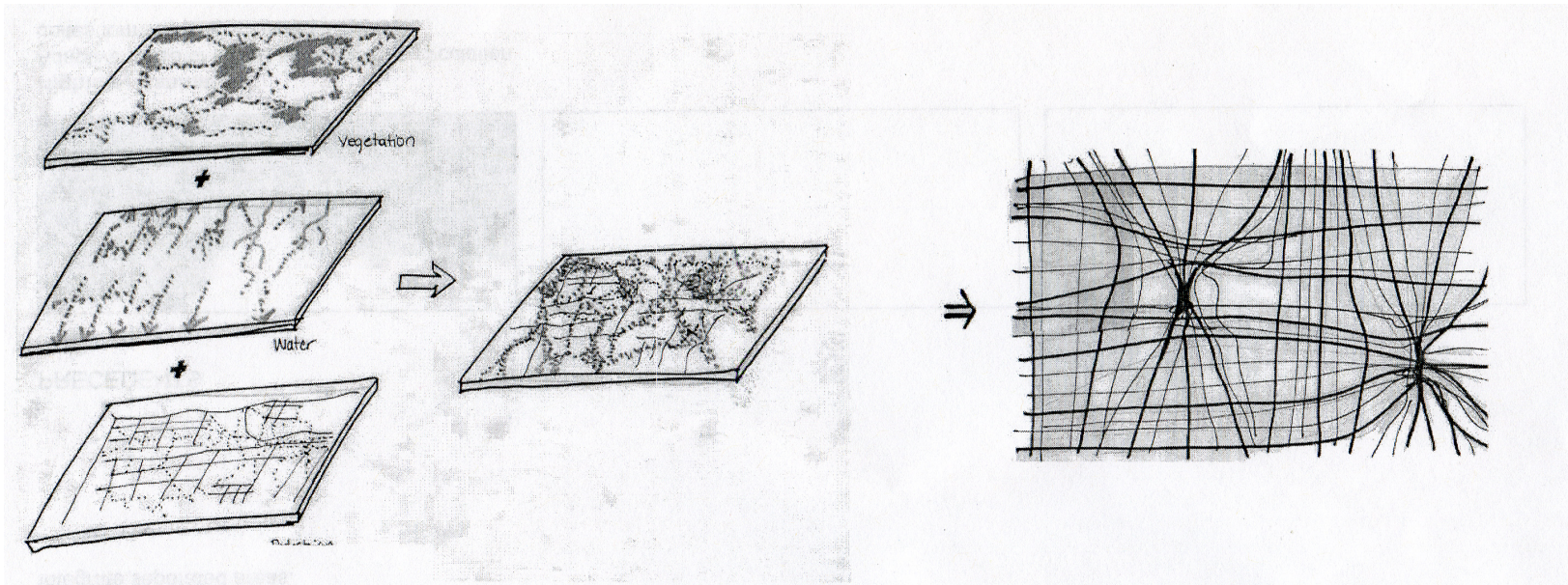
The principle of **dynamic equilibrium** begins by reconnecting currently fragmented natural, social and human powered circulation systems. The healthy, connected systems are then integrated, capitalizing on points of convergence between the systems. All of the systems defined in this principle are fluid, and require spatial and temporal flexibility. This flexibility needs to be accommodated within the urban structure, allowing for the required push and pull within the urban fabric.

At the **human** scale this principle implies designing for people, not cars. The circulation system is focused on maximizing ease of short trips, primarily by pedestrian and bicycle, rather than a focus on through traffic.

At the **block** level the focus is on network metabolism, an acknowledgment that blocks can be delineated by temporary organic, or changing corridors and connections, rather than simply by the street network.

At the **site, site context** and **regional** scales, fragmented systems are connected and green infrastructure and human circulation systems become both a servicing and social feature.
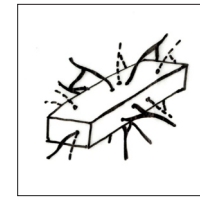
Dynamic Equilibrium **Connecting and Balancing Systems.**
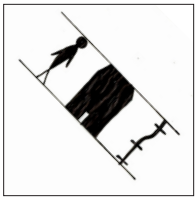
scale. **HUMAN**

Designing with pedestrian movement in mind. Enabling interactions between systems/scales.
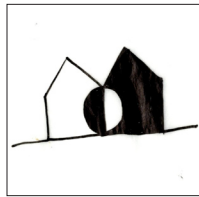
scale. **BUILDING**

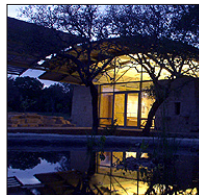Building systems balance within parcel and integrate with larger site and regional systems.

scale. **BLOCK**

Balancing and recognizing the systems that define the block unit.

PRECEDENTS

Levadas. Madiera, Portugal

Traditional irrigation watercourses with adjacent footpaths integrate stormwater management and cultural activity.

Warren Skaaren Environmental Learning Center, Westcave Preserve, Texas

Building integrates and illuminates principles of equilibrium in multi-function educational space.
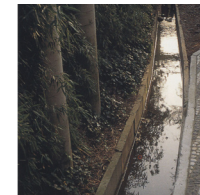
Bamboo Garden, Parc De La Villette, Paris

5 meters below ground, the park extends the block vertically, creating a unique environment and making visible the natural systems processes.
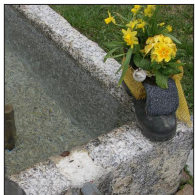
Fountain, Switzerland

Fountains cycle water from surrounding mountains, providing neigborhood service and influencing human movement.

Vertical Farming

Buildings support regional self sufficency, and integrate site systems.
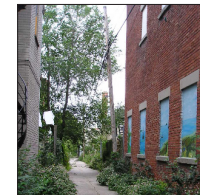
Ruelles Vertes, Montreal

Retrofitted alleys that provide pedstrian links and discourage vehicular traffic, re-defining movement systems.
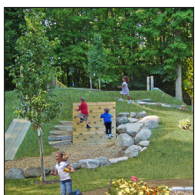
Natural Play Spaces

Illuminate and reinforce relationships between human and natural systems.

CIRS, UBC, Vancouver, BC

Living building that will contain nearly all its energy, water and waste requirements within building footprint.
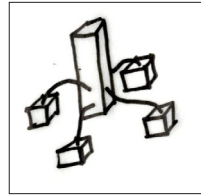
Mole Hill, Vancouver

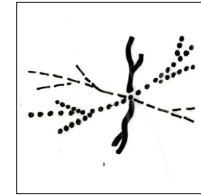Integrated neighborhood systems respond to site context.

Dynamic Equilibrium **Connecting and Balancing Systems.**

scale. **NEIGHBORHOOD**
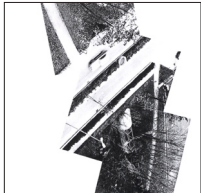
Systems support and permeate other systems.

scale. **SITE**
Capitalizing on potential concentrations of multi-systemic intensity.

scale. **REGION**

Balanced system performance goals inform and integrate with community form and amenities.

PRECEDENTS

Footbridge, Lancy, Switzerland

Tunnel creates pedestrian network continuity across heavy traffic road, while connecting ecological resources (stream).

Heiner-Metzger Plaza, Neu Ulm

Equalized cycle of water at transportation crossroads creates a dynamic gathering place and urban identity marker.


Columbia Boulevard Water Treatment Plant and Park, Portland Oregon

Infrastructural systems linked to natural systems within a community activity area.
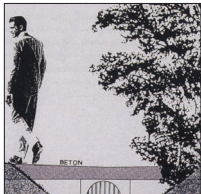
Thomson Factory, Saint Quentin-en-Yvelines, France

Natural systems integrate on a dynamic site that is changing from a research facility to a park.

High Line, Manhattan

Natural systems respond to and integrate with human infrastructure.
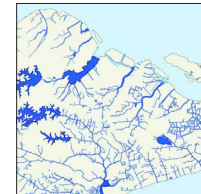
Bishan Park, Singapore

River restoration integrates stormwater management and treatement systems in the context of a park and children's playground.
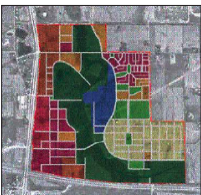
Coffee Creek Nature Preserve and Town

Integrated economic and ecological sustainablilty/self sufficiency.
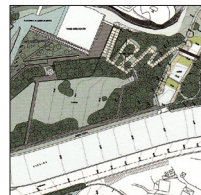
Park Sao Vincente

Park and education center preserve natural systems functioning within the context of an human activity zone.

Village Homes, Davis, CA

Integrated stormwater and green networks support community activity.

Self Sufficiency Sense of Place

The principle of Self Sufficiency via local emphasis and local empowerment speaks to the need for a 'bottom up' model of thought, action and governance. By focusing on its local specificities and unique systemic relationships, the area can achieve a formal self-actualization and through this, intrinsically engender a sense of place and a sense of identity. This approach also allows the area to attain a heightened self-assertion—an imperative driver to shift regulatory authority away from centralized loci of power, and back to its authentic source on the ground (at the feet of its inhabitants).

At the **Human** scale, this addresses the need for 'enabling spaces'—spaces which enable spontaneous coalescences and serendipitous exchanges between people, objects, and site. It also allows ingrained patterns of behavior to modulate form, enabling a dynamic mediation between constructed and projected space; compelling a continual spatial, temporal and experiential dialogue.

At the scale of the **Building/Parcel** this principle advocates 'respecting the old and preserving the authentic'. Referring simultaneously to architectural structures, social structures and environmental structures, it consolidates embedded memory as an armature for successive future urban ecologies.

The scales of the **Block** and **Neighborhood**, temporal increments further crystallize embedded patterns, while marginalized spaces remain full of potential. A gradated dynamic equilibrium can then negotiate between cultivating existing social condensers, liberating edges and engaging interstices to enable a reclamation of the street.

As applied to the **larger Site**, this principle acts as a bridge: between urban form and urban image, and between intention and implementation. By emphasizing local commerce over global corporations, the area encourages diversity yet maintains a palpable sense of identity. By engendering interaction with the broader social context, the area integrates holistically with the larger community, while establishing its local autonomy.

At the scale of the **Region**, the self sufficiency principle results in an intimate understanding of local systems, and permits optimal (ideally synergistic) performance within the regional system. It is our argument that this new level of holistic interactive performance will allow the area to meet, if not far exceed provincial targets; and thereby validate the legitimacy of a bottom up governance structure, operating within a performance based framework.
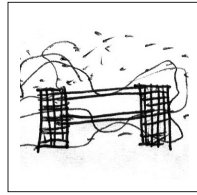
Self Sufficiency Sense of Place
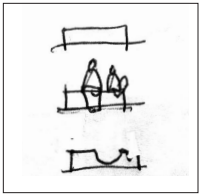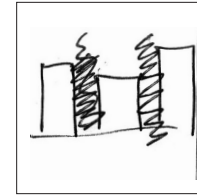
scale. **HUMAN**

Patterns of behaviour modulate form.

'Enabling spaces' nuture human health & interaction.

scale. **BUILDING**

Respect the old, keep the authentic.

Embedded memory-- armature for successive urban euologies.

scale. **BLOCK**

Temporal increment crystalizes embedded form, but marginalized space remains full of potential. Liberate the edge; engage the interstice.

PRECEDENTS

Clothesline Conversation

Example of how human patterns of behavior can modulate form, and contribute to the material reality of the gradation from public to private realms.

Abridged Entry to Quereni Stampa by Carlo Scarpa

Carlos Scarpa's contemporary intervention litterally bridges the gap between past and present, and between embedded memory and enriched future(s).
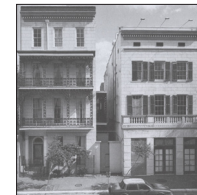
St. Charles Street, New Orleans

This image from Stewart Brand's *How Buildings Learn* depicts how a block can adapt and respond to changing needs over time.
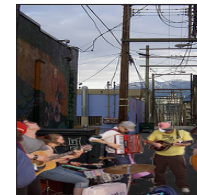
Public Fountains

Simultaneously satisfy multiple human needs; ranging from water as life sustaining substance, to water as quencher for the heart, mind and soul.

NY Museum by Stephen Holl

An example of adaptive reuse with varying degrees of flexibility and adaptability. The more animated conversion illustrates the potential to dissolve boundaries.

Vancouver alley

This image depicts an instance of tapping into the potential of marginalized spaces in Vancouver's back alleys. Showing how the block's material flow systems can be transformed through human projection.

Pigsty Conversion

While the sensitive reprogramming of the small historic structure highlights the richness of historical fabric, juxtaposed against minimal intervention.
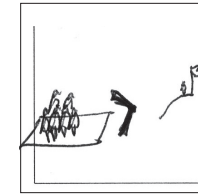
Self Sufficiency Sense of Place
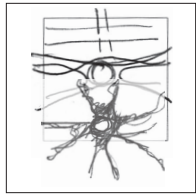
scale. NEIGHBORHOOD

Cultivate existing social condensors.
Reclaim the street. Catalyze sense of identity, sense of place.

scale. SITE

Local commerce > global corporation.
Encourage diversity; yet maintain local identity, and establish local autonomy.

scale. REGION

Understanding local systems permits optimal performance within regional system. Meeting/exceeding provincial targets empowers bottom up governence structure.

PRECEDENTS

Street Cafe & Hairdresser

Example of exisiting social condensor, as opportunity for catalytic growth.

Portland 'Public Sidewalk' by Public Architecture

This project is significant because it shows how a gradation of use can reclaim auto-orientated corridors for social interaction and local expression.

Local Commerce (merchants/ markets/industry)

Studies conducted by the San Fransisco Locally Owned Merchants Society: "local stores and restaurants return much more money to the surrounding community, since they tend to buy their supplies and services locally. For instance, locally owned bookstores create an estimated 2.14 local jobs for every million dollars of books sold. Chain stores create fewer, according to the study -- just 1.27 local jobs for every million.

Hats Off Day

The day of the year when the Heights merchants "take their hats off" to their community and their customers and the entire Heights community celebrates together.

'Our Way or the Highway'

For the Hastings corridor to have any chance at being reappropriated by its local authority, it's 'ownership must be reclaimed from the BC Ministry of Transportation. Denying the corridor its 'highway' status, is essential to evolve it into a gradiating feature instead of an insurmountable divide so the local fabric can be reknit (or 're-felted').

Urban Fabric as 'Permaculture'

Coined by Australians Bill Mollison and David Holmgren during the 1970s, the term *'permaculture'* synthesizes permanent agriculture with permanent culture. It has become both a design system and a loosely defined planning philosophy.

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Vancouver Alley Collage coutesy of *Jennifer Cutbill* (4:12)
Venice Laundry image courtesy of *Doug Paterson (*4:6)
Cuban Home Business image courtesy of *Katy Amon* (4:13)

http://www.aiatopten.org/hpb/overview.cfm?ProjectID=660
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