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I would like to thank my committee-Ante Lui, Patrick Condon, and Warren Techentin-for their valuable assistance, as well as my family for their patience and support.
The DS began as an investigation of certain contemporary lines of thought in science which affect many different fields. This was of interest initially as an alternative to the conventional deterministic theories which have become today's standards. Concepts from this study were distilled to a set of terms which form the basis for an architectural language.

All initial choices in the design project were based upon this language— from site selection to design criteria. Southeast False Creek, the last piece of city-owned land in the area, was chosen as an area for the project for its size—43 acres— which would allow for a scale of design not restricted to a single building. The site proved problematic because of its size and the intense political and social issues surrounding it—precisely the reasons that made it interesting in the first place. Reports have been commissioned by the city at great expense to determine a possible future use of this piece of land. Design proposals and economic studies have been written that alternatively point to turning the site into a park or developing it immediately to avoid the ever-increasing environmental pressures to clean it of its hazardous waste.

Moving towards a design deadline, the city has taken as its mandate the creation of a "sustainable community", the very definition of which required the commissioning of the $60,000 Sheltaire report.

Meanwhile the destruction of parts of it takes place under the nose (and presumably with the permission of) the City: the historic Cannon Industries building which was used in the construction of the Lions Gate Bridge was demolished amidst protest in March 1998.

It is evident now after 2 years of study that the city's notion of "sustainability" may take two forms: in the first case, the city may go for a wholesale development of the land. This would allow for a few people to speak for the many interested in the site. It would effectively and quickly absolve the city of the responsibilities, headache and expense of caring for this sick child. More optimistically, a second scenario would see the city engage in a parcelization of the land which would allow the many interested parties to have a say in its final form. Successful examples of similar schemes exist already in Amsterdam's Eastern Dockland Development, Berlin's IBA, and Florida's Seaside to name only a few.

The idea of parcelization and developing a set of rudimentary design guidelines is entirely consistent with concepts of naturalistic growth explored in this thesis. By allowing land to be developed slowly and around a infrastructural framework, a character will emerge that will be an expression of its many contributors and inhabitants. In addition, because the design of anything on the site would have to respond to both the historic structures and use existing in the area, it will as a matter of course become an extension of the existing use in the area. Such an integration is not the result of general and falsely optimistic planning principals based on outmoded and picturesque notions of how a city should be constructed: conversely, it is the result of many small design decisions acting in close proximity to each other.

In the beginning of the design phase it became evident that for this project to have any meaning it would be necessary to engage in it initially as a planning exercise. As such, the final plans and models exhibit a focus on the broader aspects of design: waterways, streets, height restrictions and public space has been examined with the decision that specific building decisions would take place in a subsequent phase of design. Consequently the project comes to no detailed design conclusions. Instead, it gives form to abstract planning principals in their most initial and untested state. It deals with the broader design issues of large-scale developments which are becoming more and more prevalent, and, paradoxically, involve design professionals to a decreasing degree.
1. The site is conceived of as a series of points (structures) each initiating a type of growth. In this drawing (left to right): Mackay Creek Head, ferry landing, field, Canron Building, ferry landing, Domtar Salt Building, Site of Worship, an institution for higher education.

2. Growth of these points is limited to areas. The five areas in this diagram represent the five major programmatic elements suggested by these original points (left to right): conservation, recreation, historical, religious and tech-
1. Alternate arrangement of programmatic zones, this one based on zones of water or land. This distribution is less democratic but more responsive to different requirements for land or water.

2. Routes and modes of transportation. The lines traced across the site by these various modes serve to physically as well as experientially connect this long and narrow piece of land. They include: tram, bus, ferry, automobile and pedestrian. The existing logic of the city grid is extended into the site.
The Painting

The painting was created from the necessity to give the abstract ideas explored in the DS a form. Acrylic painting was chosen as a medium because of the variety of textures and shapes it affords. It also seemed appropriate as a metaphor for the diverse historical and physical layers present on the site, as paint can be applied and re-applied and retain a trace of the previous layer. As well, it was necessary at this point in the project to break from the traditional media of architecture in order to gain fresh.

The painting is composed of two canvases, each six feet by six feet. This size was chosen as it would allow work in one area to proceed without being influenced by another area: it was important that the painting not be a "composed" image, but rather a series of ideas each responding in turn to its neighbor.

An image of the existing street pattern was projected onto the canvas using an opaque projector, and recorded in pencil. Initially, geometric forms representing the various types of building suggested by the initial explorations were drawn onto the canvas using charcoal. This proved too literal an interpretation, and consequently a selection of different media and mark-making techniques were used to identify the different programmatic elements. For example, red oil pastel represents a series of public transport stations, while black charcoal is used for the existing areas of toxicity. These marks were then allowed to grow—either by extension of the original marks (accretion), repetition (budding), or transposition. The means of growth corresponded to the type of mark made and what it represented.

As this process began to fill the canvas, areas of growth began to collide, necessitating overlapping and layering, and subsequent transformation. In this way the canvas took on the quality originally sought: simple marks are layered with meaning as a result of adjacent activities.

Finally, scratches made through the layers reveal previous work in specific locations. Text is used to clarify the identity of certain places.
Building types:

These models illustrate the combination of building with infrastructure investigated in the organizational schemes. A building type is established for each zone. The resulting overlap and convergences of types and zones results in the type of hybridization which these models investigate.
Conceptual model

This model illustrates how the project would fit into the surrounding area of the city. The central spine of green is both a waterway and tree-lined street. Water draining from the rooftops of adjacent buildings finds its way into this canal, which is aerated in before being released into False Creek.

The spacing of buildings on the site is determined by the penetration of sunlight into public (roads, parks) green spaces, as well as the private, communal green spaces between the buildings. This is also determined through an FSR of 2.1.