THE CHILLIWACK VALLEY CONTINUUM:
A SEARCH FOR A CANADIAN LAND ETHIC

by

TERRENCE CHARLES ARNETT
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Department of Graduate Studies, Architecture

The University of British Columbia
2075 Wesbrook Place
Vancouver, Canada
V6T 1W5

Date October 6, 1976
Abstract

In the attempt to formulate a statement of the Canadian land ethic (if that can even be accomplished), it was decided one area had to be focused upon -- that landscape is the Chilliwack Valley. The description of the factors contributing to the historical layering (or continuum) of the valley has been organized into five chapters.

The first chapter is an introduction to the required theory and methodology. Since this is the first attempt at an analysis of British Columbian environmental history (based on a geographically finite area), various approaches in understanding the processes of alteration and accumulation which were found helpful have been outlined. The theory found most useful suggests landscape can only be understood if the ideologies associated with spatial topics of wilderness, pastoral, and urbanism are examined.

The second is an objective presentation of events which resulted in physical alteration of the valley from its primeval state to its recent urbanization. Seven chronological periods have been identified beginning with prehistory's geomorphology, synecology and aboriginal culture, and ending with the period from post World War II to 1971. The text is supported by a series of ten maps.

The third chapter outlines a theory of cultural diffusion which has determined the expectations of the various settlers to the valley. Due to the limited time and resources available, those aspects of world heritage which filtered to Chilliwack with the British received particular attention. This could be justified because by official, cultural, and individual influence, these concepts have set the matrix for what has occurred in the valley in the past few centuries. Contributions examined include the natural landscape, the village, and the garden city. Each was analyzed for origins, evolution, and dispersal to this continent (and eventually to Chilliwack). A model of idea diffusion has been abstracted.
to gain a more complete grasp of Canadian roots.

The fourth is primary research into the modus operandi behind Chilliwackian landscape alteration. The values and ideals of successive generations of inhabitants have been discussed and their effect upon the land described. Human influence can be subdivided into four groupings including: Stalo responses to the indigenous landscape based upon a 10,000 year residency and a culture closely allied with nature; responses to the landscape by colonists who transferred an existing cultural infrastructure from Europe; responses influenced by contemporary environment solutions circulated throughout the world (both environmentally sensitive and solutions which disregard natural systems); and responses to the indigenous landscape by Chilliwackians, which reflect the emerging Canadian land ethic.

The final chapter revolves around a discussion of Chilliwack's future. It offers a vision of what the future might be for coming generations if the trends indicated by both the legacy of the past and by new pressures facing the valley's limited space and resources are not controlled. Historical precedent for the land controls which offer the only hope for the valley is given. An analysis of the purpose and functioning of the British Columbia Land Commission follows.

In the summary, two observations are made. First, the Chilliwack Valley's mountainous containment coupled with the presence of an advanced civilization should result in the whole valley being regarded as a park for the benefit of both metro and valley residents. Its original perception as the "Garden of Eden" may yet be salvaged for future centuries to enjoy. The second observation is that a Canadian land ethic seems to be slowly emerging, which may come to rely upon Canadian imagery, both historical and natural, for design inspiration.
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CHAPTER I - INTRODUCTION

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CHAPTER I - INTRODUCTION

A. Scope

1. The Continuum - History:

   It is the premise of this thesis that civilization learns from history; no human progress is made without reference to the continuum of the past.\(^1\) Continuum refers to a proleptic interpretation of history which is the antithesis of antiquarianism.\(^2\) It recognizes the continually changing aspect of the flow of history, of form, of space, and of ideas; but maintains that the past moulds the present.\(^3\) There is a stream of ideas, which located and correctly described, can shape the future.\(^4\) In this, an attempt has been made to uncover not the whims of individual preference, but the "basic, common character underlying a series or aggregation of infinite variations."\(^5\)

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1. George Kubler, *The Shape of Time: Remarks on the History of Things*, p.45: "As the linked solutions accumulate, the contours of a quest by several persons are disclosed, a quest in search of forms enlarging the domain of aesthetic discourse. That domain concerns affective states of being, and its true boundaries are rarely if ever disclosed by objects or pictures or buildings taken in isolation. The continuum of connected effort makes the single work more pleasurable and more intelligible than in isolation."

2. R.C. Collingwood, "Ruskin's Philosophy", pp.12-17: Collingwood reminds us that the creators of historical procedure were 19th century radicals who used the philosophy of the sense of time to question the prevailing rational classicism in favour of facts.

3. Sigfried Giedion, *Space, Time and Architecture*, p.6: "The historian detached from the life of his own time writes irrelevant history, deals in frozen facts. But it is his unique and nontransferable task to uncover for his own age its vital interrelationships with the past ... Unfortunately the historian has often used his office to proclaim the eternal right of a static past."

4. Kubler, op.cit., pp.12-13: "The historian ... transposes, reduces, composes, and colours a facsimile, like a painter, who in his search for the identity of the subject, must discover a patterned set of properties that will elicit recognition all while conveying a new perception of the subject ... the historian composes a meaning from a tradition, while the antiquarian only re-creates, performs, or re-enacts an obscure portion of past time in already familiar shapes." Refer also to R.C. Collingwood, *The Idea of History*, p.230 for the progressive argument in history.

With the dramatic break with history as a source of inspiration for the creative community following World War I, several generations have matured without the awareness of the interdependence of humanity throughout time. A myth has evolved that each generation discovers and creates the structure of its own cultural life. Knowledge of the functioning of general cultural history leads to a different conclusion. Only a minute proportion of the present is created from Promethean synthesis. Most of society's structure results from selective interaction among predetermined concepts which leads to extension or to revision as the structure of the past is applied to a present time and place.

For instance, the "new" environmental consciousness discussed with so much vitality is actually a refocusing of the attention of civilized discourse upon land ethics. The basis for both the manipulative and the conservationist attitudes toward the adaptation or husbanding of land lies in the past. In spite of the claims of a "new land ethic", with esoteric or scientific precision adapted for the present, everything natural on planet earth was in an easier state of equilibrium in the past. The question posited is that of how to re-establish a state of equilibrium, not how to discover one. A new

6. Clarence Glacken, "Man's Place in Nature in Recent Western Thought", p.188.
9. Glacken, op.cit., (1970); p.166: "Before the end of the 18th century, certain ideas about man as modifier of the natural world were well established. Perhaps the most important was the idea that man, as the self-judged and self-appointed highest form of the creation, has a natural lordship over the rest of the world."; refer also to Glacken's master work: Traces On The Rhodian Shore; Nature and Culture in Western Thought From Ancient Times to the End of the Eighteenth Century, for an indication of just how immense the subject is.
10. Geoffrey and Susan Jellicoe, The Landscape of Man: Shaping the Environment from Prehistory to the Present Day, pp.373-374: "Now that we know and can assess the forces battering our planet, can they first be resisted by the defensive mechanism of instinct and then controlled and put to work by the intellect? Balanced and self-renewing ecosystems had already been evolved by past civilizations...Can we also, as did the simpler past civilizations, turn scientific data into abstract thought and art, thus to sustain and identify ourselves as humans and not as animals in this extraordinary continuum?"
land ethic, based upon the stewardship principle, must be explained \textit{a priori}, in terms of the flow of precedent. Hence the argument of a land renaissance put forth by Nicholson.\textsuperscript{11}

Human influence as a significant factor in changing the patterns of nature began to be considered as a globally integrated system about 140 years ago.\textsuperscript{12} The new feature of the present day is simply the West's accelerated ability to alter ecosystems in the quest for consumer resources and in the process to shift the balance of nature beyond the point of resilience. The belief that the history of a particular land area through millions of years of geological time and thousands of years of human habitation can make a valuable contribution to understanding just what that state of resilience might be, is gaining credence in North America.\textsuperscript{13}

The other side to the historical continuum lies within the human rationale for studying environmental history. The most concise justification for the analysis of the past as the explanation for the future has been put forth by J.H. Plumb in \textit{The Death of the Past}. Plumb explains, with uncommon frankness, the result of the rejection of the importance of the flow of time (the continuum)

\textsuperscript{11} James Westvick Thorsell, \textit{Wilderness Recreation Users - Their Characteristics, Motivations and Opinions: A Study of Three British Columbia Provincial Parks}; pp.1-2: "In the search for solutions to the problems of the relationships between man and his environment, the philosophy usually cited falls under the rubric of conservation. The noted ecologist, Max Nicholson, has indeed suggested that conservation will be the basis of a 'New Renaissance!'" (Nicholson, "Conservation and the Next Renaissance", Albright Conservation Lectureship IV).

\textsuperscript{12} Glacken, \textit{op.cit.}, (1970), p.163.

\textsuperscript{13} Grady Clay, "Carrying Capacity" in \textit{Landscape Architecture}(Jan.1971, Vol.61,No.2), p.117: "Historical studies, which trace the impact of human occupancy and use on places and resources over long periods of time, are needed to give us better insights into what really goes on through generations."
by any society invariably results in substitution of another set of historical rules. For a nation to survive, it must have an awareness and pride in its origins and progress.

Most cultural leaders find the willingness of Canadian Society to present a low-keyed indigenous culture as its most desirable characteristic, and see this mixture of all the world's concepts on living as providing Canada with rich opportunities. A few writers disagree, and argue the time for the expansive identity of Canada everywhere but here, is no longer an asset; these wish for a new age: one where Canadians will find cultural inspiration at home, in the Canadian continuum.

It is difficult to assess whether one side or the other is correct at this stage. However, if the various aspects of Canadian culture are analyzed, one must be struck with the negligible amount of work that has been accumulated toward identifying Canadian culture. One would assume for the claims of the internationalists and the "Canucks" to be fairly assessed, both arguments would have to be put forth. The difficulties encountered in presenting the "Canuck" side have been noted by Tippett and Cole in *B.C. Studies*: "The dictum that cultural history is the last genre to be considered by the serious historian is exemplified in British Columbia. There is no history of the art or architecture of the Province, no study of its literature, none of its music, or drama". 14 This appears to be because the cultural leaders here, for all their sincerity, did not find enough substance within the heritage of Canada, and especially the heritage relating to the Canadian land ethic, to discuss. This no longer seems to be the case. Canadiana is an immense area of research that presents only two problems: where to start, and where to end.

2. The Continuum - Space:

The other definition of continuum refers to spatial continuity; all parts of the physical universe are interconnected. Indeed, the identification of boundaries in the global village is becoming exceedingly difficult in this era of intercontinental flight separated by only hours of space. More and more one is aware of the interconnections between discrete elements and their surroundings.

Emerson once said: "there is a property in the horizon which no man has but he whose eye can integrate all the parts, that is the poet." Setting aside the political implications of this statement, at a regional level this can be useful in understanding the visual relations between all the parts of a landscape. Innovations in technology in the 1950's led to the developed awareness of the extent of the horizon leading to a concept of microscale and macroscale. A powerful case was made for understanding relations between all parts of a region by architects, artists and philosophers. They proclaimed the need for a new sense of space, a new landscape.

15. ibid., p.8 (quoted by Kepes).
16. Gyorgy Kepes, "Art and Ecological Consciousness", p.3: "Every physical form, every living form, every pattern of feeling or thought has its own unique identity, its boundaries, its extension and its wider context; it contains or is contained by another pattern. The unique identity, discrete shape and nature of a space-occupying substance are shaped by the boundary that separates it from and connects it to the space outside. An organic form lives and grows only through its intricate transactions with its environment."
17. Richard Neutra, "Inner and Outer Landscape", p.84: "Nature is one and continuous; the landscape cannot truly or happily be parcelled, subdivided by a geometrical surveyor's treatment ... and the new landscape reaches into vastnesses and smallnesses beyond the normal sensory range; above all it reaches right into our own innermost physiology ... The entire concept of environment around the growing, living, consuming, absorbing individual now needs revision."
18. Kepes, op.cit., p.10: "The artist now has the opportunity to contribute to the creative shaping of the earth's surface on a grand scale ... we all are now at the threshold of a new scale consciousness, a complete reorientation..." Refer also to Kepes, The New Landscape:In Art and Science, chapter four; and to Sigfried Giedion, "Universalism and the Enlargement of Our Outlook", pp.92-93.
In the 20 years that has passed since the identification of the macroscale-microscale argument, it has been subject to discussion and has been discarded as naive. Without biological and sociological input, the new landscape envisioned by Neutra and Kepes easily becomes a megalomaniac dream rather than a humanized landscape.

The spatial continuum has innumerable facets that must be taken into consideration in its definition if space is to have a tactile immediacy. Another of those facets is the indoor-outdoor, outdoor-indoor paradigm\(^{19}\) -- one of the most intimate expressions of the human scale. At one level this refers to connections from a habitation to the world, while at a metaphysical level it refers to the passage from an individual's "being" to the world around. The diversity of methods for bringing the two levels of consciousness into harmony has been summarized in an article by Geddes.\(^{20}\) Architects have the ability to make the real world more humanly comprehensible; yet how often is this celebration of life now planned into settlements?

Another facet of the continuum revolves around response to site. Is the aesthetic *modus operandi* to be local, regional, provincial, national, continental, intercontinental, or global? Is it to come from the land as a response to the inspiration of an indigenous environment, or is it to be imposed on the landscape in accordance with some foreign vision? Are the two incompatible? Canadian architects have not yet resolved the philosophical issues involved to be able to formulate a coherent answer. The spatial continuum is complex.

\(^{19}\) Frank Lloyd Wright, *The Natural House*, pp.13-34 as a manifesto for organic architecture; and refer also to Frank Lloyd Wright, *A Testament: Frank Lloyd Wright*; pp.102-103.

\(^{20}\) Robert Geddes, "The Nature of the Built Environment", an explanation of methods of attaining site-integration; see also Kevin Lynch, *Site Planning*. 
3. An Open Space Theory:

Architecture is an area of research with infinite nuance. It is also unique among all other academic or professional disciplines for loosely grouped within it are all those who are concerned with human relationships with the environment -- built or natural. This generalist grouping holds a certain amount of cohesion because it is the only area of intellectual pursuit that shares as its means of expression both creativity and the synthesis of enormous amounts of information into concepts that mediate space-form design decisions.

The rubric of the various environmentalist movements of the past decade or so is increasingly having an impact upon the substance that lies within the framework of architecture. Growing numbers of the public are stating that the designers of their world have lost touch with their interests; that some of the work of contemporary architects might just as well be put on the moon.

Fortunately, this public hostility has increased the interest of perspicacious architects in having a closer understanding of the implications of landscape renaissance. The need for creative synthesizers who can give space-form resolutions to the vast range of environmental-land problems facing a society is evident.

Although there is a broad sense of unity to the architectural theme, differences do exist. The differences can be measured relative to the position taken within the space-form matrix. Landscape-architects are concerned primarily with giving form to the various components comprising space, while building-architects are concerned with giving space to form. Further, landscape-architects used to share with building-architects a sense of time, but the former appear to be the only ones remaining dedicated to the long term implications
of their design decisions. Landscape requires the foresight of planning for the future -- the time scale is not the critical path method over a span of months or years, but nature's time which is on a scale measured by generations or centuries.

Central to the understanding of landscape-architecture is the concept of open space. Several writers have analyzed the concept and resolved it into a universal system of spatial categories arranged into a hierarchial order based on relative areal dimensions. The more comprehensive of these systems includes public and private space from the smallest courtyard, through gardens, parks, regional land use, etc., accelerating to encompass the whole globe as an interconnected, life-sustaining biosphere drifting as a blue haze through the universal continuum.

Such a comprehensive spatial scheme presents great difficulties in practice. As long as Canadians require architects to give form to space, the problem of matching client's expectations with design decisions must be faced. One must be aware of the tremendous variation in opinion regarding the design of space. For example, the category entitled private garden tells one almost nothing about the range of design possibilities (both site and human generated) that must be considered in the resolution of the problem. One would expect members of the public as a whole to have interests and biases toward what is acceptable in the

21. Or in the words of Henry Elder: "The fundamental difference between building-architects and landscape-architects is the product of the former depreciates over time, while the product of the latter appreciates over time." C.S.L.A. Congress keynote speech 1972.
22. For instance, J.J. Shomon, Open Land For America, chapters two-three; refer also to Scientific American, The Biosphere.
range of ideas on open space. A megalopolis urbanist, an advocate of a
humane countryside, and a wilderness preservationist, find it difficult
to comprehend what each other's values are. Such conflict in goals is endemic
to a free society. It is right that each should hold to their own values
independent of the rest.

However, architecture must have a spatial theory capable of understanding
the whole range of expectations of the Canadian public. Since the 1960's,
architecture has concentrated most of its attention on understanding urban
phenomena.

This has led to conceptual difficulties when architects attempt to practice
outside the urban milieu. For instance, less than one percent of the Chilliwack
Valley can be classified as a central urban place. What about the rest of the
valley — is that no longer of concern to architects? Clearly, "urban" as a
label for an associated spatial value system is inadequate for defining all
the problems facing the Canadian landscape. There is a need for an architectural
open space theory that can re-establish contact with all aspects of the Canadian
areal and conceptual spatial expectations.

The most concise analysis of such a universal attitude towards the cognition
of space is that formulated by Professor Collingwood. He has reduced the
discussion of spatial aesthetics to three philosophical issues: the wilderness,

23. Morton and Lucia White, *The Intellectual Versus the City: From Thomas
Jefferson to Frank Lloyd Wright.*
27. ibid., p.100: Collingwood believes nature should be inclusive of mankind and
our creations, not separate: "It is something for which no one has worked,
something that has come absolutely and exquisitely right by no effort, but
by a pure act of divine grace ... the effortless immediacy of nature is in
everycase not something accidental to its beauty but the very heart of beauty."
28. ibid., p.102.
the pastoral, and the urbane, corresponding to the degree of human intervention in the adaptation of nature.

Here then, is a spatial theory suited to the full range of understanding of all the people's attitudes towards architectonic space. Even in National Parks the issues facing design on the land are not simply a matter of wilderness preservation (as appealing as that is toward defining the Canadian land ethic), but rather the full, complex range of expectations by humans toward the landscape has to be understood. This triad of wilderness, pastoralism, and urbanity offers the only theory capable of defining the Canadian land ethic.

29. ibid., p.104: "Nature to be beautiful, need no longer be wholly untouched by man; and that human interference, so far from impairing its beauty, may in certain circumstances even enhance it."

30. ibid., pp.111-112: "Therefore these utilitarian devices for overcoming nature are inflicted with a tang of nature herself, and in so far as they are beautiful, their beauty is a reflection, perhaps a concentration and intensified reflection of nature's beauty."

31. Thorsell, op.cit., p.11: "In the historical sense, wilderness has also been at the fountainhead of the conservation movement. In explaining man's attitudes towards the environment, wilderness, therefore, provides an important benchmark for study of the man/nature equation."
B. Research Hypothesis

1. The Hypothesis:

The function of the research hypothesis is to permit the substance of the
subject matter to be thoroughly analyzed and a conclusion to be drawn which has
relevance for contemporary society.

Formulation of a hypothesis in historical research is a continuous exercise;
it must be comprehensive enough to give an overview of the entire subject, and
yet be pliable enough to permit analysis of all the various phases. It must be
phrased in simple terms to permit ease in communication to the eventual reader,
but not insult their intelligence. And above all, it must present a personal
judgment on some aspect of society that can be open to objective debate; but
yet it must be of broad appeal so that all who participate in the debate may
further understand Canada.

The hypothesis finally chosen is this:

The absence of an applied land ethic in recent years
has had a disturbing effect on the Canadian landscape.

2. Hypothesis Explanation:

An explanation of the hypothesis is essential, for it provides you, the
reader, with my biases and motivations for spending the past few years writing
this paper. The hypothesis explanation, or as my committee prefers, the
sermonette, revolves around a belief that the more that is learned about this
land and the way Canadians presently utilize it, the more alarmed one must
become at the lack of concern shown by Canadians for their territorial heritage.

Contemporary Canadians demonstrate a pronounced concern for the values and
pleasures of everywhere in the world except Canada. There is an overwhelming
sense that Canadians, and the rest of the world, view the land mass of northern
North America as a gift to the world; if not a gift, then something to be utilized to gain wealth to permit the enjoyment of another part of the world.

The effect of the virtual absence of a land ethic can be seen in the valley of the western terminus of the nation. The Lower Fraser Valley's humanized landscape does not measure up to the standard set by the natural landscape. The architects, planners, developers and politicians responsible for building settlements in the Lower Fraser Valley have to be continually reminded that this place is one of the best places in the world, if the humanized landscape is to reflect the area's natural beauty.

The Canadian land ethic equation cannot be formulated independently from consideration of what has occurred elsewhere or what will occur elsewhere, for the world is increasingly becoming smaller and interdependent. The cumulative effect of an unwise decision made in one part of the planet today has been shown to have an unsettling influence upon a global network. Ecologists have shown just how fragile the terraqueous systems of the planet are. The main stream of thought is being directed towards solving the problems inherent with the passing generation's insensitive and critical impact upon the very resilience of nature's balance. Even the notion of abundant resources has come under close scrutiny. It is now recognized that there are limited resources available which require prudent husbanding if there is to be a civilized future. A global approach to resource conservation is increasingly advocated and will have to dominate political policies for the rest of time.

34. The earliest such conference (1956): William L. Thomas Jr., Man's Role In Changing the Face of the Earth.
35. Julius Kame, "Our Land, Not Yours" (spec), p.3: he outlines the trustee principle of use of land's resources with recognition of requirements of future generations.
Although Canadians must consider the role of external forces in the shaping of their land ethic, the intent of those forces upon the nature of the Canadian fabric must be cautiously assessed. One glance at the morning paper is enough to be able to recognize we live in a frightening world, and Canada is the last civilized nation to face the world without a cultural presence. One aspect of that cultural presence that is missing and essential is that of a coherent and inclusive land ethic to bind Canadians to the values of this place. In this, we are about 50 years behind the United States, and about 1,400 years behind Britain.

Canadians have an almost religious optimism in the value of universalism that must surely be retained. The freshness and idealism of this society is one of the most significant forces for keeping the world on the path towards freedom and peace for all of the family of man. All should have the opportunities for expression that Canadians have. However, if the message is preached without the precaution of strength, this nation will be lost in the brutal shuffle for power that only land can give.\(^{37}\) If Canadians do not learn to love the land under them, others will.

In the search for a land ethic, one must be struck by the fact that the present indifference is only a post World War II phenomenon. Our forefathers viewed the land as the definition and source of life. They struggled to make this nation possible, and gave to it a foundation of fortitude, vision and idealism. For hundreds of years they lived as an outpost of civilization and faced tremendous difficulties with actions of heroic proportions to create a cohesive society for one of the world's most promising countries. In recent years, this foundation has been scoffed at or forgotten. What has gone wrong?

\(^{37}\) Norman Pearson, speech to Canadian Society of Landscape Architects, Congress, August 1976: he outlined 13 points leading Canada to disaster and only five points to counteract them -- this nation's future is sobering.
It may well be that Canadians will find it suitable to define the future by shifting closer to the source of our society. To reawaken the idealism that characterized the first Canadians, history should be re-examined.
C. Methodology:

1. Criteria of Site Selection:

The selection of a specific landscape as a focal point for study was a prerequisite, for the study of landscape relies upon the aesthetics of a particular place.

The intrinsic qualities of any chosen site influence the judgments of the analyzed subject matter. For instance, there is a natural inclination to approach the study of a land ethic as the search for an alternative to the demands and stresses of contemporary life. The Gulf Islands symbolically appeal to the needs of this recuperative and contemplative landscape. Similarly, the British Columbia Ecological Reserves could be selected to represent another significant discrete approach to land ethics: man as the unobtrusive observer who preserves and records the natural ecological systems of the wilderness. However, to have accepted a site beyond the metropolitan sphere would have avoided the complex issues germane to contemporary life. National communication networks, industry, population increase, food production, housing, are all some of the cogent realities facing design on the land. If systems are to be unearthed that will make gentler demands on the Canadian landscape, a site must be chosen that reflects all aspects; that is, the open space theory put forth previously set the criteria that the study site had to have: a trilogy of wilderness, pastoral and urban components.

The Chilliwack region was chosen. Lying beyond the immediate influence of metropolitan Vancouver, Chilliwack presents, at first glance, the rural myth: slower paced, cohesive, connected with the land, fulfilled lives, etc. It seemed to provide a good example of the benefits of a gentler society. Also, it is closer to the British Columbian aesthetic landscape's genus loci -- in the near mystical qualities of the mountainous terrain that closes in upon the
valley (refer to Appendix A). The other advantage is that it is widely believed that Chilliwack offers the key to understanding the reality of the British Columbian landscape.

2. Definition of Site Boundaries (Spatial Continuum Identified):

The definition of what is meant by "the Chilliwack Valley" is difficult. Even the name is subject to controversy. Local historian, Casey Wells, has identified 23 different ways of writing Chilliwack. The closest to the Halkomelem is obtained using the phonetic system: chili-WAY-oek. Its meaning is equally obscure. Wells has accumulated over a dozen different interpretations. The generally accepted meaning is "return to the source (head)". This probably refers to the headwaters of the chili-WAY-oek river, Chilliwack Lake (or in Halkomelem, s'HAW-chuk'1). However, the actual meaning is a good mystery which will continue to be debated.

Considering the definition of physical boundaries designated by the term "Chilliwack Valley" is just as difficult. It depends upon the terms of reference used. For instance, the Chilliwack Valley is within the area defined by geologists as the Fraser Lowland sector of the Georgia Depression. In geopolitical terms, the Canadian sector of the Fraser Lowland (960 square miles north and 390 square miles south of the 49th parallel) is the Lower Mainland. By custom, the area is also known as the Fraser Valley, but since this defines an area from the Cariboo hinterland to the Gulf of Georgia estuary, the more precise Lower Fraser Valley is used.  

38. Note: when valley is spelt with a small "v" it refers to Chilliwack Valley; when Valley is spelt with a capital "V" it refers to the Fraser Valley. Also, the different spellings of "Chilliwack" should be carefully understood for each has a different meaning.


40. Mary L. Barker, Water Resources and Related Land Uses Strait of Georgia-Puget Sound Basin, pp.3-16 for description.
Whether it is possible to separate the Chilliwack Valley from its context, the Lower Fraser Valley, is a moot point. However, from both the physical evidence and the political-economic subdivisions that have been made over the years, few would disagree that such a division does indeed exist.

If physical boundaries are used, then the study area is defined by the topographical features of Sumas Mountain to the west, the Coast Range to the north, Mount Cheam to the east, and the Cascade Range to the south. It is an area that encompasses both sides of the Fraser River from the rising and ebbing liquid loess surface to the top peak rimming the valley. Standing in the midst of the valley and rotating, the visual presence of the whole gives an overwhelming sense of containment and of isolation from the world beyond the mountains. This place is unlike any other, and is a clear boundary that can withstand the passage of time. (see figure # 1a.) Included in the physical boundary definition would be the trails leading from the valley up to the numerous mountain areas.

If the boundaries employed by the original settlers are used, then the term "Chilliwack Valley" refers not to the sector of the Fraser Lowland described above, but rather to the Chilliwack River Basin. From Chilliwack Lake, the Chilliwack River flows through the Cascades onto the Fraser Plain. Originally it flowed through (and frequently overflowed) several channels to become tributary to the Fraser at the place now called Chilliwack Slough. (As the landscape was progressively manipulated in the 19th century, the course of the river changed). The original colonists, known as the Chilliwac, called the river "Chilkwayuhk" or "Chilukweyuk" and called the widest river in their world "Stalo" or "Staw-loh". This tribe of the Coastal Salish chose to build villages clustered along the Chilukweyuk upland for fear of attack by hostile tribes from the west, south and east. It was not until the mid-19th century that they felt safe enough to abandon their ancestral grounds and move down to the floodplain to utilize its richer resources. Using oral myth and a refined perception, the
Figure #1. Chilliwack Boundaries

(a) Chilliwack Boundaries

(b) Chilliwack River Basin

(c) Chilliwack Township (1873)

(d) Chilliwack City (1908)

(e) Chilliwack Trade Area (1966)
Chilliwack defined the boundaries of the valley using the physical realities of rivers, lakes, bogs, hills and mountains for property markers. (refer to figure #1b).

Yet another method of defining the valley arose with the arrival of a new wave of settlers from Europe and continental America. These brought to the landscape a new technology and set of ethics. The land was surveyed and divided into parcels for each family. When the settlement reached an appropriate stage of growth, the Township of Chilliwack was incorporated in 1873. The present boundaries are extended slightly beyond the original, but basically they included the land between the south bank of the Fraser River from Mount Cheam, past Ryder Lake, and close to the former Sumas Lake. Connections with the north bank of the Fraser were tenuous, but regular. A ferry boat operated between the Young Street landing and Harrison Mills, since the coming of the C.P.R. in 1886. The boundaries of the township (now called Chilliwack Municipality since 1908) were conceptually arbitrarily applied. Cartesian geometry was imposed on the landscape in the eastern and southern boundaries without reference to the lay of the land. (see figure #1c).

In 1908, the direction of goals of the urban and the farm community in the valley shifted into two camps. This resulted in the revision of the boundaries of the township to permit the incorporation of Chilliwack City. There are 988.1 acres in the city as compared with 63,808 acres of the municipality. Chilliwack early developed the lead over the numerous villages in the valley as the regional centre, a position it has retained to the present. Indications are that the aims of the city and the municipality have coalesced around urbanization, and so the fall 1976 vote regarding unification may be accepted.

41. In an era when physical difficulties were taken for granted, both sides of the valley were viewed as a distinct entity: Refer to Howay and Scholefield, British Columbia From the Earliest Times to the Present, Vol.II, p.582: "In October, 1862, the first settlers arrived at Chilliwack. Soon others followed and by the spring of the following year about sixty persons had pre-empted land along the Harrison and Chilliwack. These two localities were then regarded as one district."
This boundary definition may pass out of use. (see figure #1e).

The economic boundary of the valley since the construction of the Rosedale-Agassiz bridge in 1956, has been focused on Chilliwack City. The Chilliwack trade area was identified as having the following boundaries: Ryder Lake, Chilliwack River cluster, Cultus Lake, Sumas, the south bank of the Fraser River to Cheam View, and across to the Kent-Harrison area on the north bank. The residents west of Harrison Mills (i.e. Deroche, and Dewdney) do not shop in the valley, but rather relate to the Mission-Maple Ridge trade area.42 (see figure #1e).

The difficulties encountered in defining the precise boundaries of the study site will now be apparent. No one concept is satisfactory. Instead, the most accurate understanding of the valley comes not from terrestrial vision, but from the wholistic spatial experience envisioned from the surrounding mountains, (refer to figure #2), or better still, as described from an airplane encircling the region from various heights (refer to figure #3). And of course the ultimate in sophisticated aids to inclusive visual mapping is the Canadian Remote Sensing Satellite (refer to figure #4),43 and helps put the valley into a universal spatial context.

Man instinctively responds to the yearning to set the world in such a perspective. Before, he had to "jump the wall" or climb a mountain. In the 20th century, perception has been dramatically extended with flight. The landscape is regarded now not from a fixed reference point with static boundaries, but with fluid, continuous boundaries as seen from any point in the three dimensioned atmosphere — the continuum of space. The meaning of the

42. Garry Harkness, A Comprehensive Development Plan for Chilliwack City, p.8, figure #2: "Chilliwack Trade Area".
43. To be able to read the significance of the aerial information a text on terrain analysis was studied: Douglas S. Way, Terrain Analysis.
figure #2
View of the Chilliwack Valley from Mount Cheam.
On clear days, one can see Vancouver and the Island.

figure #3
Aerial Photograph of the Chilliwack Valley, circa 1970.
(from the National Air Photographic Library, Ottawa, print photo courtesy Garry Leong).
Figure #4. Remote Sensing Photo of the Fraser Lowland. Assembled from collage of the following orbits: FC 51.26.44 (Jan 75), FC 50.26.24 (June 75), FC 50.25.24 (June 75), FC 51.25.44 (Dec 74).
Chilliwack Valley must be seen relative to the entasis of the planet.

The Chilliwack Valley is tied to the larger systems. Expressed in contemporary geo-political terms, the valley is the eastern fringe of the Georgia Strait Urban Region (refer to figure #5); the western node for the Fraser-Cheam Regional District (refer to figure #6); and is connected via Canada One (Trans-Canada Highway), the Canadian Pacific and Canadian National Railways, with Canada's urban corridor. (refer to figure #7).

3. Human Attitudes as Determinants of the Landscape Adaption Process:

Human will is the initiator of land alteration for human requirements. Even a remote wilderness area in Canada is not preserved except by deliberate human foresight and the pressure of persons dedicated to that particular form of space. To understand the tremendous range of attitudes (ideals/expectations) of the Canadian people, a thorough grasp of the continuum of human will must be obtained.

In this, one must not confine research to the state of enlightenment discussed by the arts and humanities regarding the collective soul of mankind, but rather, the full spectrum of cultural "nitty-gritty" regarding the social, economic, political, religious, philosophical and aesthetical events of the past which add together to characterize the particular landscape at a particular time.

There are four determinants to the Canadian land ethic. The first concerns

44. Graham Collier, Art and the Creative Consciousness, introduction, also p.106: "When art does manage to convey strongly the quality of our inner life, we realize that the forms employed go beyond their representational associations and tell us much about the nature of man's ineffable experiences."

45. In the first half of the 20th century, historians seemed obsessed with defining the components of "culture". The vagueness of the approach coupled with the general malaise for the flow of time in the second half of this century has led to different interests. One of the better attempts to devise a total theory of cultural history was prepared by Leslie White, The Culture of Man.
Figure #5

The Chilliwack Valley relative to the Georgia Strait Urban Region

from a map prepared by Louis Skoda for the Ministry of State for Urban Affairs and the Lands Directorate, Dept. of the Environment.

Figure #6

Fraser-Cheam Regional District
reproduced from "South-Western B.C., Showing LMRPB Planning Area and Regional Districts", LMRPB, Regional Districts in the Lower Mainland, p.4
On the top is a conventional map showing the land areas of the provinces, Census Metropolitan areas and selected Census major urban areas. On the bottom, and opposite, is a nodemographic map showing the same information, but with the areas of the map units proportionate to their population.
traditions evolved from close association with a primeval landscape. Second, concerns traditions evolved in a homeland and loyally carried to the new world by colonists. Third, concerns contemporary international solutions applied to Canadian domestic problems that have been assimilated during the 20th century. Fourth determinant of the land ethic is the responses to a particular environment by Canadians who identify with the unique conditions, community and landscape of Canada.

Elaborating with reference to the Chilliwack Valley, the first determinant was the set of values evolved by the Stalo people through eight thousand years of intimacy with the valley. These traditions were amongst the world's most environmentally sensitive. Study of the first residents' beliefs is essential to understanding a land ethic for the future.

The second determinant, traditions evolved in a homeland, is also a critical factor in understanding the attitudes that have humanized the valley until the recent present. Although all the world's cultural heritage is interlinked in the story, the values and aspirations which ultimately shaped the landscape were applied through a British filter. That the valley's infrastructure has its roots in Britain is not accidental.

When the explorers and settlers arrived in British Columbia, they saw the potential of the lowland areas of England, the rugged highlands of Scotland, the mountains and lakes of Wales and the rough coastline of Ireland. The strength of the ties to the homeland were so close that the genus loci of this Province was not until very recently located within the Province, or even on this continent. For the last three centuries, it has been in the British Isles. This land myth with its love of nature and its consistent stewardship.

ship precepts has been imparted through a combination of poetry, painting, literature, land design and agricultural policies.

It is unquestioned that the ideals of the "mythical" British countryside in all its facets set the expectations of the Canadian public and especially the expectations of the British Columbian landscape. 47 Most writers on British Columbia find it necessary to understand the functioning of British life in order to understand the basis of the attitudes of British Columbian life.

For instance, in writing his dissertation, Gibson found it necessary to construct a model of British social beliefs in the 19th century to be able to understand how the social landscape of Vancouver evolved. 48 This thesis relies upon the arguments put forth by Gibson, but it soon became too limited in scope to be able to examine the full range of social beliefs. Instead, two images of the continuum brought to the new land will be explored: the village and the natural landscape.

The third determinant of the Canadian land ethic: contemporary influences evolving external to Canada which then have been assimilated, have had a major impact upon the developing Canadian landscape of the 20th century. It is difficult to isolate particular phenomenon as modus operandi for this determinant, because many of the components are still evolving. However, one movement does stand out as the predominant influence of the first half of the 20th century. That is the Garden City Reform Movement. The impact this has

47. For instance J.W. Wilson, et.al., Land for Leisure: the expectations of the public are so deeply ingrained in the consciousness of this end of Canada that aesthetics does not require an explanation, it remains implicit. Also, experience gained by the writer in designing public parks demonstrates the narrow range between what is acceptable and unacceptable by the public judgment.

48. In choosing the British as the main filter and as the basis of the Canadian land ethic, E.M.W. Gibson's dissertation, The Impact of Social Belief on Landscape Change: A Geographical Study of Vancouver, established the substance of the argument; refer for example to p.8: "Thus the early Vancouver landscape and its connections with British and British-Canadian social beliefs had to be reconstructed as a prerequisite to the analysis of landscape changes."
had on planning theory and in expressing the desires of the Canadian people for community standards is documented in Chapters III and IV, along with the influence of the village and natural landscape components of the countryside myth.

Since the Second World War, the third determinant of contemporary external influences has led to patterns from around the world being applied to the valley. It is still too early to assess the lasting value of these recently applied patterns.

Le quatrième et dernier facteur déterminant consiste en la réponse à l'environnement canadien, au milieu canadien. Le fait de comprendre ce qui sépare Chilliwack de tous les autres espaces du monde est l'aspect le moins compris et le moins accepté de l'histoire. On devrait étudier de nouveau l'histoire du Canada pour la contribution des filtres culturels aborigènes, britanniques et français. L'aspect rationnel devrait être de démontrer comment l'on en vint à changer ces attitudes dans l'implémentation actuelle au Canada. Cet endroit ne représente pas la répétition de la Grande-Bretagne, de la France, des Etats-Unis ou de n'importe où ailleurs. Le Canada et l'aspect extérieur canadien naissant peuvent en dernier lieu déterminer la forme finale que prendra le paysage.

The aspects that make Canada distinctive are the least discussed and the least understood parts of the human play that is about to be described. It is hoped one would be convinced by the play that the origins and the explanations of Canadian patterns can be seen in the analysis of the fourth dimension, the flow of time.
4. The Comparative Methodology Approach:

Although Collingwood's theory of natural aesthetics (wilderness, pastoralism and urbanity) provided the framework for an inclusive exploration of the Chilliwack conceptual landscape, it was not sufficient to structure the complete empirical inquiry into the parts of the hypothesis. Therefore, several interdisciplinary theories were consulted. One of the most fertile of the non-architectural approaches was a theory in historical geography termed the "cultural landscape".

This theory was developed as a means of symbolically recording the effect of "culture" upon a particular land form. Since its introduction, there has been disagreement over the methodology. One school maintains that the landscape can best be understood by analysis of successive overlays of events throughout history. However, another school believes that the most important aspect is the present physical landscape, so this should be the subject of investigation.

The writer has too limited a background in geography to evaluate the validity of the competitive claims, so it was decided instead to rely upon an interdisciplinary approach -- that of "urbanization". Within this looser designation, geography's interpretation of the cultural landscape (e.g. as per Sauer) became the dominant method used to describe the "urbanization" of the Chilliwack Valley. However another

49. M.W. Mikesell, "Landscape", p.11: "The underlying assumption of Sauer's argument was that the features thus studied would be characteristic and would be grouped into a pattern and that the landscape defined eventually by this inductive procedure could be described as belonging to a specific group of a series ... in addition, Sauer felt that landscape should be studied genetically ... in development sequence." Refer also to the closest comprehensive example of the historical geographic description of the cultural landscape in the Pacific Northwest, D.W. Meinig, The Great Columbia Plain, 1805-1910.

50. For an example of this school, refer to the rather naive description of land in the 1930's by P.W. Bryant, Man's Adaptation of Nature: Studies in the Cultural Landscape.

51. For encouragement in the use of geographical theory by non-specialists, refer to Alan R.H. Baker, Progress in Historical Geography, p.131.
difficulty soon had to be faced with the description of the urbanization of the valley, for this generalist term may imply to the layman a state of progressive expansion of an urban core until the valley is a city from the mountain tops to the river's surface. This is not the intention. To describe the effect of increasing polarity of Chilliwack urban systems with those of the metro systems and the resultant increase in demands on the resources of the valley, a more neutral heading had to be found. That was "Chilliwack's Environmental History".

The advantage of the cultural landscape approach lies in its allowing the organization of a diverse range of facts into discernible patterns. The disadvantage is that it only measures physical manifestations of an objective reality, and does not attempt to understand the conceptual process that led to the form's creation. The analysis of this process is the realm of the architectural historian, who is educated in the various facets of space-form conceptualization, and thus can properly identify and discuss the significance of a particular land decision and place it within the context of a general trend. Beyond the original sifting of the enormous amount of material, the cultural landscape (as here described) became useful only for structuring the series of 10 maps that presents the story graphically.

In the realm of general history, the diverse theories lucidly put forth in the last two centuries make it difficult for a student to sort competitive claims. Not only is time and human conceptual space constantly changing, but

52. Geographers recognize the limitations of their own field; refer to Alfred Siemens, "The Process of Settlement in the Lower Fraser Valley — In Its Provincial Context", p.28: "it is useful to set out the principal factors influencing settlement in British Columbia. Each "factor" is really only a generalized tag for a complex of related circumstantial factors that influenced decisions taken by the settlers. The effects of these circumstantial factors, only imperfectly documented and understood, should, in actuality, be seen in relation to the various values and motives of the settlers ..."
historical theories making sense of the continuum are also evolving. Therefore, greater reliance was placed upon several primary history texts which sorted theory from established procedures for studying those theories; in particular, these texts helped in the formulation of the hypothesis, in the collection of data, and in the use of evidence. Given the extensive range of the hypothesis, and the near vacuum of previous scholarship applied to this landscape, the reliance upon historical methodology was essential to maintain a continuous structure to the massive amount of material.

The wariness of evidence cautioned by both Safer and Cantor proved well founded in the case of Chilliwackian primary material. One case which illustrates this best, is the conflicting versions of the direction alteration of the Chilliwack River to the Vedder. Over a dozen sources had to be consulted to resolve the great river mystery. Since the story was spaced over the century 1820 to 1920, it is understandable that no one source presented a correct answer. It is also understandable that none of the present residents consulted could give a comprehensive explanation. The actual version seems to be a collage made from the more reliable sources. In this, another historian's theory of reliance upon visual information for cues in understanding historical evolution of the landscape was useful. The importance of this river's course proved to be worth the time spent in research; it was a key element in the explanation of the erratic evolution of the irregular settlement form of Chilliwack. Similar care was taken in investigation with the rest of the evidence.

53. Kubler, op.cit., p.62: "Our attitudes towards these processes are themselves in constant change, so that we confront the double difficulty of charting changes in things, together with tracing the changes in ideas about change."
54. R.J. Shafer, A Guide to Historical Method; see also N.F. Cantor and R.I. Schneider, How to Study History; both are deceptively comprehensive.
55. Although Casey Well's knowledge is the closest to being accurate.
56. Hoskins, Fieldwork In Local History.
At the same time, architects rarely cultivate an affinity for words or precise methodological procedures, so the use of the various methods admittedly did involve a degree of latitude which the individual disciplines may have questioned. In the defense, architects rely upon a method of analysis of creative synthesis to formulate an understanding of any problem (i.e. architecture is based on media other than words). In the case of this specific thesis, the somewhat scrupulous acknowledgement of the complexity of any generalist analysis by studying the various methodologies on a comparative basis must be considered refreshing. Most generalists jump from point A to point B without being aware of the enormity of the chasm between.

Part of the chasm which has been overlooked in the past 20 years or so, is that of grass roots history. The difficulty in convincing professionals that local history is a valid area of research, and that they must respect that interpretation in design solutions is reinforced by an attitude which sees Canada as a backward land in need of external guidance. Local history has been regarded as beneath serious interest. However, local community groups have developed a keen awareness of their history as a means of identifying their presence within the nation. The focus of concern will one day include local issues, but when that happens, the enormous ideological differences between the history of greatness and the history of simplicity will have to be reckoned with. This is by no means insurmountable; co-operation and access to the records of the various local historical societies is a privilege which requires care but is enthusiastically offered.

The reawakened interest of architects in taking up the challenge of working with numerous other fields in defining the various aspects of spaceform relationships required for a sophisticated society heading for the difficulties of the 21st century, albeit with all the complications such studies entail, will be increasingly witnessed by Canadians. As long as the
classical definition of architecture remains: "any ordered arrangement of the parts of a system; as architecture of the universe" and the classical definition of an architect remains: "one who constructs or plans anything"\textsuperscript{57}.

5. Research Format:

There are five chapters to the thesis. These are entitled: Introduction (I), Chilliwack's Environmental History (II), Conceptual Landscape Heritage: An Evolution and Dispersal Model (III), Attitudes Shaping Chilliwack's Landscape (IV), and the Future (V). Chapter IV and Chapter V hold the central issues.

\textsuperscript{57} Oxford Dictionary and Funk and Wagnalls' Dictionary.
CHAPTER II -- CHILLIWACK'S ENVIRONMENTAL HISTORY

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CHAPTER II - CHILLIWACK'S ENVIRONMENTAL HISTORY

A. Scope

The method used to present the valley's continuum is based on chronology. This is justified by the recognition of the Province's youth and of the enormous number of changes that have taken place with the passage of each year. The only remaining difficulty was in abstracting significant events in the story of the shifting environmental impact of nature and man on the valley's landscape. The abstraction concerns the grouping of sequences of time into periods or patterns. If the patterns are rigourously selected, the past should become more intelligible, and thereby make it possible to project the future of the valley with some degree of accuracy.

Specification of such a patterned chronology became an exercise in selecting a scale of event priorities. Five levels were feasible to use as a reference: local, regional, provincial, national, and external. Each level has differing environmental emphasis, leading from the outset to structuring of five different chronological patterns.

Three can be set aside. External influence was discarded because Canadian history has been dominated by external criteria: it is time to restructure Canadian history more in terms of internal occurrences. National patterns were also set aside in response to that philosophy put forth by many Canadian historians who believe that to understand the tremendous diversity of the nation, one must focus upon the parts. At the same time, most "grass roots" historians agree in the importance of formulating local history relative to the larger community.¹ This resulting tension in chronological scale permits comparision

¹ H. Bowsfield, "Writing Local History", p.5: refer also to P.W. English & R.C. Mayfield, Man, Space and Environment: Concepts in Contemporary Human Geography, p.6: "though the best landscape studies are framed within a broader intellectual context, too many of them substitute diligence for intelligence."
with other parts of a system, and permits broader insights to be made into the causes of local landscape change.

The chronological patterns of the regional and provincial levels offer the most potential for defining the story. Lower Fraser Valley history, as a region, has been divided into four periods of economic development commencing with 1808. These four regional periods proved to be insufficient to structure the enquiry. Therefore, that left the provincial level as the only remaining standard. Fortunately, five periods of economic development for British Columbia have been identified by Drs. Robinson and Hardwick, beginning with the establishment of Fort Victoria in 1843.

To be consistent with the reasoning of a larger context put forth above, the provincial pattern should be the one used for the organization of chronological research into the valley's landscape. Unfortunately, the first period in the Robinson-Hardwick framework is insufficiently detailed to account for the numerous changes that took place prior to 1843. Therefore, an adaptation had to be made resulting in the following six patterns: prehistoric period (prior to 1808), exploration (1808-1862), settlement established (1862-1886), post-confederation speculation (1886-1918), productive expansion (1919-1946), industrial growth and functional integration (1947-1971). This patterning is more catholic in its environmental assessment of the valley's history than any simplistic model of hierarchial economic growth.

The format of this section is to discuss the environmental changes which occurred in the Chilliwack Valley for each of the six time periods. The theoretical basis of the analysis of this part is the geographical concept of

the historical landscape. This requires an objective presentation of the various alterations to the landscape (first by nature and then by man), and the charting of the information on the geographical map of the particular time in the historical sequence.
B. Prehistoric Period (prior to 1808)

1. Geomorphology:

For most of the planet's six billion year evolution, the Chilliwack Valley was beneath the Pacific Ocean. It was not until our own Pleistocene Epoch that the area underwent a cataclysmic upheaval, as the Cordilleran Mountain System formed along the length of the west coast of the continent. Recollections of these tremendous forces can still be felt, as Mount Baker volcanically grumbles; the valley's past was not that of a tranquil arcadia.

Bedrock was formed during the billion year quiescence, and with the uplift, it came to be positioned in the rugged Cascade and Coastal Mountain ranges which surround the Chilliwack Valley. This natural amphitheatre became the stage for the functioning of the ecosystem evolution and elaboration, and eventually became a magnificent stage for the human drama.

The topography underwent considerable alteration by glacial, gravitational and weathering forces throughout the late Pleistocene Epoch. In fact, this period reduced the roughest edges of the bedrock as the Fraser Lowland gained a minimum 1,100 feet change in surficial geology. Erosion was a significant factor, but glacial and alluvial deposition were the predominant contributors to developing the present configuration. Armstrong has identified ten phases of this deposition, and has classified them thus: Pre-Seymour group, Seymour group, Quadra group, erosion interval, Semiahmoo group, erosion interval, Vashon group, Sumas group, Capilano group, and Salish group.

4. To understand the formation of this landscape's morphology, several primary texts on the subject were consulted; refer to C.O. Dunbar, Historical Geology; for a more detailed analysis (which indeed qualify the opening paragraphs above) refer to J. Brian Bird, The Natural Landscapes of Canada: A Study in Regional Earth Science, chapters 1 to 6 and 13.

The impact of successive ice ages greatly altered the valley's landscape. These northern hemisphere ice sheets began about a million years ago due to fluctuations in the earth's climate from a combination of earth-crust slippage, polar magnetism change, and atmospheric adjustment. Of the four or so glacial ages, the last, the Late Pleistocene, had the most profound effect on the Chilliwack region. This age is divided into two periods: the Olympia inter-glaciation, and the Fraser glaciation. The former was a respite from the frequent glaciations, lasting from 36,000 to 24,500 BP. The Fraser glaciation was the most recent ice age. It is further subdivided into seven stages beginning with the Evans Creek Stade about 24,500 BP. Evans Creek Stade produced the initial development of the Cordilleran Ice Sheet in the B.C. Mountain ranges. This sheet advanced to cover the Lower Fraser Valley during the subsequent Vashon Stade.

The latter lasted from 18,000-14,000 BP. Vashon ice encased the Lower Mainland with a 6,000 foot thick continental glacier which flowed through the Valley on its journey into the Gulf of Georgia. There would be another, but minor, glaciation about 9,000 BC, when a 500 foot thick glacier advanced as far as Sumas, but by 14,000 years ago, most of the glacial impact had been felt.

As the glaciers advanced over the interior mountains, their intense force ground and eroded considerable amounts of loose material which was then carried along -- pushed in front and bound within the ice. The accumulated soils and boulders came to rest as the glaciers reached their southern terminus, which happened to be the Lower Fraser Valley.

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8. ibid., p.327: "The last major climatic episode during which drift was deposited by continental ice originating in the mountains of the mainland of B.C. and northwest Washington ... was the Vashon Stade."
9. For scale, keep in mind that the local landmark, Mt. Cheam, has an elevation of 6,913 feet.
The uplands of the Valley gained, through this action, a thick layer of hard pan that brought their elevations close to what can now be seen. The lowlands also received this glacial till coating, but would continue to evolve several more millenia until reaching the present structure. To better relate to the glacial passage, this image may help: intuitively one would imagine the hill, Chilliwack Mountain, to have kinesthetically arrived to the Valley; and this in fact is true. Much of that hill was once part of the Rockies.

Warming conditions during the Everson interstade from 14,000 BP caused the retreat of the glaciers. The surficial geology of the Lower Mainland became inundated by the ocean. The land had been compressed well below sea level through 4,000 years of enormous stress from the mammoth ice pack. From what is now the University of British Columbia campus to what is now Yale, the Fraser Lowland became a fiord of the Gulf of Georgia, and the Fraser River, emptying at Yale, became the major meltwater channel for the receding glaciers.

The slow and gradual isostatic rebounding of the Lower Mainland from the tremendous force of glacial compression resulted in the lowland terrain leveling at about 100 feet below the present elevation. The effect of the glaciers now became apparent. Not only was the area coated in till, but several deep gouges had been made to reinforce the natural mountainous depressions (geosyncline). These became filled by the melting ice. Cultus, Harrison and Chilliwack are some of the resulting glacial lakes. From these basins flowed the two tributaries to the Fraser: the Harrison and Chilliwack rivers.

The final 100 foot mantle on the Valley's floor accumulated throughout the last 14 millennia with the rich alluvial deposition. This was a continuing process whereby the river's flooding each year added further inches to the Valley. Since 1948, this process has been minimized in the Lower Fraser Valley.

by design, but further downriver, the mud thick Fraser continues to add more and more of the B.C. hinterland to the estuarine flats (fens) of the delta. In fact, the delta has added about 1,000 feet westward per century as Sturgeon Banks rises from the ocean to become a part of Lulu and Sea Islands.11

As the fiord shrank and the Fraser River's volume decreased to its present flow rate, the Fraser began to search for a natural channel through the lowland to the Gulf. The first principal channel was probably through the Sumas Valley, and onto its outlet near Semiahmoo Bay. With the last climatic deterioration, from 11,000-10,500 BP, a lobe of the Cordilleran glacier re-advanced through the valley as far as Sumas. This Sumas Stade ice probably blocked the channel, and diverted the river in another direction -- toward Lake Matsqui and into its present channel. The old bed became reduced to Sumas Lake and the Nooksack-Lummi River system.12

By 10,500 BP the basic geomorphology was complete.13 All that remained was for additional alluvia to sediment so the ancillary features such as creeks and ponds could spill over the landscape in a more defined pattern. These ancillary features took shape during the subsequent three successive climatic alterations: the early Post-glacial period (10,500-8,500 BP), the Hypsithermal period (8,500-3,000 BP),14 and the late Post-Glacial period (3,000 BP - the present). Subtle alterations in the floodplain's surface would result in the two tributaries, the Harrison and the Chilliwack, symmetrically joining north-

11. The actual rate is difficult to determine; refer to L.A. House & G.A. Packman, Fraser River Estuary: Status of the Environment; refer also to a report on Our Southwestern Shores; and to the Westwater Institute Report; see also Borden. (1968), op.cit., p.17.
13. Refer to Loy who has determined the fiord submersion lasted throughout the Everson interstade and did not become fully habitable until sometime between 10,000-9,000 BP.
14. For evidence to counter classic Hypsithermal theory refer to p.63 of Mathewes, Paleoecology of Post-Glacial Sediments in the Fraser Lowland Region of British Columbia.
south and the east-west master; and the plain became intersected by a maze of lesser aquatic elements such as streams, creeks, sloughs, marshes, fens, swamps, lakes, and beaver ponds. Once a year they all joined as one as the Fraser swelled to inundate the plains.

In the description of any indigenous landscape that has been subject to such extensive natural changes as well as to subsequent human alteration, there are considerable methodological difficulties in determining the paleogeographic datum line. Should one attempt to describe the landscape prior to the arrival of humans, after the pristine landscape has seen traces of a primitive culture, or at the arrival of agents for modification? Geomorphology is relatively stable -- rates of change occur in units of millennia. When one looks at the elementary structure of the valley, confident judgment can be made that the basic topography and surficial geology would have been in place by about 6000 BC, or slightly earlier. Fortunately, there is adequate geological evidence accumulated to give a fair representation of what the morphology was then, and is now. Using paleogeographic techniques, it is possible to map the Chilliwack Valley's topography as it would have been in 1808 AD, and it is possible to map the surficial geology. From a combination of this information and that in the

15. Mikesell, op.cit., pp.11-12: "perhaps the most serious weakness ... was the assumption that geographers should begin their inquiry by reconstructing the prehuman or natural conditions of an area. In a world nearly devoid of undisturbed natural landscapes, the difficulties entailed in such a task are forbidding, and geographers primarily concerned with the present visible landscape were understandably reluctant to begin ... in antiquity."; this does not have to be so if the geographers would rely more heavily upon the specialists in geology -- with interdisciplinary research, any landscape can be described at any point in prehistory.

16. Reconstruction of topography can be crudely fashioned from the present morphology, from floodplain zone records, and from early reconnaissance maps. Refer to map 2: Topography. See also Crerar, Land For Farming, p.38.

17. Mapping of soil composition has been made by the Canada Land Use Survey, and also refer to J.E. Armstrong, "Surficial Geology of Chilliwack, Sumas, and Kent Municipalities". Refer to map 1: Surficial Geology.
figure # 1.

TOPOGRAPHY

ELEVATION:

1. FLOODPLAIN
2. UPLAND TO 1000 ft.
3. 1000 ft. - 2000 ft.
5. 3000 ft. - 4000 ft.
6. 4000 ft. - 5000 ft.
7. 5000 ft. - 6000 ft.
8. 6000 ft. - 7000 ft.
9. 7000 ft. - 8000 ft.

FLOOD LINE
SURFICIAL GEOLOGY

Post-glacial (Salish)
1 Swamp Deposits
2 Slopewash Deposits
3 Fraser Floodplain Deposits — Silty Clay
4 Fraser Floodplain Deposits — Sand & Silt
5 Stream Deposits
6 Lacustrine Deposits — Silt
7 Lacustrine Deposits — Sand

Glacial (Sumas)
8 Abbotsford Outwash
9 Sumas Till
10 Huntington Gravel

Pre-glacial
- Rivers & Lakes
- Bedrock
next section on vegetation, a reconstruction of the indigenous landscape can be made. Onto this base map, the impact of civilization can be plotted.

2. **Plant Synecology:**

   Between the time of the cataclysmic Cordilleran uplift and the coming of the ice ages, a lush tropical jungle filled with steamingly luxuriant overgrowth and voracious beasts flourished. This astonishing vegetation was obliterated about 18 thousand years ago, as the Evans Creek Stade cleaned the valley's stage setting and furnished new rules for the gradual emergence of the present ecosystem. (i.e. before 1808).

   The evolutionary history of the present West Coast temperate forests can be traced, but it requires an extensive knowledge of paleobotany. The new carbon dating technology and a method of pollen analysis called palynology has enabled scientists to piece together its botanical evolution. The general trend of regional paleobotanical research suggests that the present plant community is a relatively recent phenomenon. Flora in the Olympia interglaciation had evolved the basic components of the great forests known to the pioneers including a predominance of pine (*Pinus contorta*), spruce (*Picea sitchensis*) and fir (*Abies grandis*), together with minor amounts of cedar (*Thuja plicata*). Although there were a few traces of hemlock (*Tsuga heterophylla*), there was no evidence of douglas fir (*Pseudotsuga menziesii*).

   Mathewes work in defining local vegetation concluded that the valley went through several stages in the final transition to the present ecosystem. From 12,690±190BP in the Post-Vashon Stade, a fairly diverse palynomorph assemblage developed dominated by *Pinus contorta*. The early post-glacial


19. Mathewes, op.cit., p.41: "The results of this investigation indicate that soon after the Vashon ice started to retreat from the Fraser Lowland about 13,000 years ago, vegetation quickly recolonized the deglaciated terrain in the area of the U.B.C. Research Forest." See also P.65 for description of the Fraser Uplands and the Fraser Canyon.
period, beginning about 10,370±145BP brought cool and moist conditions as the ice retreated. Pine was replaced by a shade tolerant mixture of conifers and deciduous plant material as the major elements. This vegetation change was characterized by *Pseudotsuga menziesii, Alnus incana* and *Pteridium aquilinium*.20

The Hypsithermal period (beginning in 8,275±135BP at Surprise Lake and 7,300BP at Marion Lake) resulted in a significant increase in *Tsuga mertensiana*. By 6,600BP hemlock had become dominant, although there was an increasing appearance of *Thuja plicata* as the climate transformed into the wet coastal conditions presently experienced.21

It was not until after the development of the Fraser glaciation's temperate climate (about 3,000BP) that the forest composition assumed its present structure.22 Placing dates on this process is a little difficult, but it is generally recognized that the basic morphogenesis had occurred by the Everson interstade 12 millennia ago, and the consistent synecology with its related rich diversity of coastal plant material would not have evolved until the stabilization of the bioclimatic zone for Southwest British Columbia in 1,000BC.

The indigenous vegetation of the Chilliwack Valley is a fragile mantle. Its evolution has been, and is, a complex phenomenon subject to continual

20. Mathewes, op.cit.,p.42: "The sudden appearance of abundant Douglas fir pollen around 10,500 years ago at Marion and Surprise Lakes is associated with decreases in lodgepole pine, fir, spruce and mountain hemlock. A trend towards warmer and perhaps somewhat drier conditions at this time may have favoured Douglas fir, but high alder pollen with macrofossils of *Thuja* and *Isothecium stoloniferum* indicate abundant moisture."

21. Mathewes, op.cit.,p.43: "This depended not entirely upon development of a favourable climate but on development of podzolized soil and so hemlock had to wait for edaphic conditions to develop from humus and decayed conifer wood."

22. For an analysis of the present stable climate refer to Stagger and Wallis, "The Climatic Factor -- Variations on a Mean", pp.89-100.
changes governed by infinite ecological variations. The study and description of this evolutionary process is called plant synecology. It identifies principles of complex inter-relationships of natural organic systems. The impression one has of the valley's great forest canopy after examining 19th century photographs and pioneer accounts, is that such forests must have existed forever—but as can be seen above, they were far from being eternal. Synecologists demonstrate that in a matter of a few years, whole ecosystems can be altered, and given sufficient time, new species and even new genera will logically evolve.

Three bioclimatic zones can be identified in the study area: Coastal Douglas fir (zone elevation to 3,000 feet), Sub-alpine Mountain Hemlock (zone elevation 3,000 to 5,500 feet), and Alpine (zone elevation above 5,500 feet). The valley thus contains one quarter of the Province's 12 zones. This system, evolved by Dr. Krajina, lists the botanical associations for each general zone by climatic climax, edaphic climax, and associated woody plants. The subzonal character of the Lower Fraser is subject to extraordinary variation which complicates any analysis.

Theoretically, it should be possible to map the valley's paleobotany at the time Fraser first saw it from a comparison of the above Krajina zone information with the surficial geology and topography maps generated in the

23. For a text on West Coast synecology refer to R. Daubenmire, Plant Communities; see also the global effect of man on synecological systems, W.D. Billings, Plants, Man, and the Ecosystem.
24. V.J. Krajina, Bioclimatic Zones in British Columbia.
25. Hanson, op.cit.,p.24: "Within the boundaries of Tait territory there are four biogeoclimatic zones (Krajina; 1969; Krajina et.al.; 1965). Within these 'macro-zonal' groupings there are a number of subzonal and micro-environmental habitats which differ from one another in plant structure and composition as a response to specific variations along 'environmental gradients' (Wittaker; 1970 :35).
preceding chapter. Unfortunately, much is left to supposition. Intra-zonal
synecology is so transient that a detailed analysis can only be prepared with
the assistance of additional bioclimatic vegetation and soils data.\textsuperscript{26} At the
time of writing, very little such information has become available. Only
sparse data is available in other parts of the Southwest of the Province but
no information is, or has been, collected on the Chilliwack region. There is
barely enough to make an educated guess on the 1808 plant synecology.

Fortunately, there is a test available on the accuracy of this method of
mapping the indigenous vegetation -- early explorer and pioneer accounts offer
a wealth of paleoethno-botanical information. For instance, Lord and Wilson's
many detailed descriptions of the valley in 1859 remain the naturalist
masterwork.\textsuperscript{27} Of the several Hudson's Bay Co. and Royal Engineer expeditions
to preliminary survey the valley, Corporal Leech's group in 1862 gave the
most precise data. In a report to Col. Moody, he describes the basic topo­
graphy of the valley, shows the "best" location for the proposed townsit,
and indicates the line of a road to connect Langley with Hope. The terrain
the road follows is explicitly described giving vegetation found in specific
locations.\textsuperscript{28}

A general survey of the whole Lower Fraser Valley in 1873, prepared by
John Fanin for the Provincial Government, gave a methodical overview of the

\textsuperscript{26} Try the reports being prepared on the Vancouver Island Ecological
Reserves, and local Lower Mainland site analysis reports such as
D. Vaughan and Assoc., Blair Rifle Range.

\textsuperscript{27} John Keast Lord, \textit{The Naturalist in Vancouver Island and British Columbia},
p.315: "In May and June this prairie is completely covered with water,
The Sumas River, from the rapid rise of the Fraser, reverses its course,
and flows back into the lake instead of out of it. The lake fills,
overflows, and completely floods the lower lands. On the subsidence of
the waters, we pitched our tents on the edge of a lovely stream.
Wildfowl were in abundance; the streams were alive with fish; the
mules and horses revelling in grass kneedeep -- we were in a Second Eden."

\textsuperscript{28} Corp. Leech to Col. Moody, Nov.14, 1862, letter and attached map.
Valley's undisturbed areas and indicated the potential for agriculture. The only unexpected feature is that of a large prairie (as clearings were then known) at Sumas and at Chilliwack. It seems the pioneers had been busily expanding the prairie described by Lord.

The source of the prairie may be determined by conjecture. Since the Coastal Salish Indians did not practise extensive agricultural clearing, and since there were no farmers in the Valley until after Lord had left, the prairie probably had a natural origin — it was likely caused by the first stages of regeneration after a lightning induced forest fire. Such fires were common in the Province; they were nature's way of inducing youth. Other factors in explaining the origins of first clearing will be discussed in later chapters.

The dimensions of some of the giant timber were a constant source of comment by the early inhabitants and visitors. Many cedars reached maturity with a base of 30 feet and had an extended crown of 200 feet. These incredulous statistics can be visually proven, for the primeval forests were still intact after the arrival of photographers. Early photos show loggers clearing timber trunks a dozen times broader than the most virile chest by use of only an axe. Another favorite photo was of some chatelaine exploring the woods for wildflowers for pillow stuffing beneath the immense forest canopy overhead. To get a comparison of the proportions relative to today, Chilliwack's present high rise apartments would have been dwarfed beneath the lower branches of these towering firs, hemlocks and cedars.

30. For the earliest record of prairies see an untitled map of Sumas and Chilliwack area from Ft. Langley, circa 1839-1859.
31. W. Kaye Lamb, The Letters and Journals of Simon Fraser, 1806-1808, p.102: "... at this place the trees are remarkably large, cedars five fathoms in circumference, and of proportional height. Mosquitoes are in clouds ..."
The last area in the valley to be developed, east Chilliwack, was done after records had become customary, so a fairly accurate estimation of the indigenous landscape can be given. Early maps and records show marshes, beaver ponds, erratic creek patterns -- all the aspects of a fen. Windermere and Rosebank Islands were frequently inundated, and thus were able to support only willow, a few poplar, and brush. Beaver ponds and marsh grass intersected the entire area. On the higher ground, however, dense forests of mainly cedar, occurred. 32

Although there was a plentiful wildlife synecology, such as salmon, ducks, wolves and bear, the only significant animal to modify the landscape was the beaver. These prominent architects continued to be prime features in the area until this century when a combination of fur trapping, flood control programs and forestry resulted in the extinction of the beaver colonies. 33 At present they survive in about two locations in the Lower Fraser Valley. 34 Beaver remain active but sparse in the various rivers, creeks and lakes in the mountainous regions beyond the civilized landscape. 35

Through the combination of early maps, bioclimatic zone data, and the written material above, it was possible to synthesize a reasonable notion of what the Chilliwack landscape must have looked like to Fraser in 1808 (refer to map 3: Indigenous Vegetation).

33. Barry Leach, editor, Wildlife and Agriculture in the Fraser Valley, p.4.
34. Both are to be encroached by urban development this year -- at foot of 176th Street in Surrey on Barnston Island, and at Campbell River, Surrey. Source: Barry Leach, conversation March, 1976.
35. Earl McLeod, Casey Wells and others.
figure # 3.

VEGETATION

- **LAKES & RIVERS**
- **RIVERINE**
- **COASTAL DOUGLAS FIR**
- **SUB-ALPINE MOUNTAIN HEMLOCK**
- **ALPINE**

fens & beaver dams
3. Cultural Anthropology:

The first archaeological evidence of humans in this part of the world dates from the warmth of the Everson interstade (12,000 – 9,000 BC). During that period, the Yale region became the nucleus for eight successive cultural phases of settlement. Those are:

- Piasika phase .......... 10,500 – 9,000 BC
- Milliken phase .......... 7,500 – 6,000 BC
- Mazama phase .......... 6,000 – 4,500 BC
- Eayem phase .......... 3,500 – 1,500 BC
- Baldwin phase .......... 1,000 – 350 BC
- Skamel phase .......... 350 – 200 AD
- Emery phase .......... 200 – 1200 AD
- Esilaq phase .......... 1200 – 1808 AD

For the first 12 millennia, man was far from being an active force in influencing nature. On the contrary, the environment manipulated man. Most of the cultural phases were terminated by some ecosystem change, characterized by cycles of ice ages and desiccation. It was not until 1,000 BC that the climate finally stabilized and the present morphology crystallized. The complex inter-relationships between the origins and development of the Yale cultures has to be understood relative to the whole Northwest.

The most readable and comprehensive work on the coastal Indian culture, *Cultures of the North Pacific Coast*, enables such a comparison to be made of the British Columbia tribes. Three classification methods may be used. The study area tribes belonged to one of the 10 British Columbia coast linguistic divisions: the Coastal Salish. They were one of three physical anthropology groups -- the Salishan (common to coastal and interior Salish). The other usual classification is by aureal culture subdivision -- of three possibilities, they were in the Coast Salish-Chinook province. The common designation for this province is Coast Salish.

36. For a summary of each, see C.E. Borden, "Prehistory of the Lower Mainland"; pp.9-26. The yet unpublished manuscript of Dr. Borden on the "Environmental History of the Lower Fraser and Adjacent Regions" is tantalizing, but unavailable.

37. About 1974 a phase earlier than the Piasika phase was discovered by Dr. Borden.

The tribes along the Fraser River were a branch of the Coast Salish called the Stalo (also the name of the great river) who shared a common language, Halkomelem, and a nebulous social-political-economic unity. There were 17 tribes, divided into two distinct sub-regional cultures: the Lower and the Upper Stalo. The former consisted of the Musquem, New Westminster, Coquitlam, Katzie, Kwantlen, Whonnock, Skayuks, Matzic and Matsqui tribes. These shared the characteristics of the Coastal Salish and at the time of European contact had a more populous and elaborate society than that of the Upper Stalo. The Upper Stalo consisted principally of the Chilliwac, Pilalt and Tait tribes, with a transitional zone of Sumas, Nicomen, Chehalis, Scowlitz and Squakem tribes. The latter five are usually grouped together as a part of the Upper Stalo sub-region.

Conditions described above were documented in the late 19th century by the great anthropologists, like Boas. To understand how this structure formed, we must return to the 120 centuries of archeological evidence at Yale.

The Yale region became the settlement nucleus in this corner of the world, originally because of its geographic advantage as the fiord headland for several millennia during the Everson interstade. When the fiord receded, it retained settlement prominence as the furthest extent of navigation up the Lower Fraser River. This added to the fact of its supremacy as salmon and oolican fishery, ensured that the site would remain attractive for primary cultural regeneration. Evidence gathered by Borden suggests that the Yale cultures were the source of human procreation until the end of the Milliken phase, when coastal settlements began to appear. Yale continued to be the source of acculturation until the end of the Baldwin phase; after that,

39. Wilson Duff, *The Upper Stalo Indians of the Fraser River of B.C.*, pp.19-24 and map#1; see also Borden, op.cit., p.24, who claims there were 18 tribes.
the Lower Stalo began to develop a richer culture.

Since the Yale cultures were the source of humans in the Fraser Lowland for the first six millennia of habitation, and since there is archeological evidence to prove settlement on the Lower Stalo estuarine fens by 6,200 BC, the most logical deduction is that the Chilliwack area tribes must have arrived prior to that date. They would have been colonials from the Milliken phase Yale nucleus. This must remain a hypothesis, for extensive archeological research into the Chilliwac has not yet been carried out. The affinity the Chilliwac felt for Yale survived into the 20th century, for this was the location of the Chilliwac summer village.

A brief analysis of the characteristics of the Upper Stalo must begin with the comment by Drucker that this river produced the most profound blending of cultures on the whole side of the continent. This can be explained in part by the massive mountain ranges which inhibited contact between the coastal and interior peoples except at a few river valleys. Still, the Stalo fostered the greatest exchange of all the coastal valleys. The factors fostering this exchange revolve around the bountiful resources. Each summer tribes from the Upper and Lower Stalo together with distant travelling Coastal Salish would gather at Yale for fishing, trading, socializing, and inter-marriage. Along the hazardous trail through the Fraser canyon, Harrison Lake and over the Coquihalla trail, constant trade with the interior was possible — though the contact was still minimal. Borden's theory that the Yale cultures originated by staged migration from the interior would help to explain the persistence of interior patterns.

41. Vancouver Public Museum permanent exhibition, room #2, St. Glenrose Cannery phase.
42. The meagre funding for B.C. heritage projects is notorious.
43. Drucker, op.cit., p.110: "along the Fraser, there was a blending of cultures not found elsewhere in the area."
44. Borden, op.cit., pp.11-25.
Yale, again and again, comes through as the key link between the Pacific and the hinterland. Its offspring, the Chilliwac, retained elements of the filtered interior culture infused and blended with later innovations from the coast. When talking about specific cultural phenomenon in depth, a picture of definite zones of intermixing emerges. The Chilliwac were the last in the chain to demonstrate interior traits, and yet were only partially coastal. It was a transitional culture of the sort that rarely occurred in "primitive" societies.\(^{45}\)

The prehistoric population of the whole Stalo Valley has been estimated at a maximum of 3,500 people by 1808. They lived for the most of the year in a series of villages clustered throughout the region. About 1,250 people lived in the study area at this time.\(^ {46}\) The Chilliwac, Pilalt, Tait, Chehalis, Scowlitz, Nicomen, and Sumas tribes shared the valley's space. The Chilliwac were the major tribe in the study area. Their principal settlements were not in the Valley proper, but were strung along the Chilliwack River in 22 small villages, from what is now Vedder Crossing, to Chilliwack Lake. This protected valley location had strategic importance for defense against the repeated attacks by Lower Stalo and coastal war bands. They only ventured out of the river basin for hunting parties and during the summer to fish at Yale.\(^ {47}\)

Through the information in Duff's report, together with a discussion on the Nooksack and Sumas villages by Smith,\(^ {48}\) it was possible to piece together a rough map of settlement locations of the prehistoric peoples in 1808 (refer to map 4: prehistoric Stalo settlements). Since it is known that their land

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\(^{45}\) The best source of information on the Upper Stalo is Duff's 1952 monograph; earlier works are difficult to read. Instead of paraphrasing Duff, the writer recommends reading his monograph to gain a general appreciation of these tribes' general culture.

\(^ {46}\) Duff, op.cit., pp.28-29.

\(^ {47}\) Duff, op.cit., pp.35-45, and map III.

\(^ {48}\) Marion W. Smith, "The Nooksack, the Chilliwack, and the Middle Fraser".
ethics involved a minimal impact upon the synecology, one can be fairly confident that this would have been the extent of human adaptation of the environment. One other aspect perhaps should be mentioned. Although rivers were the prime means of travel, there were many trails intersecting the Valley that had origins in antiquity (as deer trails). The location of most was lost in the subsequent Caucasian pioneering, but many became the precursors of the modern Chilliwack road network.
LEAF 58 OMITTED IN PAGE NUMBERING.
C. Exploration (1808-1862):

1. Preliminary Caucasian Exploration:

The earliest events to shape the Chilliwack Valley's landscape began elsewhere. Dr. Ormsby classifies this preliminary exploration into two sorts: coastal and overland exploration. 49 Coastal exploration began with Captain Cook, but the first voyage specifically related to the Fraser River was the 1790-1793 hydrographic charting expedition of Captain George Vancouver. In this first contact with the Fraser Lowland, Vancouver identified the fens as possibly the deltis estuary of a great river. 50 The later voyage of Eliza, the Spanish captain, may have been the first to reconnoitre and venture up the Stalo, but records were withheld as secret intelligence by the Spanish court, and since have been lost.

It was from an overland route that the Stalo first became known to the outside world. Following the path of the heroic MacKenzie 51, Simon Fraser explored and established trading forts throughout the territory christened New Caledonia for their native Scotland. (This is now the hinterland of British Columbia). From May to July of 1808, Fraser and a party of 24 men set out southward following a river they both presumed and hoped would lead to the estuary of the Columbia. In the early afternoon of June 30, Fraser passed through the Chilliwack Valley. This demarks the datum line between history and prehistory for the Valley. 52

Fraser's disappointment at being unable to find a navigable route to connect his interior posts of the Northwest Co. with the amenities of the

49. Ormsby, op.cit., chapters 1 & 2; space does not permit elaboration of the many intriguing romances of explorers with our coast.
50. B. Mitchell, Exploration and Settlement in Southwestern British Columbia Before 1900; for an explanation of why Vancouver failed to detect the river, see p.22.
52. John Edgar Gibbard, "Early History of the Fraser Valley 1808-1886", p.44. Fraser's log entry for that day is frequently cited in articles on the valley. For the specific log entry refer to W. Kaye Lamb, ed., The Letters and Journals of Simon Fraser 1806-1808, pp.101-102.
southern coast of Oregon, was overcome three years later when Thompson dis-
covered an overland route through the Okanagan to connect with the Columbia
River system and to the mouth of that river. Attention was directed away
from the Stalo estuary to the more advantageous Oregon coast. Although
Thompson never ventured down the Stalo, it is by him that that river became
renamed -- Fraser's River. This was to be a lasting tribute to that man's
courage in facing the unknown. This was in reciprocation for Fraser's
name of the Thompson River. 53

18th and 19th century mapping of the key explorations of the Province
have been assembled by A.L. Farley and save much time for historians. This
two volume work gives the simplest access to understanding the evolution of
cartographic knowledge of the whole of British Columbia. 54 Unfortunately,
it does not describe the cartographic evolution of the Chilliwack Valley,
so a separate compendium had to be researched. The more useful maps are
listed in Appendix B of this thesis.

2. Hudson's Bay Outpost:

For a generation, Fraser's River was ignored. The Columbia boomed. The
Northwest Co. was soon joined in competition by the American Pacific Fur
Company. The War of 1812 left the Northwest as British territory, but with
most stories in history, the action was not finished with one chapter. In
1818, the Americans began in earnest to acquire the whole continent. Under
the terms of the Treaty of Ghent, the Americans insisted upon territorial
right to the American Fur Company's former assets at Fort Astoria (renamed
Fort George) and to the joint occupancy of the Columbia District with Britain.

54. Albert Leonard Farley, "Historical Cartography of British Columbia With
a Separate Appendix of Maps; this limited edition has only been found
in the Provincial Archives."
The Northwest Company and the Hudson's Bay Company's destructive rivalry throughout British North America ended in 1821 with merger. The expanded Hudson's Bay Company held a monopoly throughout Rupert's Land and the Pacific Northwest. The area was divided into several departments, with George Simpson appointed governor of the Northern Department (which included New Caledonia and Oregon). Over the next quarter century he was the government and justice throughout the area. Simpson's policy was to unify the interior-coastal trade, and to consolidate British influence in Columbia-New Caledonia. One of the earliest decisions was to relocate the nucleus of H.B.C. operations above the 49th parallel on Fraser's River. As main H.B.C. depot on the west coast, the Lower Fraser River was to be opened to the ports of the world.  

Chief trader MacMillan and John Work were volunteered to explore the potential site for this depot in December of 1824. MacMillan and his party portaged from Semiahmoo Bay along the Nicomekl River, over Langley Prairie, to the Salmon River, and down to the confluence of the Salmon with the Fraser. The end of this trail was chosen as the site of the fort. The first attempt at founding a fort failed the next year, but by the summer of 1827 MacMillan returned to oversee the building of a stockade to be known as Fort Langley, after a director of the H.B.C. in London.

Geographical knowledge of the Fraser Lowland began to be extended at the same time, for Lieut. Simpson in H.M.S. Cadboro charted the Fraser estuary, taking soundings and readings as far upriver as the Tait villages. In 1827 and 1828 further knowledge of the lowlands was gained when reconnaissance groups were sent to prepare preliminary site analysis reports on the tributaries of the Fraser. F.N. Annance, a trader with the H.B.C., was given

the responsibility for the Chilliwack River area, and made two visits in November 1827 and in December 1828.\textsuperscript{57}

In 1828 Governor Simpson travelled from Fort Kamloops to Fort Langley on his annual inspection of the territory. It was on this trip that Simpson's pride in the new depot collapsed. He recognized, while attempting to pass by sheer cliffs in the Fraser Canyon, that Fraser had been right -- this river was almost impossible to utilize as a communications link.

Attention was thus redirected southward to the Columbia. Plans for expanding Fort Langley were abandoned, and the great western port for British North America dissolved. The fort was retained as a small coastal trading post. Consequently, Langley's hinterland remained undeveloped until a new political-economic reality emerged. In its stead, Fort Vancouver (on the Columbia River) continued to grow in prominence as the Pacific nucleus.

The growing American presence that had been anticipated did materialize. After a minor depression on the Eastern Seaboard, more and more settlers came west in search of land. Congress assured each they could acquire free land grants throughout the fertile Oregon territory. Faced with the inevitable American annexation of the territory, the Hudson's Bay Co. once again reassessed its policy of northern retrenchment. This time attention was focused on the southern coast of Vancouver Island.

James Douglas was sent in 1843 to found Fort Victoria. From this strategic location, the British presence was felt to be secure. The British navy of the day ruled the oceans, making the island a virtual fortress. Trade with the mainland was to be carried out from a limited number of forts scattered

\textsuperscript{57} Gibbard, \textit{op.cit.}, p.80; refer also to B. Ramsey, \textit{Five Corners: The Story of Chilliwack}, pp.12-15, for instance: "at the extreme end of this lake (Sumas) they found a considerable extent of low clear country, intersected with a number of little creeks and ponds well adapted for wildfowl."
along the inhospitable coastline, with the assistance of a small fleet of trading vessels (such as the Beaver⁵⁸).

Over the subsequent three years, a series of events resulted in the relinquishment of British sovereignty of all land below the 49th parallel, except for the tip of Vancouver Island.⁵⁹ A combination of Indian unrest and American domination after the Oregon Boundary Treaty led to the abandonment of the inland communication route via the Columbia, a few years later.⁶⁰

While this international chess game was being played to its conclusion, the traders and their families at Fort Langley enjoyed a bucolic existence. In addition to the fur trading, an auxiliary venture of agriculture began to be important. The stored fertility of the land led to bountiful crops so soon fields were cleared and planted to help feed the fort; upon retiring, many employees took to farming in the area. The year 1839 was eventful for the Fraser Valley. Under the terms of the Anglo-Russian agreement signed that year, the Hudson's Bay Co. received trading privileges in Alaska in return for supplying Russian traders with agricultural produce.

The H.B.C. formed a subsidiary company, Puget's Sound Agricultural Company, to establish a sufficiently large farming community to carry out the agreement. The Columbia River settlements formed the principal farmland, but a sizable operation was begun at Fort Langley. As a result, the 1827 stockade was abandoned in favour of the enlarged fort upriver (present National Historic Monument location). Also in 1839, the superabundant salmon resources began to be tapped.⁶¹ A cannery was constructed from logs at the mouth of the Chilliwack River. This was the first Caucasian building to appear in the

⁶¹. Ramsey, op.cit., p.15: he states 1839 as the date for the cannery construction.
landscape of the Chilliwack Valley. Salmon were salted in barrels and shipped to the Sandwich Islands, the Orient and Europe.

The construction date of the Chilliwack cannery is subject to question. For instance, Anderson's memoirs give a brief description of the journey he made down the Harrison to Fort Langley and back in May of 1846. There is conflicting evidence here for he states men from the fort accompanied his group on the return trip as far as the mouth of the Chilliwack where they set up camp with the intention of establishing a salmon fishery. There is no mention of an existing cannery. More research is required to clarify this date as well as its architectural character.

3. Crown Colony of Vancouver Island:

Part of the policy of northern entrenchment resulted in the 1849 creation of the Crown Colony of Vancouver Island. The Secretary of State for the Colonies at that time, the third Earl Grey, over-rode formidable opposition and guided the measure through parliament. The Hudson's Bay Co. was appointed colonizing agent for the crown for a period of 10 years. They were charged with establishing a viable farming settlement both as an economically profitable venture, and as a method of blocking American imperial expansion. Earl Grey proposed settlement to resemble pastoral Britain.

The second Governor of the colony, James Douglas, took special care in nurturing the steady improvement of the land. Puget's Sound Agricultural Co.'s main operation was transferred from Fort Vancouver to Vancouver Island, and farming flourished. As the settlement began to grow, the Governor was subject to considerable attack over conflict of interest. He was not only the sole arbiter of Her Majesty's order in the colony, but also the chief factor of

62. R. Sandilands ed., The Architecture of the Fraser Valley, p.59: the date 1846 is given for the cannery construction; it did not survive the century.
63. A.C. Anderson, History of the North West Coast, pp.64-65. Thus Ramsey is shown to be incorrect.
the Hudson's Bay Co. and a director of the principal farming venture, the Puget's Sound Agricultural Co.

One of the most contentious issues was that of subversion of independent farmholding throughout the Island and the Mainland. Douglas ensured that the H.B.C. mainland fur operations would not be interfered with by an influx of settlers as was the case in Oregon. The only farmers, for instance, granted land rights along the lush Fraser River were those working for the P.S.A.C. on Langley Prairie or retired H.B.C. employees. Consequently the Chilliwack Valley remained untouched save for the small clearing around the cannery.65

Miners were tolerated on the mainland, and there is reference to a "road" being cleared from Fort Langley to Fort Hope in 1848.66 This was probably a slightly widened Indian trail through the dense woods. The miners would have seemed harmless enough at first, for the great gold rush of 1849 was still to come.

Douglas' inhibiting influence on the private sector, especially on the mainland, began to be the repeated subject of criticism. When the dam broke with the discovery of gold and the area could no longer be reserved for the fur trade, Douglas was given the choice of continuing with public service or continuing with the Hudson's Bay Co.

One other event took place in the decade following the creation of the Vancouver Island Crown Colony. This was the surveying of the boundary between British North America and the United States by the International Boundary Commission. Capt. Richards of H.M.S. Plumper charted the maritime boundary, and Col. Hawkins of the Royal Engineers surveyed the 49th parallel. Although

66. Ramsey, op.cit., p.16; the writer is suspicious of the authenticity of this trail, for there is no reference to it in any other work. See also Ramsey, p.26.
their activities increased during the next phase of the development of the Valley, the effect they had will be elaborated upon here. It is important to recognize the Boundary Commission contingent of Royal Engineers was distinct from the contingent under the command of Col. Moody which had a more dramatic influence upon the infrastructure of the mainland. The Boundary Commission was appointed before the Columbia detachment, but their term of duty overlapped.

Col. Hawkins' men surveyed and scribed on the landscape the boundary parallel to the Chilliwack Valley in 1859. Camps, depot structures, cabins, corrals and roads were constructed. During the spring and summer of that year the later famous naturalists J.K. Lord and W.C. Wilson wrote descriptions of the landscape which are useful for evoking a feeling of identification with the indigenous conditions. The presence of the Royal Engineers fostered confidence in the potential of the valley.

4. Stalo Resettlement:

With the presence of a technologically advanced people on the river, the disagreeable Kwantlen and coastal tribes were persuaded to treat the Upper Stalo people less as game and more as brothers. Fort Langley generated a healthy respect for order to such an extent that the non-aggressive Upper Stalo were able to abandon their ancestral villages and relocate in the main lowland. The Chilliwac moved from the shelter of the Chilliwack River Basin down to the resource rich Chilliwack plain.

The new villages constructed were scattered throughout the area, principally along the main feeder rivers to the Fraser. The nucleus was located on the relatively high ground between what is now Vedder Crossing and Sardis.

67. Sandilands, op.cit., p.59; see also, Ramsey, op.cit., pp.27-34.
68. Lord, op.cit., 2 vols.: their camp was known as "Chilukweyuk Depot".
Several small villages daringly were constructed along Fraser River frontage. By luck, the location of most of these 19th century "new towns" were frozen by the awarding of Indian Reserves in the 1860's so clues to the early landscape can be seen today in a tour of the valley. Duff has mapped and explained the compositions of most of these villages.\textsuperscript{69}

In summary, the period of the Valley was under the control of the Hudson's Bay Co. was for the most part, peaceful in its splendid isolation. It unintentionally became the best possible transition for the indigenous population. Although the population began an alarming decline from the lack of immunization to Western microbiotics, at least half managed to limp into the 20th century.\textsuperscript{70} This is a humane record by comparison with the typical slaughter experienced south of the 49th parallel.

5. \textbf{Gold Rush:}

The 1858 gold rush transformed the area from its state of isolation to a new place of international prominence. All around the world newspapers reported the gold strike on Fraser's River. Thousands and thousands of men dropped their safe pursuits and headed for the new el dorado. Victoria, as main port of entry, felt the effects of the boom first. The village burgeoned with the phenomenal influx. The prospectors then moved onto the Lower Fraser Valley where a few nuggets had been panned along the sandbars. In the first winter, three thousand men wintered between Fort Langley and Fort Hope.\textsuperscript{71} A few log cabins were built but most dwelt in tents, ever ready to move along to a more promising place. Most soon recognized the Lower Fraser held but traces of gold and so headed upriver to the fabled lode. By the end of 1858 25,000 men had journeyed up the Fraser River.

\textsuperscript{69} Duff, op.cit., pp.37-39 & 44.
\textsuperscript{70} ibid., p.28
\textsuperscript{71} Gibbard, op.cit., chapter 4.
The effect of this implosion on the landscape of the Chilliwack Valley was minimal. The miners were orientated toward the sandbars and tributaries and made camp with little alteration of the forest. They had come for gold, not for the exhausting labours of logging. Three years after the neo-argonauts had moved on, few traces remained, except for the few log cabins. The population of the whole Lower Fraser Valley in 1861 was only 300 non-Indians.

Governor Douglas of Vancouver Island recognized the urgent need for law and order throughout the crazed mainland. Early in the rush (1858) he extended his jurisdiction, and wrote to London for further instructions. Whitehall approved the action as essential, and took steps to formulate and guide through Parliament an act to create the Crown Colony of British Columbia. The Colonial Secretary, Lord Stanley, and his successor, Sir Edward Bulwer Lytton, took especial interest in the organization of the new colony — Lytton hand picked a group of officials and staff who would form the new government. Douglas was offered the position of Governor of Vancouver Island and of British Columbia, and Col. Richard Clement Moody became Lieutenant-Governor, chief commissioner of lands and works as well as commander of a contingent Royal Engineers.

While the first wave of the gold rush left little tangible evidence of its presence, the arrival of the government on the mainland set in motion the processes of humanizing the landscape. Whitehall was convinced that the colony should be permanently settled by a population with a commitment to farming, forestry and mining. The Royal Engineers were ordered to maintain law and order, to open up the country to settlement by construction of roads,

72. Sandilands, op.cit., p.59; the few extant cabins may have been built by the Royal Engineers of the Boundary survey commission.
73. Ronald H. Meyer, "The Evolution of Roads in the Lower Fraser River", p.73
planning and surveying of towns, surveying of lots for pre-emption, con­structing public buildings, establishing social organizations, etc. All this was to be accomplished with 165 men and a handful of officers in an area that was four times the size of Britain. Nevertheless, this group set the basic infrastructure for the Province's future cultural landscape. 75

6. The Royal Engineers:

The Royal Engineers were the closest thing to professional community and resource planners that the mid-19th century had produced. They were originally a military unit of the British army which gradually grew more autonomous from the 17th century. As time passed, they became increasingly involved with the diverse needs of the civilian population as well as undertaking any assignment entrusted by the government. Royal Engineers, by the 19th century, were appointed to govern the extended outposts of the British Empire. It was not by accident that they were called upon to give leadership and skill to the settlement of the latest colony. 76

The architect of the settlement pattern was Col. Moody. In preparation for his role, he had been introduced to all the design concepts of his age, and used the accumulated heritage of regional planning to formulate conceptual plans.

Moody's first action upon assuming his duties was to select a capital for the mainland. He chose a hillside site near the confluence of the Fraser and the Pitt Rivers chiefly for its military suitability. There was constant fear of attack from the Americans across the border, so defense in case of siege became an important criterion in the selection. But there were other criteria:

75. Lillian Cope, Colonel Moody and the Royal Engineers, chapter 1.  
including oceanic port facilities, orientation to the main route to the interior, and freedom from flooding. The new capital was sited, and the first survey of the grand design by Moody was implemented before the name of the city was finalized. This was to be New Westminster, capital of the Crown Colony of British Columbia.\textsuperscript{77}

A similar gridiron plan was proposed and implemented at the other end of the Lower Fraser Valley on the small plain surrounding Fort Hope. The new Hope was built as the secondary city for the Lower Mainland. It served as the landing for the river steamers that plied the river from New Westminster and Fort Langley. Miners and settlers departed the boats there and assembled pack animals for the overland route into the hinterland. Hope's mimicking of New Westminster's gracious scale and numerous parks underscores its early importance to the Province.

One of the first auxiliary townsites to be considered was that at the mouth of the Chilukweyuk River in the Chilliwack Valley. In the summer of 1859, Douglas ordered Moody to set out a townsite in the Valley in his impatience to encourage settlement.\textsuperscript{78} By May of 1860, it became possible to send a detachment under Capt. Parsons to make a preliminary survey for the proposed settlement.\textsuperscript{79} For some reason, the town plan was lost in the harried pace of development, and a new town had to be surveyed later. It was not until November of 1862 that another detachment could be spared. This was under the charge of Corp. Leech.\textsuperscript{80}

\textsuperscript{77} Cope, op.cit., chapters 5-7.
\textsuperscript{78} Moody to Douglas, July 14, 1859: discussion on how to finance the proposed survey of the Chilliwack-Harrison area. There are several other letters in the Provincial Archives which show the administrative difficulties.
\textsuperscript{79} Moody to Douglas, May 17, 1860: Capt. Parsons sent to survey land at mouth of Chilukweyuk for town lots; see also B.C. Papers, Part IV, dispatch May 31, 1860 which confirms Parsons is in the Chilliwack Valley.
\textsuperscript{80} Corp. Leech to Col. Moody, Nov. 18, 1862. See also the general report of Lands & Works Dept., 1862, in which the survey of Chilukweyuk was authorized; it took three R.E. under Leech from Oct. 26 to Nov. 5, 1867 to complete.
This group was directed by Moody to lay out a town on the south bank of the Fraser across from the mouth of the Harrison River. The survey done at this time would subsequently influence the location of the eventual site of Five Corners.

It must be remembered that for most of the 19th century, the Fraser was the great highway for the Lower Mainland. Inland trails were mostly impassable, and were thus rarely used. As a consequence, the first settlements were all oriented toward the River.

The 1862 group thus laid out a riverine townsite as directed on the flood plain of the Chilliwack Valley on the south bank across from the Harrison River. The rectangular plan of one square mile on Fairfield Island would never materialize, but still it was a significant step in humanizing the Valley. The centre of the proposed town was later to become Minto Landing.

Corp. Leech's detachment also surveyed a longitudinal line through the woods to join the Chilliwack River. The clearing made along this survey line would later become Young Street. Leech's map of the Valley at this time also shows an existing trail and two routes to Hope (one of which Leech recommended as preferable). All the paths intersect on a slight knoll (which he determined to be 30 feet above the river's level) in a belt of pines. (Note that the "pines" were probably Pseudotsuga menziesii). This would become, within a decade, Five Corners. 81

There was every intention of this rectangular townsite on Fairfield Island becoming the nucleus of the Valley. A speculator by the name of Kirk applied to be the first purchaser of a waterfront lot, but was turned down because there was to be an auction of town lots later in the year. 82 The reason the

81. ibid., attached map.
82. W.H. Kirk to Col. Moody, Jan. 8, 1863, for the request; see also Moody to Kirk March 2, 1863, for the application rejection.
river town never materialized was simple. The Royal Engineers could not follow up the initial survey with more precise plans because they were under too much pressure elsewhere. When the gold rush pandemonia dissipated in 1863, the need for comprehensive resource planning lessened, and they were recalled. The town soon drifted into obscurity and became entirely forgotten by later chroniclers of the Chilliwack Valley. Young Street was always thought to be an afterthought, but in actuality as a survey line, it pinpointed the crossroads of the later nucleus.

Another aspect of the Royal Engineer's work in the Lower Mainland was that of surveying and supervising construction of roads. Trails built as a part of the defences of New Westminster included North Road and False Creek Trail. Roads built to encourage settlement included Burnaby Lake trail, Kennedy trail, North Arm trail, Pitt River Road, Maple Ridge trail, and Semiahmoo trail. Several trails were cut through the Lower Fraser Valley as part of the route to the hinterland.

Capt. Parsons' contingent to the Chilliwack Valley in 1860 also was directed to explore the Sumas-Chilliwack area to plan a possible road from New Westminster to Yale, and to make an inventory of farmland potential.\(^83\) The survey was undertaken at the request of the Governor in his endless demand for greater and greater progress in settlement.\(^84\) As a result, the first attempt at constructing a road through the valley was made from 1860-1861.\(^85\) An independent contractor was paid 90 pounds for improving an existing trail from Hope to Chilliwack. It is probable that this was the

\(^{83}\) Cope, op.cit., p.130.
\(^{84}\) For instance, refer to Moody to Douglas, Sept. 23, 1859: Douglas wanted a road from Langley to Chilliwack, so the hard pressed Moody asked the Boundary Commission if they would oblige.
\(^{85}\) Capt. Luard to P.O. Reilly, Lands & Works Dept. outward correspondence, Feb. 15, 1861.
trail first mentioned as being used by the miners in 1848. It was in actuality one made by the Hudson's Bay Co. from an Upper Stalo trail.

In 1859 the first pre-emption in the Valley was made by a Jonathan Reece. He pre-empted 160 acres and drove in a herd of dairy cattle from the Puget's Sound Agricultural Company ranch in Oregon to establish the first Chilliwack farm. Reece was one of the few to recognize the fortune to be made in supplying essentials to the miners. In addition to the farm, he had a butcher shop and mill at Hope and Yale which took most of his attention. Two of his Ontario cousins, Isaac and Henry Kipp joined with him to expand the farming venture in 1862. A good living could be made by selling beef, cheese and butter in the Cariboo, as well as wintering freighter oxen and growing crops. After the end of the gold boom, the Kipps remained to be pioneers of the valley's new order. From 1862 more and more settlers arrived to pre-empt land in the valley.

In 1863 the Royal Engineers were recalled and in recognition for their valuable services to British Columbia, each was granted 160 acres of land of their choice if they wished to settle. Most remained in the colony and a number chose to start farms in the Chilliwack Valley.

87. Ormsby, op.cit., chapter 6: for a list of their accomplishments throughout the Province.
map #4 & 5
STALO VILLAGE SITES - CHILLIWACK REGION

note: This map does not presume to be the definitive cartography on the early human landscape of the valley. In fact, it is frustrating that so little can be ascertained.

LEGEND

to accompany map

I. Prehistoric Sites
drawing no. 1....... s'Haw-ch.uhk-uhl 9....... KAY-luhs
2....... no-SA-kwatch 10....... liy-UHM-thul
3....... ch.ihl-KWAY-uhk 11....... THAH-them-ahls
4....... sen-EH-say 12....... skwee-KWIY-leths
5....... sel-EE-see 13....... soo-WA-lay
6....... ee-AY-thel 14....... quo-QIY-ah
7....... t'ehm-ee-HIY 15....... SWEE-eh1-ch.ah
8....... t'uhp't'OH-P

II. Villages Established 1808-1862
drawing no. 16....... quh-KA-lahk-el 40....... sum-AHL
17....... chee-AHK-tel 41....... sum-AHL (summer)
18....... SHAHL-kee 42....... shuhl-AHL-'qw
19....... SKWIY-kway-lah 43....... sahl-KAY-wuhl
20....... yook-yohk-WHAY-oo.S 44....... s'ch.ah-choo-kihl
21....... skow-KAYL 45....... chee-AHM
22....... Suhk-soo-koh-MIY 46....... h'otx'I'1
23....... skwiy-HAW-lah 47....... siy' t.a
24....... koh-KWAH-puhl 48....... pila'1q'
25....... SKWIY-ee 49....... li'lk'aliks
26....... SKWEH 50....... ?
27....... SKWHH-lee 51....... ?
28....... sk'WAH-lah 52....... ?
29....... qwah-lay-nee-ah 53....... ?
30....... choal-TEEL 54....... ?
31....... A'tsel-ihts 55....... pa/pk'am
32....... kuh-MEE-leets 56....... sk'a/tac
33....... LAK-uh way 57....... sk'a/wk' t'l
34....... s'yook-q 58....... uhe'm'al
35....... nah-NEETS 59....... spa'patis
36....... kaw-kwiy-UHK 60....... sk'aw'1x' w
37....... nah-NEETS 61....... sx'a x' iwb'l
38....... qoo.QUAY-ook 62....... wilk'amii'x
39....... tuk QAYL 63....... c'kals
40....... pa/pk'am 64....... xi'te'lič
65....... iwa'was
66....... ka't-x'um

III. European Settlements 1843-1862
drawing no. A....... Hudson's Bay Company
B....... Royal Engineers Boundary Survey Depot
C....... the first Townsite (Royal Engineer Plan)
D....... Millar's Landing
E....... Chilliwack Landing (1865)
F....... individual farmsteads have not been plotted.
D. Settlement Established (1862-1886):

1. Pre-emptions in the Forest:

In addition to their duties of planning settlements and roads, the Royal Engineers had been busy making reserves for future military establishments; these later became the University of British Columbia, Jericho Park and Stanley Park. 88 They also were responsible for surveying land for agriculture. There is some question as to the size of the grid used throughout the Lower Fraser Valley. Conflicting references are made to three mile by three mile grids with 160 acre sections or even 80 acre sections. 89 Through a combination of haste, topographical irregularities, and pre-emptions before proper surveys could be made, much of the early agricultural allotments set out by the Royal Engineers were not done in accordance with the pure geometry associated with the settlement of the great North American plains. In the Chilliwack Valley this was especially true.

The first farms in the valley were pre-emptions made along the crude road connecting the capital with Hope. Very gradually these pioneers were able to clear their land of the great forests and create prosperous farms. Families like Vedder, Chadsey, Miller, Hall, Wells, Kitchen ... were some of the pioneer stock who took hold of the new land. Researching one of the early farms, that of a retired Royal Engineer, William Hall, proved to be useful in understanding the logic of the amorphic settlement pattern which emerged in the 1860's. 90

89. ibid., p.157: "the extensive plains on the Pitt, Smess and Chilwhayook Rivers were to be hurriedly surveyed and thrown into 80 acre sections for immediate occupation for the purpose of raising food and retaining a permanent population in the country."
90. Hall to Hon. Birch, May 22, 1865 and on Feb. 28, 1870, and Dec. 14, 1870. Letters describing the property together with maps, also requests for roads.
The first farms were located on the driest land possible in a floodplain but also close to a steady supply of clear water. Also settlement occurred first in areas previously cleared either by lightning, Stalo burning for primitive agriculture, Royal Engineer camps or surveys, or unsuccessful attempts at settlement by some disappointed miner. The first pioneers who formed the basis of the permanent population took these attempts at clearing and gradually extended them. Most of the 1860's farm pre-emptions were between Chilliwack and Sumas Mountains, clustered around the only road, or around the only riverboat landing at Miller's Landing.

This landing became the centre of valley trade for a while. In 1865 Miller set up a post office and a general store to serve the 10 developed farms. Gibbard reckons this was the year people began to settle "with the intent to make it a town". By 1866, 4,860 acres of land were under cultivation. Probably in that year the need for improved transportation of the farm goods generated enough activity to warrant a second landing at the mouth of the Chilliwack. By the following year another general store was in operation at Chilliwack Landing. Since this landing was closer to the emerging farms along the road to Hope, it gained prominence over Miller's Landing. Again, reference to the Hall papers is useful in understanding why. Roads were little more than mud trails so hauling a harvest to the main highway of the era, the Fraser River, required the shortest possible distance. Hall lobbied for years together with his neighbours to get Provincial assistance for improving the road. In the interim, river traffic

91. Gibbard, op.cit., p.201.
92. Winter, op.cit., p.106.
93. Ramsey, op.cit., p.40: "the Miller store at Sumas, and the one Robert Garner opened at Chilliwack Landing were the social centres of the area, and as the year 1867 was upon the valley there was much talk about around the stove and apple barrels of these two emporiums".
94. Hall to Lands Commissioner, Feb. 28, 1870, op.cit. Hall took over the clearing begun by a Mr. Smith, a disenchanted miner who had finally left B.C.
and landings provided the only real access to markets.

The countryside began to be altered as the settlers implemented their new attitudes towards conceptual space. Year by year, more and more land was opened for farming as the forest was attacked by saws, axes and fires. It was not easy — one man could only clear about five acres a year. Some of the timber was fashioned into log houses and barns. Slowly, the small clearings became larger and neighbours began to join their farms.

This was a fearsome landscape for the early pioneers to tame. Its majestic peacefulness that so appealed to the early settlers aesthetic sense resisted destruction. Yet, it was done. Once the tree was felled, the pioneer slash axed the branches and made further cuts in the log to permit hauling into enormous bonfires. The forest, which had been so formidable, was cremated in an implicit funeral pyre. Stumps were usually left to rot, cedar taking only a few years before there would be nothing but a mound of brownish-orange mulch left to indicate its organic grave. In the meantime, the farmer had hitched his team to his plow and had made the first furrows in the earth, not unlike those of his medieval European forebears. This was considered good practice. The undesirable practice of straight burning was occasionally resorted to. This removed the forest rapidly, but the intense heat scorched the earth destroying most of the stored fertility. It is remarkable that there were so few antisocial burnings which got out of control and had to be fought by all the neighbours.

Logging of the valley's timber as a cash crop for domestic construction or export around the world was not implemented until the 1880's, when a few

95. Refer to Chapter III on the evolution of villages.
96. See Winter, op.cit., p.110; see also Wells, Chilliwack's Early History, p.6, and Early Times in the Fraser Valley.
mills were built. The rate of timber clearing until that point had not been excessive.

Channelling the floodplain proved impossible for individuals or even coordinated efforts. Still, the minor rivers and creeks were channelled, and the innumerable marshes and ponds were drained. The farmers cleared away the forests and the underbrush exposing the bogs and mires and streams and set to battling the next round in taming the valley. Ditches were dug to drain trapped flood water, and ponds were given channelled streams to carry away the volume. Gradually more of the land cleared for farming dried to permit plow and furrow.

The Valley's major river, the namesake, the Chilliwack, had since time immemorial flowed out of the Cascade Mountains and onto the plain to meander circuitously to meet the Fraser at what would become Chilliwack Landing. After the 1875 flood an auxiliary branch developed, called the Luck-a-kuck River, that flowed beside the Chilliwack to the Fraser. The width of most of the rivers were never properly shown on early maps for they were drawn after the channels had subsided. For instance, the Luck-a-kuck was shown as a 30 foot wide creek bed when in fact it was over 100 feet in flood. The size of the Chilliwack River may be guessed at by examining the Vedder Crossing area today. It must be remembered that the junction of the Chilliwack with the Fraser was a major landmark in the early days of the valley's occupation.

In 1873, it began to change direction when the Vedder River, which had been merely a creek draining the Vedder area into Sumas Lake, somehow joined with the Chilliwack at Vedder Crossing. For two years it was an auxiliary channel of smaller dimensions to that of Luck-a-kuck, but in 1875 a snowstorm flood caused a massive log dam to form at Vedder Crossing, blocking the

97. Casey Wells; see also Ramsey, p.77-78.
ancient river bed. Erosion quickly formed a passage down the Vedder River to Sumas Lake to carry the volume. By the time the farmers could clear away the dam, the course was entrenched. The Lower Chilliwack River had dried to merely a creek and slough, and the Luck-a-kuck vanished to become a dry creek bed.

After the great flood of 1876, pressure for drainage and dyking proposals sponsored by the Provincial government were heard throughout the Lower Fraser Valley. A proposal was put forth by the Sumas, Matsqui and Chilliwack Drainage Co., headed by a man named Derby, to solve this area's flood problem. In return the company was to receive 10,500 acres in the area. Derby began the work but soon recognized that even a regional scheme was doomed if the whole Fraser River was not considered. Mounting costs and failure of the dykes to withstand freshet pressures led to abandonment of the proposal. The venture was not a total waste to the Valley for it reinforced the report that had been submitted by Edgar Dewdney in 1876 calling for Provincial action on the draining and dyking of the whole Fraser River to permit safe and predictable farming. It would take generations before such a proposal would be implemented though. The other benefit from the Derby attempt was the concentrated effort upon clearing the bogs throughout West Chilliwack. The largest marsh, an area of about one square mile, finally was drained into Sumas Lake. The continuing rhythm of winter floods and late spring freshets with a great flood every few years that would inundate the floodplain washing away crops,

98. ibid., pp.52-53; see also Gibbard, op.cit., part V; for some of the misconceptions refer to Sinclair, op.cit., p.1, and Duff, p.43: "the Chilliwack River is a swift flowing river which takes its rise in Chilliwack Lake and after flowing some 24 miles westward through the Cascades to Vedder Crossing, disgorges onto the broad alluvial plain of the Fraser. In finding its way across some five miles of plain to the main river, the Chilliwack has used at least three different routes within historic times and the network of sloughes above its present mouth testifies that even more were used in earlier times. These early shifts and changes in the course of the river were remembered in the traditions of the Chilliwack tribe, whose lives they affected very materially."


1. Gibbard, op.cit., chapter V.
ditches, animals, and houses would continue to be the natural condition of
the landscape, but man, the modifier, had arrived.

Early roads in the valley began mostly as Indian trails, most of which ran
along the major streams and rivers' natural clearing. Chilliwack was a maze
of water courses. The first trails reflected this free form terrain. The
road between Chilliwack, Hope and Yale, which had first been commissioned by
the Royal Engineers, was widened in 1862 by Chilliwack residents. In 1865
the Overland Telegraph Co. utilized this trail as a part of its project to
connect America with Europe via Siberia. A telegraph office was established
at this time in the valley.

From 1873-1875, the Provincial government implemented its trunk road
program of inter-regional roads. This New Westminster to Yale wagon road
(or Yale Road) connected New Westminster with Yale via Langley. The old
telegraph trail was followed through the Chilliwack area for much of the
distance. The condition of this major thoroughfare gives some idea of the
appalling conditions of overland traffic faced by the pioneers. Yale Road
was first an earth path of a few feet wide which was only suitable for
horseback and sleigh in the best of weather. Gradually it was widened to
permit wagon travel but the innumerable mud holes and stream crossings made
travel hazardous and painfully slow. The next phase was the use of gravel
with corduroy and planking for the poorly drained areas. It was not until

2. Gibbard, op.cit., p.191; and also Meyer, op.cit., p.72. This was possibly
the trail to Reece's businesses; it was certainly the trail made earlier.
3. There is some confusion here: Ramsey claims it was the Western Union Co.
see pp.36-40; Ormsby, op.cit., p.211, claims it was built by a British
Columbia subsidiary called the Collins Telegraph Co.; and Meyer, op.cit.,
p.73, suggests it was the Overland Telegraph project. In any event, the
line followed the old Whatcom trail to connect with the existing road to
Yale through the Chilliwack Valley. Several retired Engineers such as
Samuel Maclure's father were involved with this project -- refer to Where
the Trail Meets, p.11
the end of the century that this major road was paved.  

The "roads" and paths intersecting the valley for the use of local residents were proportionally maintained. A map of the valley begun in 1868 and revised four times to 1886 gives a clear picture of the road network. Telegraph trail and its successor, Yale Road, is clearly shown. Other roads included: a road from Miller's Landing to the Telegraph Trail made in 1866 (since disappeared), Sumas-Chilliwack road (became a part of Yale Road West), Chilliwack Mountain path (retained), Luckakuck Road which followed the river (became the main link between Chilliwack and Vedder Crossing and is now known as Vedder Road), Chilliwack Landing Road (this was the connector from the landing to Yale Road, and is now known as Wellington Avenue), Chilliwack River trail (survives), Cultus Lake trail (recreation section retained, urban section abandoned), and Elk Creek trail (abandoned for grid). These trails provided access to markets for crops and permitted socializing so they were significant features in the landscape. Roads were the major lines of human communication in the days prior to telephone and other technological inventions.

Housing in the countryside in the pioneer days remained scattered around the Valley, with a few clusterings that would become villages later. The individual farmer built his home in the middle of his property or close to the road and was typically some distance from his neighbours. Until the 1870's all the houses and barns were constructed from rough hewn logs with bevel-notched corners, hand-split shake roofs and stone fireplaces. In 1875 the first lumber mill in the Valley was established at Popcum, permitting construction of more refined wood frame houses in the various styles that were

7. Plan of township #23 East of Coast Meridian in New Westminster District; first surveyed in 1868 by G. Turner, and revised four times in 1886. The fate of each road is given in brackets.
sweeping 19th century North America.  

The houses were usually built in stages, with the central rectangular frame part built first. As time passed verandas and gothic ornament and additional rooms were added. For the pioneers, the old cabins were converted to storage sheds and served as reminders of the hard early days. A few still survive. To gain an appreciation of the contents of these houses, the exhibit of paraphernalia at the Chilliwack Historical Society's Museum should be visited.

2. **Incorporation of Chilliwack Township:**

The social structure of the valley began to take shape in 1865 with the weekly visits by the Methodist minister for the Lower Mainland. The faithful would cluster in Sunday best at one of their friend's homes to commune with the biblical God. Religion was a salient factor in making a cohesive community in the 19th century, and the Chilliwackians were acutely aware of a need for divine guidance. This may have been intensified by the isolation and by the closeness to nature that the pioneer families experienced.

When there were scarcely more than a handful of settlers, the Methodists pooled their resources, organized a Church board (1865), built a church by joint effort (1869), and raised an annual stipend and glebe for a minister.

The church thus built in the Atchelitz area became the first community building in the valley.  

Parochial activities such as politics, the sad state of the roads, the flood levels, and crops, were the stuff of informal meetings at the two general stores -- one at Miller's Landing and the other at Chilliwack Landing.

9. Ramsey, op.cit., p.41; refer especially to Gibbard, op.cit.,p.244 for the extent of influence the Methodists had on the social life of the Valley. In 1882 the church was found to be too small and a new one was built closer to Five Corners; a third was built in 1886 at Sumas -- refer to Sandilands, op.cit.,pp.68-69.
In 1870 the Farmer's Association was formed to promote high standards in agriculture. Shortly after, they began an annual fall fair where the harvest could be compared and judged. In 1871, the community took one more step towards joining the outside world with the formation of the Chilliwack-Sumas school organization. A one room school house was built at Sumas.  

With the 1871 union of the Crown Colony of British Columbia with the Dominion of Canada, the political life of the new Province was reorganized. One item thus changed was the repeal of the Borough Ordinance Act in the following year, and the subsequent passing of a new Municipalities Act.

In 1873 Langley and Chilliwack became the first municipalities in the Province to incorporate. One June 10, 1873 the first Chilliwack Municipal Council was formed. Principal concerns throughout the early days were the improvement in roads so the citizens could better make an income and better be able to come together.

The decisive year for the urbanization of the valley was also 1873. In recognition of the continual growth of the settlements of the valley, the Anglican primate of British Columbia, Bishop Hills, promised a church. A simple frame church from the now ghost town of Douglas at the north end of Harrison Lake was relocated in the valley. It was brought down the Harrison by six canoes and reassembled at a site personally selected by Bishop Hills and consecrated St. Thomas' Anglican.

The location of the church reflected the growing importance of the Yale Road. At an improved road diagonally connecting Chilliwack Landing with

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11. Wells, op.cit., p.31
12. For a description of Vancouver Island and the mainland's union in 1866 refer to Ormsby, op.cit., p.217; for union terms with Canada see: Ormsby, ibid., chapter 9.
13. Rogers, et.al., History of Parish of St. Thomas, p.4; refer also to Gibbard, op.cit., p.245.
14. Ramsey, op.cit., p.50: "as far as Chilliwack was concerned, the building of the Yale Road put a backbone into the Community."
Yale Road (at the intersection described under the Royal Engineers section) the Bishop purchased an acre of land and set his church. This triangular site on the south-west corner of Wellington Street and Yale Road West would become the genesis of Chilliwack City. Within a year, the essential smithy, a new school, several houses, and a hotel appeared clustered around the church green. 15

The success of the Anglican village as town centre was due to a combination of factors. The Landing was constrained from growth since the surrounding land had been awarded to the Indians as reserve. There was also a need for higher land less subject to annual flooding, and the Five Corners site was on a slight knoll. Five Corners was also closer to the centre of the valley and so was easily accessible; in fact the village became known in the 1880's as Centreville. With the increase in farms and the subsequent increase in volume of land traffic, the Yale Road gained an importance which would eclipse the river steamers; hence the rise of the town located on the artery, and the decline of the river settlement. One other factor should be considered in rationalizing the success of Five Corners. This is the power of the village myth with the church as the centre for life. In the 19th century the pioneers had certain expectations on what their valley's nucleus should be, and Five Corners satisfied those requirements.

Five Corners was not alone as a settlement. By 1875 there were settlements at Chem, Rosedale, Popcum, Sumas, as well as at Chilliwack Landing and Miller's Landing. Shortly after there would be the beginnings of settlements at Vedder, Sardis, Cultus Lake, Elk Creek, Majuba Hill, Yarrow, Ryder Lake, Bellrose, and many more by the turn of the century. 16 Some

15. ibid., p.51
16. Ramsey, p.75; MacLeod qualifies this by reminding that the settlement might only be one house and a dream of its owner.
would become thriving villages in the valley, but many would remain only as marks on maps. Chilliwack Landing has not even survived on maps. In the first few years of Five Corners' establishment, all the shops, hotel and services of the Landing relocated in the new nucleus. The dock would remain through the first years of the 20th century but with the end of regular river traffic even the dock did not survive. Today, only a few rotting timber piles at the water's edge remain to demarcate the valley's ghost town.

The rate of growth in the valley increased in tempo. The B.C. Directory for 1882-1883 lists 86 farms and one dairyman at Chilliwack and 26 farms and one dairyman at Sumas. Most farmers had a secondary source of income. 17

In the whole Lower Fraser Valley, there were about 6,000 whites and 1,700 Stalo at this time. The character of Five Corners was that of a frontier town. In 1882 the county court was located in the village, adding to its importance. Construction was from the abundant timber and the typical form was one and two storied frame buildings, most with mock-facades in the manner of the stone architecture of the towns of their past. Streets were rutted mud with wooden boardwalks along each side. Horses, troughs, hitching posts, and carts were a part of the streetscape. Five Corners shared the crude texture of the Western ethos.

3. **The Canadian Pacific Railway:**

One of the significant terms of Confederation in 1871 was the construction of a trans-continental railway to connect the west coast with the east. 18 Financing such a venture proved too difficult for the young nation, and for 15 years the railway was delayed. In the interim, the government of Sir John A. MacDonald fell on the issue. With his re-election in 1878 on

17. Gibbard, op.cit., p.258: for a complete list of occupations.
a "National Policy" platform, The railway proposal was rejuvenated. A national railway was seen by Canadians and the mother Parliament as being the only way to unite the nation and protect the land from absorption into the rapidly expanding United States.

Still, controversy surrounded the project from the time of the signing of the Canadian Pacific Railway contract in 1880 until the completion of the railway six years later on Burrard Inlet. Narrow thinking individuals hampered financing throughout the period. Heavy support of the Canadian government and British investors proved inadequate to meet the expenses. More and more of the west was signed over to the company as collateral to help raise additional capital.

The line crossed mountainous terrain that defied construction. Tunnelling, bridges, blasting and gentle grades all consumed massive amounts of human energy and financial resources. As with the other stories of the Canadian past, it was an heroic period.19

A hot political obstacle proved to be the location of the terminus. Vancouver Island and the Cariboo pressed Ottawa for a Bute Inlet route with a bridge to the Island and terminus at Esquimalt. Lower Mainland residents contended the most feasible location would be by the Fraser Valley with a terminus at New Westminster or on Burrard Inlet. This part of the debate was settled in 1878 when the C.P.R. chief engineer, Sir Sandford Fleming, recommended the overall advantages of the Fraser Valley route.20

The final phase in the selection process was the designation of the specific terminus site. In this, all the Lower Fraser Valley farming

19. For a colourful account of the building of the C.P.R. refer to Pierre Berton, The Last Spike; for an academic account of the railway refer to H.A. Innis, A History of the Canadian Pacific Railway; refer also to the C.B.C. series, narrated by Berton.
communities sided with their city centre, New Westminster, but this was of little consequence. The railway had the pick of the best the country had to offer and were not tied to local preferences or to established communities. Burrard Inlet's superb natural harbour was clearly preferable to the limited port facilities offered by the Fraser River. The eastern end of the Inlet, Port Moody fen, was designated as the site, but during an 1884 visit, Sir William Van Horne cancelled that and selected the deeper water off a small settlement known as Granville just west of Gastown. The area became known as Vancouver, Canada's port on the Pacific.  

Vancouver exploded into being overnight. As focus for the trade from Eastern Canada, the Prairies and the Pacific Rim, Vancouver rapidly developed into the first order centre for the west coast; Victoria and New Westminster were relegated to second order stature.  

The route of the C.P.R. followed the north side of the Fraser through the Valley. The station at Agassiz was the immediate link between Chilliwack and the outside world. People reached it by using a ferry connecting Minto Landing with Harrison Mills, the ferry being at first, a canoe. The impact on the Valley of the railway would have to wait a generation for a secondary transportation network to branch out from the centre.  

The attraction of large numbers of settlers to the Lower Mainland was assured by the presence of the railway, and shortly after arriving at Vancouver many would look to the rich land upriver to make their start. These were predictable events so it is not surprising how hard the various factions lobbied to get the railway route. When the first train arrived in  

1886, the valley's residents rejoiced in overcoming their isolation.  

4. The Decline of the Stalo People:

Population statistics and estimates for the Upper Stalo tribes show a terrible decline throughout the 19th century. Between one half and three quarters of the pre-white population died from epidemics, mostly smallpox, which periodically swept through the area. The last major smallpox epidemic occurred in 1886 with the massive wave of immigration brought by the railway. Afterwards immunization helped lessen the problem, so that by 1915 the decline levelled and the birth rate began to rise.

The specific figures for the valley do not reflect the overall impact on the Stalo for this area became the refuge for many of the upriver and downriver tribes. The new economy of farming that was forced onto the Stalo made many of the old village locations impractical, so there was a massive migration from the 1860's to the 1890's to areas with sizeable tracts of arable land. For instance, the Tait relocated from their canyon villages south to concentrate on the previously unsettled Seabird Island. The Pilalt, who had moved from the hilly north side of the Fraser to the south side in the 1840's became absorbed by the Chilliwac by the turn of the century. The search for fertile land and the desire to escape from the growing presence of white settlers in the Vancouver-New Westminster area also led to migration of the downriver peoples to the Chilliwack Valley. The net effect was the tripling of the valley's population from about 151 in 1839 to 406 in 1951 (Chilliwac tribe only). The Chilliwac became the largest tribe of the Upper Stalo.

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28. ibid., p.28: combined population of valley's tribes in 1839 was 716, in 1879 was 635, and by 1951 was 799.
The land claims issue was resolved from the beginning with Governor Douglas' usual foresight. He instructed the Royal Engineer surveyor, McColl, entrusted with marking out Indian reserves in 1863 to: "give Indians as much land as they wished and in no case to lay off a reserve under 100 acres". The minimum acreage supplied was 10 acres per man, a low figure relative to the 160 acre pre-emptions given to the white settlers, but a much higher figure was observed. Reserves in the Chilliwack area were not surveyed until the 1870's with the boundaries completed in the next decade. There were modifications made in 1914 by the Reserve Commission as some of the land was rescinded as too generous an allocation. The Chilliwac received 17 reserves with land surrounding all of the existing villages on the plains in the 19th century. At present only nine of the reserves are occupied. The land held by the Indians became a considerable factor in the subsequent development of the valley. White farmland and the later urbanization has built around the reserves. Now some of the reserves are in key locations for the future expansion of the urban areas so greater co-operation with the Stalo council is going to be required.

The reserve terms were made more generous than those for the northern British Columbian tribes so the Stalo were and have until recently been quiescent in accepting the award. Skeptics question Douglas' motives; many feel he did not wish friction in the areas of principal European settlement and so around the Capital he was generous. Others see him as sympathetic to the Indian case since he was closely associated with the Hudson's Bay Co. which had a good record in dealing fairly and his wife, Lady Douglas, was half-Salish.

The effect on the confinement to reserves and the limited access to the

29. Duff (1952), ibid., p.41.
30. Ormsby, op.cit., p.94.
valley in which they had previously had freedom of movement by aboriginal right, contributed to the collapsing morale of the Upper Stalo. As each acre of land became cleared for farming, the former way of life became more and more obsolete. A new economic and social order had to be assimilated if they were going to survive. With this, the Stalo had the assistance of several dedicated missionaries. One of the first, Father Demers, arrived in the 1840's to a welcome reception by the tribes. In the 1860's the Methodist minister for Chilliwack-Sumas, Rev. Crosby, helped to educate the Stalo. The major step was made in 1886 with the establishment of Coqualeetza school by the Tates. This mission doubled as a hospital; it was the major source of assimilation to the new order for the native people. Photographs of early students show native children dressed in suit and tie and long Victorian dresses. The pain of children adapting to an entirely different culture to that of their parents must have been considerable.

Relations between the Stalo and the new settlers were remarkably peaceful. Though there were differences in culture and in particular language, both sides strove to minimize conflict. No animosity is recorded. The Stalo began to fit into the new order finding employment in fishing, farming and logging. The cost was the abandonment of Stalo heritage.

32. ibid., p.59: note error by Ramsey.
33. Duff, op.cit., pp.12-13: "Always pacific and always tractable, the Stalo have accepted these changes without the open bitterness and hostility so evident among some tribes of British Columbia."
Map #6
Chilliwack and Lower Mainland
in 1876 (from Provincial Archives).
E. Post-Confederation Speculation (1886-1918)

1. Emergence of Urban Hierarchies in the Lower Mainland:

With the arrival of the Canadian Pacific Railway, thousands and thousands of immigrants flocked to the Lower Mainland. Confidence in the future of the west, pacific terminus status, and the abundance of available land added together to stimulate interest in the area. From 1890 to 1913 there was a period of particularly heavy immigration across Canada. The settlers arriving in the Lower Mainland were mostly from Britain but had first spent some time in eastern Canada.

The population of Vancouver rose from its birth in 1886 to 13,709 in 1891 to 29,432 in 1901 to 120,847 in 1911. The boom created an instant city.\(^{34}\) It was a city of speculators; fortunes were made in real estate practically overnight. While the boom progressed urban oriented newcomers found accommodation as best they could close to the centre of the action as possible. The wealthy found the west end facilities of waterfront and Stanley Park to be ideal and soon the area was transformed with mini-estates. When that area was filled, Shaughnessy was opened as a C.P.R. upper class community. The ordinary people found housing in the not so choice sections; street car suburbs began. Early in the city's history the mills on False Creek went into maximum production to process the vanishing forests of the Lower Mainland. Since only the first grade timber was used, the vast quantities of timber were judged superfluous and were destroyed in huge burners. The constant emission of dense black smoke filled the pure coastal air creating a much worse visual air pollution than is experienced now.

As Burrard peninsula became transformed by speculation, urbanization and dark clouds of ash, more and more hopefuls arrived to make a new start in a

new land. Those wishing farms headed towards the delta and the alluvial land of the Lower Fraser Valley. The Chilliwack area was particularly attractive to those who could see the inherent value of the land after hard work had cleared and adapted it into farmland.

With its rapid growth, Vancouver quickly became the largest city in the Province, and by 1910 was considered sub-metropolitan in size. This was the economic hub of the Province, yet it still did not have control of the activities throughout B.C. For instance, New Westminster became the regional centre for the Lower Fraser Valley communities. Agriculture was processed through the New Westminster packing and canning plants and through the Farmer's Market. Until 1910, Vancouver and Victoria merchants had to get produce through New Westminster wholesalers. Competition was so keen that for a time the Vancouver and Victoria merchants hired steamers to carry produce directly from Chilliwack to them; after the introduction of rail service between the valley and the metro area, dairy and market garden produce became transferred more equitably. Still, New Westminster retained regional centre stature.

The growth of settlement in the Chilliwack Valley from 1886-1918 focused upon increased road traffic and on service by railways. By the turn of the century the market town, Chilliwack, was one of three third-order centres in the Lower Fraser Valley; by 1918 Chilliwack was the lone third-order centre, and had spawned several auxiliary villages.

2. **Chilliwack as a Countryside:**

Clearing of the forests prior to the arrival of the British Columbia

Electric Railway (B.C.E.R.) was confined to the lowland agricultural areas and was primarily a matter of clearing land for farm purposes. The first sawmill was built in 1875, but the next was not constructed until 1892. A small lumbering industry developed by the turn of the century with some local processing and some shipping of booms downriver to Fraser Mills and to False Creek.

With the arrival of the B.C.E.R. in 1910, the process of logging the primeval timber increased dramatically. Within three years all but the mountains had been deforested. The railway had intended the logging to supply the initial freight; then with the valley cleared, there would be an influx of settlers who would become the succession market for rail services. The depression and World War I inhibited the total success of the prediction, for the settlers were slow forthcoming.

As the western part of the valley filled and was humanized, settlers moved into the East Chilliwack area's marginal land. Considerable dyking, channelling and draining was required since the bulk of the land was marshland or easily inundated. Between 1900-1903, a major dyking project was undertaken with the assistance of the Provincial government -- this would free the valley from all predictable flooding. The contract was awarded to the McLean Brothers who had previously made safe Boundary Bay, Lulu Island, Pitt Meadows, Coquitlam, Langley, Matsqui and other parts of Chilliwack.

Under the terms of this contract, the Semiault was dredged and several dykes were built to stabilize the land for settlement.

39. Roy, op.cit., pp.61-62: "The B.C.E.R. correctly anticipated that the greatest single source of freight revenue on this branch would be the carriage of forest products ... by 1913 all the merchandisable timber immediately adjacent to the line had been cut."
40. Siemens, op.cit.(1968), p.38: there had been serious floods in 1876, 1882, but the last one in 1894 finally put the government into action. The next flood would be in 1948.
41. Hickman, op.cit., p.2.
Another part of the valley to attract settlers was the north bank around Agassiz. Capt. Lewis N. Agassiz retired from the Royal Welch Fusiliers and made the first pre-emption in the area in 1862. When the C.P.R. passed through the area in 1886 they named the valley's station after this distinguished pioneer family.42

Two years later, the Federal Government's Department of Agriculture constructed one of five Dominion Experimental Stations across the nation at Agassiz. This model farm and research laboratory became the source of crop and farming methods improvement for the west, and in particular for the Chilliwack Valley. The high standard of agriculture in the valley has been in part attributed to the constant attention through lectures, inspections and articles in the local newspaper by staff members of this farm.43

Farmers found grouping together into organizations for education and marketing to be most useful and so an increasingly diverse range of organizations was initiated. The annual fall fair, held since 1874 by the Chilliwack Valley Farmers Association (1886 construction of first fairgrounds) was supplemented by joining in the New Westminster annual fair for the whole Lower Mainland. In 1889 the B.C. Fruit Growers Association was formed, principally by Chilliwack producers to obtain fair prices for fruit shipped to the prairies. In 1890 the B.C. Department of Agriculture was formed to give assistance to forming other co-operatives, more settlement, dyking and education. In 1912 the forerunner of the Fraser Valley Milk Producer's Association, a dairyman's co-op, was initiated.

The effect of settlement growth on land prices was dramatic. Land values

43. Canada Department of Agriculture, Progress Through Research 1887-1962: Agassiz, B.C., Experimental Farm, 75th Anniversary.
quoted in 1904 in a booklet promoting immigration to the Province gave figures for Chilliwack at $70 per acre of cleared and cultivated farmland, with $35 per acre buying partially cleared land. Six years later cultivated land sold for $600 per acre, and the price has been steadily increasing since that time. An increasing population was a desirable goal. At the time of the 1913-1914 depression, Chilliwack promoters continued their successful campaign to attract people. Thousands of farmers were said to be wanted for the valley. Small tracts were available for intensive farming. The booklet continued to show all the advantages of living in a civilized region. Farmers were wanted, but the days of the penniless immigrant arriving in a new land to pioneer a farmstead were past. Only those with adequate capital to buy into the valley were welcome. People did not flock to Chilliwack as a result of the hard sell campaign, but there was a steady increase, and by the end of 1918 all but the marginal land was in production.

One of the principal causes of the split between town and country in 1908 was the issue of road improvements. The farming majority of the township voted consistently to use tax money and labour on the construction and improvement of rural roads and bridges. Chilliwack's town roads remained rutted mud and gravel. The last country road to be constructed in an amorphic and loose manner was the 1898 trail through the Chilliwack River Basin toward the gold strike on Mount Baker. This Mount Baker trail is the present Chilliwack Lake Road.

44. The Settlers' Association of British Columbia, Farm Lands in British Columbia, p.35.
45. George B. White, A History of the Eastern Fraser Valley Since 1885, p.122: this was part of the A.C. Wells farm. Unimproved land in 1907 was selling at $20/per acre according to the B.C. Bulletin No.10: Land and Agriculture in B.C., 1907. By 1910 this rate too had increased considerably.
46. The Chilliwack Board of Trade, Chilliwack, the Garden of British Columbia, p.10.
47. Ramsey, op.cit., p.62: this was the last gold rush to hit Chilliwack.
The early 20th century road improvements differed from the original surveyors' roads in that they were brought into uniformity with the surveyed gridiron pattern.\textsuperscript{48} The early roads were adapted to terrain, going around hills and ponds, but the road improvements obeyed geometry. Depressions were filled, hills were levelled, and where the road had to start up a mountain, the grid was respected until the angle of incline reached impossibility. The roads in the newly opened areas such as east Chilliwack conformed to the north-south, east-west orientation giving the landscape a prairie perspective. The older roads began also to be straightened and wherever possible the gridiron was introduced. As traffic volume increased and the tax base increased and the encumbrances such as water were controlled, some of the turns in the roads became unnecessary inconveniences and were better removed; but many of the straightening programs undertaken were determined more by attitudes than needs.

The character of the agricultural landscape was transformed during this period from that of pioneer homesteads in an expanding clearing in primeval forest, to that of cleared countryside with orchards, turf, and crops. Gone too were the innumerable streams and ponds and the constant threat of flooding. The rivers were contained in dyked courses, and the valley's timber was beginning to be removed on the mountains.

The diversified agriculture of the valley contained a microcosm of all that could be grown in the climate, including beef, dairying, sheep, swine, poultry, forage crops, hops, peas, corn, berries, tree fruits, grains, nuts, bulbs, nursery stock, and even tobacco. Toward the end of the period, area

\textsuperscript{48} The Chilliwack Progress, various issues -- report on Council meetings between 1891-1921.
specialization began to be felt which saw the end of the grain fields which moved to the Peace River and to the Prairies, and the end of the tree fruits which moved to the Okanagan. Dairying and market garden crops increasingly accounted for the texture of the landscape from 1918.  

3. The Urbanization of the Chilliwack Valley:

Europe and North America from the mid-19th century were being transformed into urban societies; the appearance of the C.P.R. in 1886 opened the valley to the same sort of urban pressures. Settlers were determined to attract more and more people to help tame the valley to help pay for improvements to roads, schools, etc., to increase the quality and quantity of services, to generate a real estate boom that would see property values increase and to increase the level of available capital investment in the community. During this period the values of the inhabitants shifted from those of an agrarian society to those of an urban society. Even the farming sector was transformed.

The explicit campaign to attract the new breed of settler was given impetus in 1891 with the establishment of a weekly newspaper, The Chilliwack Progress. Its editorials would constantly repeat the message of a booming economy. Residents would send copies to relatives and friends to entice them to join the march west. For instance, from a random example of the regular editorials: "Chilliwack has now entered upon a career of prosperity. The village is booming ... the valley is the prettiest, richest and best spot on earth".  

A later editorial describes the prosperity from progressive trade and industry. Just before incorporation, editorials praised the steady growth of the area in a manner far exceeding its actual size. The arrival

49. For a historical view on the early agriculture of the valley refer to White, op.cit., chapters 3 & 4; also refer to G.R. Winter, "Agricultural Development in the Lower Fraser Valley", pp.101-116.

50. The Chilliwack Progress, April 16, 1891.

51. ibid., June 3, 1896.

52. ibid., Nov. 27, 1907 and Feb. 5, 1908.
of rail service served as a time for reflection upon the progress to date.\textsuperscript{53} The result was the increase in population of the town centre from 500 people in 1901 to 1,700 people in 1921, and the population in the township went up a staggering 500 percent in the decade of 1901-1911.\textsuperscript{54}

The recession of 1913 and the effects of the Great War had a mild influence on the valley. The former was softened by the phenomenon of peripheral growth during times of recession; so while Vancouver experienced a 20 percent drop in population, many of these people relocated in the less expensive suburban and rural areas of the Lower Mainland. Consequently Chilliwack continued to expand.\textsuperscript{55} With the Great War, agricultural produce was at a premium, so the township was at full production.

The period was noted for its increasingly varied offering of services -- the growing numbers of town shops gave competition to the New Westminster stores. Several hotels were built, though no liquor licence was permitted until well into the 20th century.\textsuperscript{56} Government buildings included the post office, the county court, and the high school, all built before the turn of the century. In 1893 the growing business community initiated a Board of Trade. In 1897 St. Thomas' church was rebuilt to accommodate the expanded congregation.\textsuperscript{57} Community facilities were brought into the technological era with the 1907 construction of a fresh water supply by the Elk Creek Falls Water Co., and in the next year with the arrival of a complete telephone and electricity service.

\textsuperscript{53} ibid., Nov. 2, 1910.
\textsuperscript{54} Roy, op.cit., p.59.
\textsuperscript{55} Howell-Jones, op.cit., p.146; refer also to J.L. Robinson and W. Hardwick, op.cit., p.28, for an explanation of the principle.
\textsuperscript{56} Gibbard, op.cit., p.244: "one effect of this Methodist dominance was that until well into the present century no one was able to secure a licence to sell intoxicants".
\textsuperscript{57} J.L. Rodgers, et.al., op.cit., p.5.
Recreation was provided for the increasing numbers of tourists with the 1907 proposal for the creation of Cultus Lake Park.\(^58\) In 1908 the new fairgrounds were opened. It seems 1908 was an eventful year. The municipality was split into Chilliwack City (population 800 but with ambitious plans)\(^59\) and Chilliwack Township. The other significant event was the fulfillment of the campaign promise of Premier McBride. He was elected on a policy of Provincial trunk road improvement to permit the new era of the automobile. Yale Road became the link in the Trans-Canada Highway, and the surface was macadamized.\(^60\) (The Dewdney trunk road had been constructed in 1905 as far as the Harrison River).\(^61\)

In 1909 the centre of the town was conspicuously altered with the relocation of St. Thomas' Anglican. The wood frame structure was moved in one piece from its site on Five Corners to its present site using rollers and horses.\(^62\)

The impact of the 1910 arrival of the British Columbia Electric Railway has been discussed in part elsewhere, but the agricultural impact was also important. Rates for transporting produce to the large Vancouver area market were lowered substantially over those of the old river steamers. The 1911 introduction of a daily fresh milk and vegetable train meant the expansion of local creameries and dairying. In 1913 the last regular steamer service offered by the C.P.R. was discontinued.\(^63\) In 1915, the second national railway, the C.N.R., passed through the valley, this time on the

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58. The Chilliwack Progress, Aug. 21, 1907.
59. The Chilliwack Progress, Nov. 25, 1896: the first editorial suggesting incorporation of a city.
60. Meyer, op.cit., pp.82-83: gravel was wide spread use on roads in 1913.
south bank with tracks parallel to the B.C.E.R. The interurban connections encouraged more people to regard the Valley as integral with the metro region, and more non-farming people began to relocate there.

Chilliwack at the turn of the century still had the characteristics of a frontier town. The shade trees, mud and gravel roads, covered boardwalk, horse and buggy, and the wood frame construction predominated in the growing town. A few concrete block buildings began to be built after the establishment of the Elk Creek Cement works in 1902. The Chilliwack fire of 1906, when the north side of Wellington between Young and Mill was destroyed, led to concern with fire protection. The need for a fire brigade and for a fire safety by-law in town contributed to the 1908 split between town and country. After 1908 the town was gradually rebuilt with more permanent structures. When the church sold its acre facing Five Corners, two concrete block structures replaced it — the three storey Hart Building and the two storey W.T. Jackman Building. Between 1910 and 1912 the cast-in-place concrete palladian City Hall was built. Brick also was introduced from MacLure's Clayburn Refractory in Abbotsford. 1913 saw construction of Chilliwack's General Hospital.

Residential construction in the period was of wood frame construction. Many of the town houses were large, reflecting the large Edwardian families and the prosperity of the merchants and professionals. For instance, the first architect-designed house was built in 1891 for Ashwell, a local merchant. Gradually the old method of owner built housing or construction helped by neighbours came to an end. Several contractors appeared to build to standard or custom designs. The various styles, sizes and location of

64. The Chilliwack Progress.
66. ibid., p.72.
the extant buildings is covered in Sandilands and Somers excellent paper.\textsuperscript{67} There appears to have been a few pre-fabricated homes built by owners from the kits supplied by the B.C. Mills Timber and Trading Co.,\textsuperscript{68} but the majority appear to be contractor built. The first subdivision of town lots into bungalow size lots was in 1906, and this may be taken as the date of introduction of the "suburban" garden and boulevard texture of the city.

The first automobile appeared in the valley in 1911.\textsuperscript{69} The first ad for suburban homes in the village of Sardis appeared in the Chilliwack Progress in that year, and was followed in the next month by an editorial extolling the continual expansion of the urban portion of the valley. The "city" of Chilliwack had only 800 residents, but the need for "suburbs" was said to be essential.\textsuperscript{70} By the time of the introduction of the first car dealership in Chilliwack, suburbs were considered common-place.

\textsuperscript{67} ibid., pp.74-89.
\textsuperscript{68} D. Lunden, "Dewdney & Nicomen & Kent" in Sandilands edit., pp.96-97.
\textsuperscript{69} Hickman, op.cit., p.105.
\textsuperscript{70} The Chilliwack Progress, May 31, 1911 for ad., June 28, 1911 for editorial.
Map #7
Chilliwack and Lower Mainland in 1892 (from Provincial Archives).
1. **Inter-urban systems:**

The Lower Mainland rebounded from the post-war recession and nation-wide labour unrest and entered into the prosperity of the roaring twenties. It was an era of growth for the peripheral areas of Vancouver; the scattered settlements of Burrard peninsula united into one metropolitan region. The expanded metro area extended across to the north shore with the 1929 opening of the Lions Gate Bridge and also began to extend into Richmond. The Lower Fraser Valley east of New Westminster remained relatively stable in terms of hierarchial arrangement but most experienced a net population increase.

The particular buoyant economy for the West Coast was due to the full effects of Pacific trade. With the Panama Canal in operation, and a time of peace on the ocean, trade with the whole world expanded, especially grain, lumber and fish. The usual pattern of metro growth in prosperity and valley growth in time of recession held true throughout the period. Chilliwack continued to be exceptional since it experienced a relatively constant rate of growth throughout. It remained the only third order centre in the Lower Mainland.  

It was also an era of consciousness of a new scale of interconnectiveness within the nation. Technology had humanized the vast space of Canada to bring people closer together. The telephone and telegraph systems previously available increased in efficiency with telecommunication developments. In 1927 the radio station, CHWK, was opened.

Perhaps the most important aspects of the interurban systems to be expressed on the landscape at this time were the numerous transportation links. The national railways continued to be the best method of travel across the

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country, and the B.C.E.R. continued to tie Chilliwack with metro markets, but beginning in 1923 the volume of traffic on the B.C.E.R. began to decline in favour of motor transport. As the railway had made river transport obsolete, the flexibility and relative cheapness of operating automotive transport made the railway uncompetitive.

It was the automobile the valley's residents turned to in the twenties. Seeing the declining volume, the B.C.E.R. management shrewdly followed the trend by introducing a motor bus service, the Pacific Stage Lines, in 1923 and by 1926 service was successfully extended to Chilliwack. The B.C.E.R. also entered into competition with itself for the freight trade by forming in 1926 the Fraser Valley Truck Lines.

Politicians also read the signs of change and supported automobile oriented use of tax resources. The 1920 election platform of John Oliver promised to construct highways for the increasing numbers of automobiles. In 1924 Yale Road was designated the route of the major transprovincial highway (soon called the Trans-Canada Highway) and work was started in straightening, widening, grading and gravelling the old trail to bring it up to automotive travel standard. In 1926 the Lougheed Highway was extended to connect the Harrison-Agassiz area with New Westminster. From 1928-1935 the Trans-Canada Highway received a topping of concrete throughout the valley. The reorientation of the highway through Sumas Prairie ended years of extra effort in circumferencing the Lake. Municipal roads continued to be improved

73. Roy, ibid., p.61: the last steamer on the river, The Skeena, stopped service in 1928.
74. Ormsby, op.cit., p.412: per capita ownership of autos had risen from 116 in 1911 to 16 in 1921 to 6.2 in 1931 as a result of the introduction of assembly line techniques.
75. White, op.cit., p.35; refer also to Meyer, op.cit., p.82.
76. Roy, op.cit., pp.63-65; refer also to Meyer, op.cit., p.84: the Lougheed was not paved until 1937.
77. Meyer, op.cit., p.83.
throughout the period. In the city, curbs and sidewalks were introduced.

Air flight had been popular in the Lower Mainland since the twenties, when numerous planes arrived. At first they used farmers' fields as runways. With the establishment in 1940 of the Sardis-Vedder Crossing Royal Canadian Army base, the need for an airport was apparent. Several acres of fields were acquired near the centre of the valley and concrete runways and metal hangars were constructed.

2. **Countryside:**

The major alteration to the valley's indigenous landscape began in 1919. The Sumas Lake land reclamation project involved dyking and drainage of 29,000 acres of prime farmland with an additional 4,000 acres of land freed for farming on the periphery. This project had long been advocated, and numerous proposals had been put forth for methods of accomplishing it. The cost made it prohibitive for private enterprise to handle.

The Provincial government was persuaded to include the project in its war recovery program and in 1919 work began. The chief engineer of the Project, Sinclair, later wrote an account of the procedure. The plan involved the dyking of the Sumas, Vedder and Fraser Rivers, the construction of several canals (the major one named the Vedder Canal) and the draining of all water from the lake bed. The budget ran over triple the estimates for a total price of $4,600,000, which represented a sizeable proportion of the Provincial income. Under the terms for awarding the land, the government

78. First by Dewdney in 1876 - see Gibbard, op.cit., pp.450-454. The B.C.E.R. acquired options and were ready to proceed until the cost estimates came in. See Roy, op.cit., p.60 for one company's proposal.
80. Ramsey, op.cit., pp.77-78; Sinclair included a financial statement in his history which shows a total cost of $3,350,000 with $555,000 of this recovered through crown land sale for a cost of $2.8 million (p.20); refer also to Ormsby for an indication of the problems incurred in financing.
sold the crown land with clear title at $50 per acre.  In 1922 the first farmhouse was built on the diminishing lake beds and in 1923 the first crops were planted. It was not until 1924 that the water was completely drained and the land dried adequately for full production. The cost was amortized in part by the sale of land and by the anticipated land tax.

The effect of opening up such a large expanse of fertile land was to increase the valley’s farming community by enough to cushion the effect of the 1930’s depression.

In addition to supporting the Sumas Lake project, the B.C. Land Settlement Board, together with a federal program, helped make land available to soldiers on their return from Europe. 802 soldiers took up farming in the Lower Fraser Valley resulting in a 25 percent increase in land under cultivation by 1920. This was the first effect of planning at the national level filtering into the valley.

Recreation facilities for the growing numbers of tourists finally took shape in 1923 when the City and the Municipality jointly acquired 63 acres of waterfront land on the north end of Cultus Lake from the Dominion government. This was followed in 1925 with a further grant of several hundred acres. The Cultus Lake Parks Board permitted a small community of holiday cabins to be constructed. About the same time, a summer cabin community was made on the southern shore of Harrison Lake. Shortly afterwards a luxury hotel was built to utilize the hot springs; it developed a fine reputation

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81. Sinclair, op.cit., p.14; but if 30,000 acres were sold this should have realized $1.5; the financial picture is impossible to sort out with the available references. The price seems incredibly low in comparison with Chilliwack farmland.
82. Sinclair, op.cit., p.3: Drainage district established 1923.
83. The 1924 date was given by Siemens, (1968) op.cit., p.38: both White, op.cit., chapter 5 and Ramsey, op.cit., p.78 give 1926 as the date the mud had dried adequately to permit farming.
85. White, op.cit., p.129.
Logging operations in the higher elevations resulted in the complete removal of all indigenous forest by 1930. The last few hundred acres in the Lower Mainland to be taken was called Green Timbers (between the Serpentine and Whalley, south of Guildford). The fight to preserve this area by conservationists was prolonged, but proved to be futile for between 1927 and 1935 it too was gradually logged. Public attitudes toward conservation had a long way to go. The Canada Conservation Commission had been laying the groundwork since 1909, but old attitudes of resource exploitation were difficult to combat. After the 1920's scandal of overfishing the Fraser River, the Provincial government began to reassess its attitudes. In the 1930's afforestation of the non-arable land in the Lower Mainland was begun to provide a succession crop. Most of the forest now observable is about 40 years old.

The effects of the agricultural technological revolution began to be experienced in the valley's landscape in the 1920's. Trucks, tractors, and combines replaced horse drawn equipment, greatly improving the efficiency of each operation. New methods and improved crops permitted larger yields and a higher standard of living. The larger population of the Lower Mainland (370,000 in 1931 and up to 450,000 in 1941) created a stable demand for locally produced products.

Importation of staples throughout the period was impractical, but movement of produce from areas of specialization within Canada became a reality. The varied crops of the Lower Fraser Valley found they could not compete, so the landscape specialized in dairy products and market gardens. The

86. ibid., pp.150-154.
87. ibid., chapter 4.
collapse of the grain market in the depression years ended wheat and oat production; fruits were found to be better adapted to the climate of the Okanagan Valley, so most of the orchards in the valley were gradually removed; fluctuations in the wool market ended the sheep flocks.\textsuperscript{88}

Agriculture in the Lower Fraser Valley peaked in 1941 with 330,000 acres in cultivation.\textsuperscript{89} Under pressure from urbanization agriculture began a steady decline as more and more prime farmland was covered with concrete.

3. \textit{Urban Chilliwack}:

There were few developments in the period 1918-1946 in the urban component of the valley which could not be anticipated by the trends established at the turn of the century. The city core continued to add permanent commercial space; houses that got in the way were frequently relocated in the same manner as St. Thomas' church.\textsuperscript{90} Subdivisions with bungalows in the manner of Vancouver's suburbs continued to be built. Chilliwack's "suburbs" gained additional population. A few community parks and schools were built to meet the increased demand.

About three things happened out of the ordinary. The first was the sale of land in 1928 to a group of Mennonites who migrated from Manitoba. Yarrow became the centre for an expanding presence.\textsuperscript{91} There are now several thousand Mennonites in the valley.

Another event to alter the urban sector was the 1929 gift by the Carnegie Corporation of an experimental rural library system. The Fraser Valley Union Library has its trial headquarters on Wellington Street in Chilliwack with

\textsuperscript{88} For a complete list of the growth and decline of the various agricultural products introduced to the valley refer to: I.C. Carne, G. Cruickshank G.A. Muirhead, G.R. Thorpe, Second Approximation Report: Agriculture in the Fraser Valley.

\textsuperscript{89} Winter, op.cit., p.114.

\textsuperscript{90} Sandilands, op.cit., p.70: Dr. Henderson's house relocated in 1940's.

\textsuperscript{91} Siemens, op.cit., pp.41-42; see also Ramsey, op.cit., p.83.
branches at Abbotsford, Langley, Cloverdale, Ladner, Haney and Mission. Sub-branches were established at Hope, White Rock and Port Coquitlam. Smaller rural villages were served by a travelling truck library. This was one of three such experimental library systems in North America.  

The other event was the establishment of the Royal Canadian Army base at Sardis-Vedder Crossing in 1940. Barracks and training facilities for several thousand men were provided for. The stimulus such a large input of regular paychecks had for the local economy resulted in further expansion of the service sector of the urban components of the valley's landscape.

The growth of an agro-industry in Chilliwack got off to a good start with the establishment of the Edenbank Creamery in 1890 by A.C. Wells. This was followed by the Fraser Valley Fruit Cannery Co. which survived from 1891-1894. The Chilliwack Canning and Preserving Co. had similar difficulties over its period of operation from 1908-1912. In 1917 the Borden Co. Condenser was established. In 1925 the Fraser Valley Milk Producers Association built a utility plant to handle its growing business. Several packing companies managed to survive for a time until the mid-thirties. With the war the agro-business began to improve. The Board of Trade has always tried to attract a strong agricultural related industry both to help keep production costs at home, and to stimulate the further growth of a suburban population.  

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92. White, op.cit., p.142.
93. White, ibid., chapter 4.
LEAF 111 OMITTED IN PAGE NUMBERING.
G. **Industrial Growth and Functional Integration (1947-1971)**

1. **Inter-urban Systems:**

   The post-war period was characterized by a Provincial economy favourable to the growth of sub-regional centres, but integrated by the one metropolitan nucleus. All the resources of the Province came to be controlled through Vancouver's Central Business District.\(^93\) The pre-eminence of metro Vancouver as the economic capital of a fabulously wealthy hinterland resulted in an expanding urban population which flowed outward from the centre to every part of the Lower Mainland by the end of the period.

   At first the growth in the Lower Fraser Valley took the form of uncontrolled sprawl on unserviced land but by the mid-fifties the consequences of this alarming activity were recognized and the various municipalities began to take steps to contain growth and channel it to create prosperous communities.\(^94\) As a result, subdivisions of primarily single family housing in areas planned and serviced by the various municipalities with several suburban satellite city centres emerged.\(^95\)

   From the centre several zones of influence of the metro area over the Lower Mainland developed. The fringe area continually expanded eastward until by 1971 it had reached Abbotsford.\(^96\) Chilliwack continued to act relatively independent of the metro area. It served as a market town for the Chilliwack region.

   Growth rates in the expanding metropolis doubled within 20 years. By 1961 the population was 999,700 and the projected population for the year 2,000 was eagerly anticipated at 2 million. Chilliwack's growth rate was higher than

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93 Robinson & Hardwick, op.cit., p.47.
94 Lower Mainland Regional Planning Board, *Urban Sprawl and Economic Aspects of Urban Sprawl*.
95 Gerhard Sixta, *Burnaby Plan*.
the metro mean. The valley's population rose from about 16,000 in 1941 to 26,000 in 1951 to 35,000 in 1961. From 1961 the rate of increase rose to 10% per annum.

Control of growth of the inter-urban system was monitored by an agency called the Lower Mainland Regional Planning Board. From 1949 until its termination by the Provincial government in 1968, this Board served as the forum for discussion of planning problems in the whole Lower Mainland. Each municipality, including Chilliwack, was represented on the Board. Programs agreed by a majority of members of the area were put forth for each council to ratify or reject to ensure political input from all sectors. The final project of the Board was the preparation of the 1966 Master Plan for future development of the whole area.

In that year the Minister for Urban Affairs in Victoria introduced the system of Provincial Regional Districts to handle local affairs such as planning. Authority was transferred from the L.M.R.P.B. to four Regional Districts serving the Lower Mainland. These are: the Greater Vancouver Regional District, Central Fraser Valley Regional District, Dewdney Alouette Regional District, and the Fraser-Cheam Regional District. The Chilliwack Valley falls mostly within the Fraser-Cheam Regional District.

Inter-urban transport systems concentrated on trucking and the private automobile from 1946-1971. In 1950, the B.C.E.R. discontinued passenger service and drastically reduced freight service. The only public transport that remained was the Pacific Stage Lines. At first the existing highways provided growing space for the expanding population but by the mid-fifties other routes had to

98. Lower Mainland Regional Planning Board, Official Regional Plan for the Lower Mainland Planning Area.
be built.\textsuperscript{2} In the valley, the Rosedale-Agassiz bridge and the Lougheed Highway extension to Hope helped to interconnect both sides of the Fraser. Investment in freeway connections across the nation resulted in the construction of the Port Mann Bridge and Canada \#1 in the 1960's. The effect of this freeway on the landscape of the valley is visually dramatic. With the distance to Vancouver cut to one and a half hours, the metro influence began to rise.\textsuperscript{3}

2. Countryside:

With the advent of the post World War II recovery came a gradual, but profound, reorganization of the beliefs underlaying the Canadian consciousness. From a total dependence upon the resources and beauty of its landscape, Canadian society shifted to a total dependence upon the pleasures of its metropolitan corridor. This process was generally recognized as dominant by 1962. A new set of attitudes came to influence patterns of living. These patterns separated man and nature to an extent unknown on this continent. The pioneer society had sought to create order out of nature, but at a human scale which was relatively compatible with nature. The new mentality, however, was that of a plastic society which did not understand the awesome effect its patterns would have.

The most devastating effect of these new attitudes on the landscape of the Lower Fraser Valley was the constant conversion of prime agricultural land to urban purposes. The rate was 2000 acres per year.\textsuperscript{4} A far greater amount of land was made sterile by subdivision into small-holdings of one to five acres. This effectively ended food production since few hobby farmers produced surplus for market.

By the 1960's agriculture was thought of as a temporary inconvenience which

\textsuperscript{2} Howell-Jones, op.cit., p.156: "During the first decade the new development tended to advance along the single linear access of the Trans-Canada Highway. Development became far more widespread in the second half..."

\textsuperscript{3} Meyer, op.cit., pp.86-87.

\textsuperscript{4} Winter, op.cit., p.114.
would be overcome by the eventual urbanization of the whole Lower Fraser Valley in a similar manner to California's San Fernando and Santa Clara Valleys. The most significant feature of the alteration of the landscape of the Valley during this period was the loss of the countryside as an amenity. Much of the land was either converted to urban purposes or made unattractive by speculation.

3. Urban Expansion:

Post-war Chilliwack was transformed from a rural community to a suburban one within one generation. The instrument of this change was primarily the automobile. The valley was altered not to fit the needs of biological ecosystems but those of mechanical devices. The settlement patterns came to reflect the scale and requirements of the automobile. Paved roads, service stations, and acres of parking lots were installed throughout the valley. Residential patterns became dominated by well engineered roadways of exceptional proportions; Ribbon or strip development sprang in an uncontrolled manner along the major streets. Yale Road became a jungle of wiring, neon, asphalt and wretched construction. Toward the end of the period the councils recognized the need for controlled planning and so the strip was halted in favour of a new form of commercial pattern: the shopping centre. In trying to adapt the valley to the car, even the market town, Chilliwack, began to take on the appearance of a shopping centre. Acres of blacktop appeared throughout the central area. Public transportation was shunned in favour of individual mobility.

The rapid rate of growth can be attributed to five factors. First, the returning soldiers settled down at the war's end and raised families. The "baby boom" coupled with the shortage of accommodation that had accumulated

5. Parker, op.cit., p.168: "The plight of the farmer in the Fraser Valley is due largely to the general lack on the part of residents and government officials of a basic respect for agricultural land as a non-renewable resource, and an understanding that rural activities are a vital aspect of the economy and community life."
through the depression and the war rationing, resulted in a high demand for single family housing. Chilliwack, like the rest of North America made large increases. Second, the retirement of many army personnel to the valley contributed to the growth rate. They had been stationed here during the war and had made a commitment to return. Third, was the large migration of prairie farmers who chose to retire to the valley. The construction of multiple dwelling units in Chilliwack City and the relatively high rate of people over age 45 (24.6%) reflects this. Fourth, is the growing number of commuters to employment in other parts of the Lower Mainland.

The fifth factor contributing to the growth rate was the development of local industry to employ local people. By 1966 there were two saw mills, three food processing plants, a grass dehydration plant, and a machine industry, in addition to a growing number of smaller industries. Plans were prepared to attract more industries to the valley to provide a larger population.

The introduction of planning was in 1954 when Chilliwack Municipality hired a planner through the L.M.R.P.B. The municipality was one of the first in the Lower Fraser Valley to do so. Unfortunately the restrictions imposed on individual disposition of land created so much friction that he was fired. Until 1966 the valley made do with a loose zoning plan prepared by Council and the building inspector. In that year the City hired the L.M.R.P.B. staff to prepare a report on its future. The report called for the increase of Chilliwack to regional centre status and for an increase of more than triple the valley's population to 100,000. This report proposed appropriate changes to the core area including a more substantial shopping district and a surrounding zone of medium density housing. All the remaining single family lots would be infilled. There was a warning that if the city did not progress, then the outlying sub-centres

would. Harkness' report reflected the goals of the L.M.R.P.B. master plan which was prepared at the same time.

In the 1968-1969 period, the township commissioned a planning study of the future of Chilliwack. This report supported the regional centre concept but greatly increased the urban component of the valley. Sub-centres were to be built throughout the municipality and a large industrial complex was to be built in the north-west paralleling the railroad. Agricultural production was reduced substantially to permit urbanization of much of the fertile lowlands. In 1970 council accepted in principle the plan but postponed approval of zoning.

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9. Willis & Cunliffe, op.cit., the planner who prepared this report was hired as township planner in 1969.
Map 49
Chilliwack and Lower Mainland
in 1971 (National Topographic System reproduction, scale 1:250,000).
FIGURE 10
PROPOSED DEVELPOMENT PLAN
THE TOWNSHIP OF CHILLIWACK B.C.
SCALE: 1" = 4000"
Map #10
Projected Trends - (copy of Chililiwhack Municipality 1968 Master Plan). This is only one indicator of the scale of anticipated growth of the urban sector.
CHAPTER III - CONCEPTUAL LANDSCAPE HERITAGE: AN EVOLUTION AND DISPERSAL MODEL

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A. Scope

British traditions have had an enormous influence upon British Columbia's heritage. British institutions, concepts, and social customs created and moulded settlement in this part of Canada. The reasons for this influence are diverse, but population was an important factor. Until recently, theProvince was predominantly British in origin. Ormsby stated that regardless of the later Canadianization of the Province, its cultural ties continue to be strongly attached to Britain.

In the early 1960's these ties began to weaken, resulting in the redefinition of the Provincial history along multi-cultural lines. Several projects were commissioned to stress the contributions of all the people of the world to British Columbia for the 1966 Union Centennial, and the 1967 and 1971 Canada Confederation Centennials.

This recent trend does tend to lead to distortion of the attitudes that provided the raison d'être guiding settlement. For instance, the first attempt to define the cultural landscape of the Lower Fraser Valley avoided reference to the Stalo and to the British contributions. Instead, Siemens focussed upon the recent contributions (since World War II) by various minorities. His rationale for doing this was because such groups are academically easier to isolate and describe. However, this did little to extend the

1. The Census of Canada shows a decline to 60% British ethnic origin by 1961.
4. Alfred Siemens, ed., The Lower Fraser Valley: Evolution of a Cultural Landscape, p.44: "Among those who came in response to this and other factors, the British element of the population was there first and remained numerically dominant...they did, of course, affect the form of the cultural landscape profoundly, but it is difficult to decipher the 'Britishness' in it, mixed and interfolded as it is with elements the British settlers adopted along their way westward through North America. It has proved more feasible so far to analyse the impact on the landscape and involvement in the settlement process of some of the valley's more distinctive, smaller groups."
knowledge of the attitudes that actually set the landscape infrastructure in motion. To accurately discuss the evolution of the valley, all of the population’s contribution must be considered, not just one or two minority groups who have recently arrived. To ignore both the aboriginal Indian and the British contribution is to ignore the basis of British Columbian history.

With an eye to remedying this oversight, the procedure for analysis of this phase of the hypotheses is outlined. The procedure is to isolate and describe the origins and development of each of the three continuum patterns which were influential in forming British Columbian conceptual roots. Reiterating, these are: the natural landscape, the village, and the garden city. The diffusion of these ideals to this continent, both to the United States and to Canada, will be discussed, along with a note on the various transmutations that occurred as the visions were transferred across to British Columbia.

With the aid of several historical theories, a model of idea diffusion (diagramatically showing the flow of the concepts) has been abstracted. To this day, the flow to British Columbia has been a continuous unilateral direction from the various international sources. There has been little feedback to world cultural heritage. The last section of the model discusses why this has been, and demonstrates the effect of the continual dependence upon exogenous culture for explanation of the uniquely Canadian experience of landscape. The banner here is a Canadian future of cultural nationalism tempered with recognition of the importance of respecting the precepts of the past.

5. This is not the whole conceptual framework by any means, but it is a start.
B. The Natural Landscape

1. The Extent of Influence of 18th Century Naturalism:

For this one period in history, landscape led the arts and the sciences into a new order. It gave tangible expression to a nebulous philosophy and then acted as a catalyst for so many of the man-nature dialogues that should have created a perfect world today. The horizon of that which was worthy of concern by man swept away formal separations and declared man was a part of nature. It took one and a half centuries before Darwin would be able to prove this intuitive sensibility.  

Rejection of the first stages of the British natural landscape is popular now, in part because the initiators were a privileged group of aesthetes with refined taste and wealth. However, it must be remembered that these people were the radicals of their day: follow for instance, the political career of Lord Shaftsbury, one of the first proponents. Landscape became a symbol of the new socio-political order which kept Britain on the path toward the public good, instead of toward the disastrous opulence on the continent. As the first walls began to come down around the island's gardens, causing perception, creativity and exploration to explode outwards, the Sun King built Versailles. All the world, proclaimed Louis XIV, was realigned through radially clipped avenues to implode upon one man's bed.  

Labels for the aesthetic movement toward natural systems vary from historian to historian. Some of these include: the Pastoral Landscape, the English Landscape school, the Jardin Anglais, the Romantic Landscape, the Paradise

6. Before proceeding, read: Marie-Luise Gothein, A History of Garden Art; Paul Shepard, Man In the Landscape, chapter three; Norman T. Newton, Design on the Land; Silvia Crowe, Garden Design, chapter one; Edward Hyams, A History of Gardens and Gardening; George B. Tobey Jr., A History of Landscape Architecture: The Relationship of People to Environment; Christopher Tunnard, Gardens in the Modern Landscape, chapter one; and Derek Clifford: A History of Garden Design.

7. A slight exaggeration, Le Notre planned the geometry to focus on the centre front facade — the King's bedroom, not the bed.
Garden, the Arcadian dream, the Picturesque Landscape and the Natural Landscape. The difficulty is compounded by the recognition that the design philosophy was not born fully developed, but had an organic birth and evolution through a diversity of theoretical facets. This can be underscored by the etymology of the word "picturesque". If ever a word was elusive to define, this is it.

What is required is a synopsis of history to show how these attitudes towards nature from the late 17th to the early 20th centuries contain an underlying message. This message links all the various facets under the term of "The Natural Landscape".

The importance of the Natural Landscape is in its contribution to the way mankind assessed its relationship with nature. To the early medievalists, a celestial paradise was the ultimate, a glorious nature. The physical world was terrifying and abhorrent. The British of the 18th century transformed the last vestiges of this conceptual attitude into a recognition that the physical world had, if not divine order, capabilities of reflecting some potent aesthetic and ethical judgements on the universal forces holding heaven and earth in their place. The paradigm, design with nature, became commonplace. Such an enormous revolution in values must hold fascination for anyone interested in the sources of the ecological precepts of contemporary Canadian society.

2. Pre-Enlightenment Land Ethics:

Nature, to the early and middle medievalists, was a harsh reality. They had little time for philosophizing upon man-nature synergisms. The forests held terrors of wild animals, roaming barbarians, and beasts of ferocious imagination. It was not until the small clearings in the woods began to meet, and nature became controllable, that the earth could become of interest. 8

8. The universal human fear of wilderness as a factor in the imagery in the later symbolic aesthetic landscape is shared with at least one other civilization. The Chinese garden dates from the T'ang dynasty when most of the countryside had been deforested and brought under an agrarian economy. Refer to Oswald Siren, The Gardens of China, and to Terrence Arnett, "Chinese Environmental History".
Another factor in the anti-earth campaign was the indifference of the bulk of the medieval population, the peasants, to the aesthetics inherent in the land. Fields meant hard work, and a vicarious, temporal life devoid of all but the most elemental conceptual thought. The fact is those closest to the land do not see any need to discuss the aesthetics of nature. The paradox is that landscape taste and the ability to see one's place in the universe, excelled only with the most advanced and civilized people in Europe.

The other factor, and probably the most important one, was the domination of religious dogma. Monastic withdrawal, theologians such as St. Anselem warning a divine retribution for enjoyment of the senses, and the allegorical dependence upon "the next world" for guidance through this one, inhibited all but the most utilitarian of interpretations of nature. Pearsall and Salter phrased it well: "The new eschatology raises the stakes of existence, so that the delight of the senses in the pleasures of landscape may come to seem not merely an irrelevance but a positive distraction from the all-compelling battle for salvation."

Images of paradise occupied aesthetic representations of the natural world in poetry and painting until the late medieval period. However, from the 12th century, the temporal world began to assume a greater role in the lives of the informed. The walled castle garden, or hortus oculusus, became the enchanted pleasance on earth. Within the confines of the enclosed garden, love and the rebirth of civilization took refuge and from there these forces of order could venture forth to influence conceptual thought and the conduct of society.

9. Lord Kenneth Clark, Landscape into Art, p.2; or try Peter Shepard, op.cit., p. 131: "the beauty of farmed land is seldom felt by the farmer, or if felt, seldom articulated. Farmland is admired not by those who work it, but by those who live in the city and travel through the countryside."
10. D. Pearsall, and E. Salter, Landscapes and Seasons of the Medieval World, p.161
11. Paul Shepard, Man in the Landscape, p.69: "the garden was a hedonistic affront to ascetic moralism and Christian virtue."
13. ibid., chapter three.
Outside the walls, there could be an unhospitable wilderness, but within there was peace. The design of these gardens was formal, reflecting the Hellenic tradition begun by Epicurus, and the new Persian gardens encountered during the Crusades.

As the Renaissance approached, the work of several painters and poets became more representative of the real world. Bocaccio's *Decameron* contains a description of a walled garden full of sensuous enjoyments and symbolic references toward Paradise. The work of the Italian poets of this era has been examined to find the changing attitudes and imagery as the humanist philosophy emerged. Petrarch is the most representative of the connections between the two philosophical worlds. Here was the first urbane man for 900 years to recognize the need to regenerate discussion of the human condition within the peace of frequent contact with the countryside. His retreat from Parma to the Vaucluse and delight in images of nature such as the revolutionary ascent of Mount Ventoux to enjoy the view, has been interpreted as the first aesthetic gesture to the Renaissance's predilection for certezze (perspective) and chiaroscuro (contrast of light and shade).

Word of the joys to be found in the countryside found a receptive audience with the urban courts of the Italian peninsula. Gardens were relocated in the suburbs surrounding the city-states both to escape from the frequent plagues and social turmoil and to capture the gentle atmosphere needed for the genesis of a redirection of the shape of civilization. Country houses with walled gardens, such as Villa d' Medici at Fiesole, became the image of "paradise on earth" which

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15. Pearsall and Salter, op.cit., chapter four; refer also to the poem of courtly manners, "Romaunt of the Rose".
16. ibid., pp.81-83.
18. Kenneth Clark, op.cit., p.7: "Petrarch was probably the first man to express the emotion on which the existence of landscape painting so largely depends; the desire to escape from the turmoil of cities into the peace of the countryside." Refer also to Pearsall and Salter, op.cit., p.182.
19. The climbing of mountains until the 18th century was connected with figures of genius only; e.g. Moses, Petrarch, Da Vinci. Ordinary people did not find mountains agreeable.
suited the humanists. This was the environment where Platonists evolved their philosophy. Anyone who has visited the villa after a harsh day in Florence must empathize with its refreshment of the soul.

The theological response to the new atmosphere produced a man of universal significance — St. Francis of Assisi countered monastic withdrawal with a love for all the creatures and elements of the landscape. He found the meaning of man's role on the planet not in the walled enclaves of the cultured ruling elite, but in a peasant's hut. Infused with the love of creation, St. Francis' idealism could have been remembered by the Platonists and kept the renaissance on the course of man-nature dialogue. However, life behind the walls led to a one-sided dialogue. The reborn classical theories that were carried back into the cities in triumph misplaced nature. Gardens became theatres, not sources of inspiration. Mannerism, then the baroque, reduced the gardens to an ornamental art. There was no denying that the splendid designs were impressive, but they were the symbols of a growing aggrandisement and decadence. The remnants of nature permitted in the formal designs had been reduced to hedonistic pleasures. What had started out as a leap into understanding the world quickly ended in a display of concentrated wealth and power. When looking for models for expressing their domination of the landscape and all within it, the French elite would fall upon the designs of the Italian walled garden and take it to its final shattering conclusion.

3. The Pastoral Landscape:

The Age of Enlightenment's landscape began on the two dimensional canvasses of 17th century painters. Dutch and Flemish masters such as Breughel and van

21. Georgina Masson, Italian Gardens: these remarks must have Masson turning over in her grave, but face the fact: Villa d'Este, Villa Garzoni, Villa Lante, etc. were built for the wrong reasons.
22. Glacken, op.cit. (1970), p.166: "Before the end of the 18th century, certain ideas about man as a modifier of the natural world were well established. Perhaps the most important was the idea that man, as the self-judged and self-appointed highest form of the creation, has a natural lordship over the rest of the world."
Ruysdael began to portray a naturalistic conception of the countryside. They told it as it was: a peasant worked landscape frozen forever through natural realism. However, the major influence on the future came from the Italian school.  

This small group of painters found inspiration beyond the walls of the courtiers' gardens. They went out into the countryside and saw a landscape of an inscape dream. Hellenic gods and heroes came to life to move through classical architecture softened by verdant growth and luminous sky. Virgil-inspired artists, such as Lomesso, Carracci, Giorgione, Clause and Poussin, presented a mythological landscape for the reborn classicists to enjoin.

The Italian renaissance held a powerful attraction for the rest of Europe as soon as peace was established on the continent, gentlemen (and gentlewomen) travelled to the source to study the aesthetic implications of the reborn civilization. They studied classical relics, works by renaissance and baroque architects and designers, and were particularly absorbed by the pastoral dream presented by the landscape painters. Collections were assembled of the Italian and realist masters and were dispatched home. Circulation of the limited numbers of originals and their acceptance as the standard of taste, soon was aided by copyists, prints and access to private galleries for viewings. They came to influence British painting and poetry; but most of all, they came to influence the planning of the British countryside. On return from their travels, the dilettante became no longer satisfied with viewing the dream on the canvasses, they wanted to be a part of the myth. And so they took steps to walk into the canvasses.

24. Clark, op.cit., chapter four, *The Ideal Landscape*; "La Tempesta" as the quintessence of the Arcadian Dream.
It was a gradual process, but the old gardens of topiary, mounts, knotbeds, mazes and kitchen gardens, all behind a walled enclosure, together with the medieval agricultural order were transformed as the new breeze of conservation and a civilized landscape grew upon the land.  

The tastefulness of nature was first expounded by A.A. Cooper, third Earl of Shaftsbury. This late 17th century statesman and leading connoisseur brought pressure upon his generation's government and society for reforms in the conduct of life. In several books (e.g. The Moralist) he advanced a theory of fundamental unity between man and natural systems, unfolding principles that would later be advocated by Jean Jacques Rousseau. A friend, Sir William Temple, began to implement the first amorphic designs. Gradually the message of a less fastidious regime was accepted.

The diverse interests of Shaftsbury and his group halted further exploration into the new order, but two youthful aesthetes soon began to expand public awareness of the ideas. Addison and Pope correctly interpreted the spirit of the age and then eloquently gave expression to it. Addison's views were widely circulated and absorbed by means of a series of editorials in *The Spectator*; one series entitled "Essays on the Pleasures of the Imagination" initiated discussion on the beautiful and the sublime. This was the beginning of connecting art with sensual emotions. To Addison, the sublime was an emotion of spatial immensity and characterized nature. The beautiful was an attribute requiring a humanized

27. Walter J. Hippie Jr., *The Beautiful, the Sublime and the Picturesque in Eighteenth Century British Aesthetic Theory*, chapter one.
28. G.B. Toby, op.cit., pp.128-129: this was on a peripheral island of his estate. He did not implement a unified design to the whole.
29. An auxiliary influence upon the landscape was that of the new awareness of exotic solutions to aesthetic problems principally advocated by Sir William Chambers in *Dissertation on Chinese Architecture*...; the loose Taoist garden theory, Sharawaggi, may have been more than chinoiserie novelty.
30. Hippie, op.cit., chapter one; this essay appeared in the June 21-July 3, 1712 issues of *The Spectator* and initiated aesthetics.
aesthetic judgement that could be applied to nature. The gap between criteria of the beautiful and the sublime and the old treatment of the landscape became irreconcilable.

Alexander Pope's poetry demolished faith in the pretentious formality all around him. In Essay on Criticism, 1711, Pope stressed the need to follow the cues and the rules discernible from nature. To lead his generation into new models for treating the land, Pope implemented the sort of garden he theorized. The innumerable visitors to his five acre country house (Twickenham) saw the results and made plans to reorder their bits of the country.

The first professional landscape gardeners made their appearance about this time. Henry Wise was one belonging to the old school. He was appointed in charge of the royal gardens by William III, and soon became a prominent consultant to the aristocracy, using the established formal design method. Concurrently with the opening manifestos of the Romantic Movement, he was commissioned to build the great parterre at Blenheim. While there he also channelled the stream into a straight canal that expanded into a round pond. Later, Queen Anne's austerity program at Hampton Court eliminated most of the formal parterres and Wise firmly objected. The newly emerging style, with Pope's guidance, became fashionable and Wise was eclipsed by a new world to which he could not relate.

The opportunity of initiating the new style fell to Charles Bridgeman. Garden boundaries melted as Bridgeman synthesized an old military engineering device, the fosses, for use in defining the garden boundary. The invention was called the ha-ha, after the expression of surprise at its use: "Fait crier ah ha!" The devise separated livestock from the grounds adjacent to the house.

31. ibid., pp.17-18: "the mind of Man naturally hates everything that looks like a restraint upon it, and is apt to fancy it self under sort of confinement when the sight is pent up in a narrow compass, and shortened on every side by the neighbourhood of walls..."
32. Christopher Hussey, English Gardens and Landscapes, 1700-1750, chapter three.
33. ibid., chapter two
Bridgeman was the designer of several large estates, but the most significant for the development of landscape architecture was the initial plan for Stowe. The scheme for Stowe still relies upon the traditional geometric images within the area defined by the ha-ha. It became apparent that although he had grasped the need for a simpler, more natural style, Bridgeman could not fully comprehend the new aesthetic; however, the opening statement was made.

The next transitional designer was a painter and architect, William Kent. Kent recognized the need to resolve the distance between the arts and the botanical sciences. He recognized that the garden should reflect the form of nature outside the now invisible boundaries. Design still relied upon geometry for definition of all of the separate parts, but those parts were connected amorphously.

Long before Hogarth's celebrated *Analysis of Beauty* (1753), Kent introduced the baroque serpentine line to the landscape, thus moulding conceptual nature one step closer to ecological reality. The only surviving complete example of Kent's work is fortunately the best exemplar of the early pastoral, Rousham. The client, General Dormer, was a member of the circle of influential politicians and scholars that Pope represented. General Dormer was impressed with Twickenham and wished to create a garden in the same temperament. Pope introduced him to Kent who would serve as landscape artist of the grounds. Kent excelled in the commission,

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34. Tobey, op.cit., pp.130-136 for an explanation of the stages of refinement of Stowe and the significance of this garden upon the emerging landscape.
35. Hussey, op.cit., (1967), p.45: "Walpole's claim that Kent 'leaped the fence and saw that all nature was a garden' remains substantially true. The new device had provided the means for merging the 'specific garden' with the scenic environs." Refer also to Derek Clifford, op.cit., p.133: "The essential feature of the English Garden Revolution was not the creating of the boundary: it was the making of what lay within the wall look like what lay outside it."
36. Pevsner states the "line of beauty", the serpentine, rather than considered a revelation in Hogarth's generation, was something of a joke: an academic and bawdy good laugh. Hogarth only restated an important discovery of the previous generation.
37. Jenifer Sherwood and Nikolaus Pevsner, *The Buildings of England: Oxfordshire*, pp.739-746; refer also the Hussey, op.cit., (1967), chapter XVII. As a contrast in how significant this garden was, see the nearby work of the same designer at Shotover Park.
Figure #8

Serpentine stone rillet at Rousham, Oxon (By the Octagon Cold Bath).

Figure #9

Rousham Park: plan of the gardens
carefully modelling the land, including distant views into the composition, maintaining the natural course of the small river, using a looseness in plant material, and introducing symbolic classical architectonic-sculptural elements. The most significant innovation was the contemplative walk connecting the octagon pond with the cold bath. The stone rillet used to modulate the path was probably the first deliberate use of the informal curved line in the history of the cultural landscape.

Landscape compositions in the new order increased in frequency from this time onward. Two significant ones designed by connoisseurs for themselves should be investigated and visited by every student of the Natural Landscape. Cirencester Park, Gloucestershire, was created by a friend and neighbour of Pope, Lord Bathurst. The extensive parkland on his estate made the first attempt to unite the seemingly irreconcilable beauty and utility. The other park, Stourhead, Wiltshire, is probably the most sophisticated pastoral composition. The owner-designer, Henry Hoare II, was inspired by Claude's "Aeneus at Delos" and Pliny's description of Clitumnus, to create a unified circuit adroitly describing the allegorical stages of a man's life. The classical references in the "story" were immediately understood by the literati of his generation. Those of us who are no longer immersed in classicism require an academic treatise to be able to grasp the imagery.

Kent's protege, Lancelot "Capability" Brown, was able to synthesize the amorphic, natural form to unite house and park. Formal geometry was finally eliminated in entirety: and any traces of earlier geometry on the land ruthlessly destroyed. Brown's ability to enhance the natural features of a site gained

38. Distant views became marked by "eye catchers" or "follies", so named because they were usually just aesthetic elements -- eg. shepherd's cottage or a church. They were mostly constructed as make work programs during winter and recession.
39. Any baroque architectural use of the curved line was confined still to a fairly rigid geometry. This rillet meandered.
40. Hussey, op.cit., (1967), chapter XI
favour throughout society. People wondered why they had not seen the beauty of the landscape before. The numerous and extensive commissions Brown undertook, as well as the design principles he nurtured, transformed the landscape of the island.\(^{42}\) The extent of his work and the ruthlessness of his adherence to the classical-pastoral vision regardless of historical precedent led to a number of humorous anecdotes.\(^{43}\) Ten years after his death, delight with his interpretation of the Arcadian dream faded as critics dismissed it as insipid. Aesthetic principles of the humanized landscape were again revised.

4. The Picturesque:

Debate, toward the end of the 18th century, centred around the definition of three terms; the beautiful, the sublime, and the picturesque. The century had opened with landscapes relying heavily upon classical literary imagery (eg. Stourhead). This reflected the inter-relationship of the arts and sciences in a time when an educated person was expected to be an authority upon a diversity of subjects (i.e. a renaissance man) if only to entertain his generalist friends. It also reflected the need to endow nature with human content. At the same time, there was a strong sense of painterly qualities structuring the design of a garden. For instance, Brown applied rules of composition according to the accepted rules of the Royal Academy. The formula included: large irregular lakes, serpentine paths and roads, clumping of trees, and organization of vistas into "pictures". Hence the word "picturesque". To Brown, it meant composing a landscape for view from one point to recapture the sense of order exhibited by painters like Claude or Poussin. The sense of naturalness was only achieved by considerable effort. The end result was to be viewed with a

\(^{42}\) Dorothy Stroud, Capability Brown; also remember the economic conditions, the enclosure acts and the beginnings of the agrarian revolution, which permitted such an enormous transformation of the countryside — see Hoskins, op.cit., (1955), chapters five and six.

\(^{43}\) For instance, Manwaring, op.cit., p.141: Richard Owen Cambridge, poet, once commented: "Mr. Brown, I very earnestly wish I may die before you." "Why so?" asked the surprised Brown. "Because I should like to see heaven before you had improved it."
cerebral picture frame around selected views. In fact, people walked around the pastoral landscape and attempted to compose pictures in the park with the aid of "Claude glasses". (These reproduced the same rose hue that characterized the master's work.)

This was substantially the view expressed by the Reverend William Gilpin. In 1748, he began to write the first guide books for touring landscapes. Gilpin defined picturesque as "that which is suited to pictorial representation," and elaborated that it encompassed principles of composition lighting, drawing, expression, execution, etc. However, by 1782 he had to reconsider the definition.

For the source of the great debate on the picturesque, we must return to the description of the work of the 17th century Italian school. The Arcadian dream was not the only subject painted and discussed. Of peripheral interest was the work representing a vision of a wild and fantastic landscape. The leading, although not the best, artist was Salvador da Rosa. The dilettante were not unaware of the rough and fantastic contrast between the nature of this group and that of the classical myth group; indeed da Rosa's paintings were avidly collected, but the public attitude was not disposed to a wild gothic roughness. They were looking for the ultimate peaceful dream. The cult of the wilderness took a few more generations to catch on. For instance, the eminent Dr. Johnson regarded the wildness of the Pyrenees with trepidation,

44. Christopher Hussey, The Picturesque, Studies in a Point of View.
46. All of the considerable profits from the sale of his books went toward education -- he was a headmaster.
47. Clark, op.cit., p.52. Clark is particularly harsh on Rosa's contribution.
48. Manwaring, op.cit., pp.v-vi: "On their canvasses the English visitor saw a powerful representation of scenes already in his memory. What he had felt at Frascati, the Virgilian tranquility, the evocation of a Golden Age, had been felt with infinitely more dreamy sweetness by Claude Lorrain; the awe, which he called horror, that had stricken the traveller as he crossed the dizzy crags in his journey, the sense of might and vastness of nature and the littleness of man, the thrill of the wild and untamable, Salvador Rosa had felt more passionately."
49. ibid., p. 23: there was a definite hierarchy in painting, with classical painting with human figures at the top.
fearing disaster from accident or robbery. He rode through mountains with carriage blinds drawn shut because the view was too sublime.

Toward the end of the 18th century, considerable advancement had been made in controlling the forces of the natural environment and a new optimism in the power and achievement of man led to a softening in the traditional abhorence for raw nature. One sign of the new spirit was that scientific explorations of discovery were organized to make detailed reports of the landscape beyond the horizon. For instance, Captain Cook's third voyage around the world published in 1784, and Captain Vancouver's voyage to the North Pacific Ocean, published in 1798, sparked the imagination of a new era.

A great many of the descriptions brought back to Europe from the world were of vast stretches of wilderness. Partly in response to this recognition of the planet's ecology, attention was focussed upon extending the criteria of aesthetic worth beyond the invisible boundaries of the pastoral landscape of civilization to embrace the wilderness beyond.

Thus in 1782 Gilpin qualified his earlier definition by stating that the picturesque's visual attributes were not characterized by all painterly qualities, but were defined by the aesthetic use of roughness and intricacy. Through several books and essays, he came to be well known to an increasing number of the informed public. The concept of scenery for an "itinerant eye" became fashionable as people read and followed the tours recommended and outlined by Gilpin. At first the scenery was that of the adapted landscape, but

50. Johnson was not alone in this fear of wilderness, most of his generation was; even Voltaire refused to cross the Alps unless the carriage blinds were drawn. Refer to Shepard, op.cit., p.131.
51. Cook's first voyage was to observe the transit of Venus from the South Pacific.
52. Hippie, op.cit., pp.193-194: "the taste for the picturesque is a taste for a greater measure of complexity and intricacy than either beautiful or sublime affords."
53. ibid., one such book that became immensely popular was: Three Essays: On Picturesque Beauty; On Picturesque Travel; and On Sketching Landscape; To Which is Added a Poem, on Landscape Painting.
the concept was increasingly applied to the wilderness. The romantic desire became the exploration of primitive areas and their societies in an effort to cast aside the artificiality and re-unite with the elemental; this was the motivation for much travel. The most important items for such travellers were the theories of the picturesque which made them scrutinize closely passing nature. At their worst, Europeans approached primitive landscape in an absurd manner, at their best the groundwork was laid in the public awareness of ecology in such countries as Canada.

In the 18th century discussion on aesthetic theory was not a dialogue between pedants, but had the same interest amongst the society as a flight to the moon arouses today. The addition of the picturesque to the criteria of the aesthetics of the beautiful and the sublime became the subject of a great debate with Gilpin, Price, Payne-Knight and Repton pinpointing its attributes.

Sir Uvedale Price was one of the leading philosophers of the age, and he became one of the principal exponents of the picturesque. He found the picturesque to be the logical contrast to the beautiful and applied the biological analogy of growth and decay to prove its importance. Its characteristics were defined by aspects of roughness, irregularity, asymmetry and agedness. In his Essay on the Picturesque, 1794, Price elaborated the need for aesthetics to be defined in terms of five components: beauty, sublimity, picturesque, ugly and the deformed. He argued that design should reflect each of the first three positive components, and showed the versatility of combining them; the book can be interpreted as one of the opening statements of eclecticism.

54. Shepard, op.cit., p.132: such as the ridiculous Chateaubriand in his pursuit of Rousseau's theories of the wilderness -- "Chateaubriand went into the primeval forest to see unspoilt savages in their paradise. The guide led him to an Indian village. Out of a hut came a Monsieur Violet, a French dancing teacher, who with a sweep of his hand introduced Chateaubriand to 'ces messieurs sauvages et ces dames sauvagesses.'"

55. Peter Collins, op.cit., chapter 14; for an explanation of the position of the biological analogy in design.
Price implemented his theories at his countryhouse Foxley, in Herefordshire. The beautiful, the sublime and the picturesque were combined in the design as he advocated. As a transition from the house to the garden, a formal architectonic garden was built; yet, at the edge of the park a forest was planned as a wilderness retreat. It was the first time a wilderness had been consciously moulded for re-creation. The other first was in using trees to break and vary the regularity of a facade.

Of Brown's critics, radical Richard Payne-Knight is now the most respected. His, *The Landscape, a Didactic Poem in Three Books, Addressed to Uvedale Price, Esq. (1794)*, became the manifesto of the picturesque. It generated a probably pre-arranged public controversy, principally between himself and Price, in which the principles of the picturesque were expounded. In siding with the most Romantic and emotion-charged aspects of the wilderness, he gave focus to the love of primitive nature. That a prominent member of the Society of the Dilettante, who also had one of the finest collections of Claude's paintings in the world, should advocate the discarding of classical rules to adopt an ecologically sensitive approach may seem revolutionary. But it was not that radical a shift for the appreciation for ecology was born not as a Promethean burst of inspiration, but as a reformulation of the existing aesthetic theory.

Payne-Knight implemented his redefined philosophy on the estate, Downton Castle. The grounds are of a unified gothic design from the castellated house to the formal terrace off the house facing a valley park. The gothic parapet of this terrace merges with a copse to become a wall. The first of all those Romantic literary fantasy walled garden gates opened upon a path which meanders through a glade, around a pasture, past a ruin, over a bridge and into the

56. Hippie, op.cit., chapter 14, especially p.213: "Picturesqueness enjoys the greatest facility of union with the other aesthetic characters".
57. ibid., chapter 17, p.258; refer also to p.278.
forest. The forest path was a hazardous route on the banks of the valley's river, which led to a cave in a rough clearing. The cave was complete with a hired primitive, who regularly terrified Payne-Knight's pristine guests into acceptance of the elemental as the source of humanity. For the age, it was a profound amusement.

Humphrey Repton (as the leading professional landscape gardener) was caught in the middle of the aesthetic battle. Having trained under Brown, he was not apathetic to the Arcadian dream, yet he recognized the need for modifications to Brown's principles. In two books, Sketches of Hints on Landscape Gardening (1795) and Observations on the Theory and Practice of Landscape Gardening (1803), Repton put forth design rules consistent with what the theorists were demanding and with what his clients were willing to accept. He advocated a return to the formal separation of the garden adjacent to the house from the park through a combination of raised terraces and a multiplicity of small gardens for different purposes interconnected around the house. Repton could not totally accept the forest-wilderness direction of Price and Knight, but instead stressed the need for a tamed landscape surrounding the home of a civilized family. This was a marketable point of view.

Repton's professorial approach to soothing clients into acceptance of the new picturesque direction helped to establish the profession of landscape gardener as a respected merger of the arts and sciences. His contribution to spatial theory was in recognizing that design on the land must be considered three dimensionally: from all points of view, from different times of day, and in different seasons. This was a giant step forward in the observation

59. About this same time the awareness of the history of mankind was born. In giving the cave as the destination of the wilderness path, Payne-Knight was making an important statement on the realities of the human condition.
60. Hippie, op.cit., chapter eighteen.
62. ibid., pp.131-132; refer also to Hippie, op.cit., pp.229-233.
of ecosystems within the context of a work of art.

The 18th century Natural Landscape revolutionized the way mankind conceived nature. In the span of about 80 years, the 5,000 year tradition of a walled garden dissolved and in its place, we began to see merit in the wilderness. The source of inspiration for this revolution cannot be narrowed to the creative genius of a few individuals. They only had the good fortune and privilege to live when they did. The source must be found in the larger context of the society.

Britain in the 18th century was becoming an increasingly sophisticated society. It was transformed by industrialization, urbanization, colonization and scientific innovations. The British ethos had always been close to the land, and so when confronted with the complexities of a modern world, her intellectual community developed a heightened awareness of the human senses and strove to be closer and closer to the universal expression of order, that is, to nature.

5. Refinements:

What followed was a rich aesthetic period where the spirit of the natural landscape spilled over into the other arts and even throughout the sciences. This was the period of the emergence of Romantic poets like Wordsworth and painters like Constable and Turner. The love of all aspects of nature, from the pursuit of the sublimity of the remote Rocky Mountains to the beauty of the latest hybrid rose at Kew, became entrenched in the civilized consciousness.

There were some refinements of the basic trilogy: beauty, sublime and picturesque, that will be briefly mentioned. John Claudius Loudon and his wife, Jane, proposed that instead of built form and terrain dictating the design

64. Clark, op.cit., chapters 5 & 6.
of the garden, the enormous potential of the plant material should serve as
the inspiration and focus of design. 65 Botanical gardens in Europe at the
time were bulging with species discovered, collected and shipped back home.
All the flora of the world was being hunted, named and described. The garden-
esque style of the Loudons permitted a way for the botanical array to be dis-
played. They were also responsible for diffusing the upper class consciousness
of landscape to the growing middle class and thence throughout today's suburbia.
Suburban taste for gardens is not accidental.

Toward the end of the 19th century, a division occurred between the informal
gardenesque and the reintroduced formal paradise garden. These views would
clash in a well publicized battle between architects and horticulturists. The
prestigious architects, H.A. Peto, John Sedding and Sir Reginald Blomfield,
advanced the case for a formal treatment of a garden designed without con-
sideration for plant material, taking as inspiration the walled baroque Italian
pleasure garden and the beaux-arts child of the French garden. The less
erudite horticulturists had only William Robinson to demand the opposite.
Robinson, in The Wild Garden (1870), discarded the hard edges of the constructed
garden and advocated a design process in which amorphic, irrational form would
evolve from the form of the plants. 67

The debate clearly outlined the fundamental differences between architecture
that emphasized man's manipulation of nature, and plant science that emphasized
man's cooperation with nature. Robinson was no match for the prestige with

66. Refer to The Gardeners' Magazine, and to The Suburban Gardener and Villa Com-
panion, and to An Encyclopaedia of Cottage, Farm and Villa Architecture and
Furniture.
67. George F. Chadwick, The Park and the Town, p.244: "The Picturesque was a
complete philosophy, all-embracing, and involved in its practical application
to the garden, one of its aspects being perhaps the deliberate suggestion of
neglect by the use of wild, freely growing plants, echoing the earlier romantic
concept of the wilderness; Robinson's wild garden was rather a different
thing: here the particular plant was the start of the idea, there being
almost as many visual effects as plants."
which Victorian society held their architects; however the fertile ideas remained the more acceptable in moulding the direction of public landscape taste. Never before in western civilization had the options been so dramatically cleaved. The reconciliation of the two points of view has to this day not been resolved; evidence the present battle between urbanists and ecologists.

Fortunately for planet earth, there were a few attempts at dialogue between the more moderate architects and botanists. The most agreeable compromise resulted from the collaboration of architect Sir Edwin Lutyens with the botanist-painter, Gertrude Jekyll. The latter's lyrical treatment of the landscape appears to be the consummate statement on the picturesque. Later developments in design seem to be mere restatements of the two centuries of growth of the theory of Natural Landscape.

The Natural Landscape as a set of aesthetic principles had reached maturity by the opening of the 20th century. The story is one familiar to all great innovations in the shape of civilization: theory devised, experimental forms implemented, revisions made, and then dispersal throughout the public's consciousness. From its origins in a few obscure gardens of philosopher-poets, has come the conceptual framework for softening mankind's impact upon the global ecosystem.

6. Dispersal of the Natural Landscape to America:

The ingrained love of nature was one of the aspects New England colonists transferred to the New World unquestioningly. New England cottage gardens were filled with the same mixture of herbs, flowers, and vegetables that so

68. Gertrude Jekyll, Colour in the Flower Garden; she "painted" a contrived wildness into the garden.
overjoyed their Elizabethan ancestors. Most of the plants were old favourites transported by hand from the old country in seed packets, for their medicinal, aesthetic or nutritional qualities; but there was a strong botanical interest in the native flora. The latter resulted in continuous exploration of the countryside, both by hobbyists and by scientists, in search of plant material for horticultural use. Soon there was an inter-continental flow of plant material which transformed the indigenous landscape of both continents.

Throughout the 17th century and the first part of the 18th century, the design of the few small formal topiary gardens of the colonial administration, such as the Governor's mansion at Williamsburg, mimicked the walled garden tradition of the renaissance. The Cartesian order gave a sense of stability and security to the colony's nucleus in a time of virtual containment by the forests and native peoples. It was not until the late 18th century that settlement had been expanded far enough into the wilderness to permit a confident application of the Arcadian dream beyond the protection of a walled garden.

The transition to the pastoral dream of a heroic faith in human potential was begun on the North American continent by Jefferson at Monticello. The separation between the mother country and the fledgling nation required a restatement of the rationale for the application of the style, and Jefferson was quick with a response: the Natural Landscape was equated with the philosophy of freedom expressed in his Declaration of Independence.

Anti-British sentiment eased with the appearance of the first landscape gardener in the United States, Andrew Jackson Downing. Early in his career, Downing made a pilgrimage to the British countryside. Henceforth, he emphatically stated that his inspiration and principles of design were derived from the Natural Landscape school. Downing was a prolific writer. As editor of The

Horticulturist and with the publication of Treatise on the Theory and Practice of Landscape Gardening and the posthumous Rural Essays, he led Americans into a new landscape.  

Downing designed innumerable private gardens, which added to his publications and set the standard for suburban landscape taste. The similarity in objectives between Downing and J.C. Louden led to a firm friendship. Downing had another side; he lived at the beginning of the age of public commitment to reforming democratic societies, and became involved with laying the groundwork for urban parks. At the time of his untimely drowning (at age 36), he was designing the Capital grounds, the White House gardens and the Smithsonian Institute park in Washington.

The principles of the Natural Landscape were continued in the second half of the 19th century by the ubiquitous Frederick Law Olmstead. He too was attracted to the source of the countryside myth as a young man and published a book on the impressions during the walking tour. As a result, Olmstead turned his back on a promising career as an engineer, farmer, and agricultural journalist to become a landscape designer. Olmstead's interest in the use of open space by the Britishers as the instrument for social reform, resulted in his becoming editor of the New York based Putnam's Monthly Magazine, which was the main voice for American moderate social reform. He and his partner, Calvert Vaux entered and won the competition for New York City's first public park, Central Park. Implementation of this "greensward" plan to retain the natural landscape, had an enormous influence upon the provision and design of large metropolitan parks throughout North America. That the Natural Landscape

71. Frank A. Waugh, editor, Andrew Jackson Downing: Landscape Gardening; he was a disciple of Repton
72. Reps, op.cit., chapter twelve.
75. Vaux was persuaded to leave Britain by Downing to become his partner, and upon the latter's death became Olmstead's partner; Hyams, op.cit., p.291
76. F.L. Olmstead, Jr. & Theodora Kimball, eds., Forty Years of Landscape Architecture: Central Park -- Frederick Law Olmstead, Sr., Part II.
77. Fein, op.cit., chapter one; refer also to Chadwick, op.cit., p.190
triumphed on this continent was remarkable considering the opposition of speculators who decried the entrance of the public sphere into the planning of livable cities, and also the opposition of the beaux-arts bred "society" architects of the day. The formal vs informal battle that was being waged in Britain was reinacted. R.M. Hunt's attempt to impose a beaux-arts monumental facade to the park was one of the more controversial battles. This facade was defeated in favour of the original natural design thus convincing North Americans of the need for an open democratic public landscape.

It has been said by historians that the only innovation to the principles of the Natural Landscape made by North Americans is that of extending its application to the widest range of public uses in the world. Olmstead did initiate so many public landscape projects that together they form a solid base to the environmental consciousness of the continent. This "Father of American Landscape Architecture" saw his land transformed from an agricultural to an urban society, and led the movement that made the new world a fit home for man. The staggering extent of his projects included: Central Park, and several other urban parks, Riverside suburb, campus plans, the first national park at Yosemite, Arnold Arboretum, the Columbia Exposition in Chicago 1893, the first attempt at conservation in forestry at Biltmore and the introduction of landscape to regional planning.

7. Dispersal of the Natural Landscape to Canada:

The Canadian landscape is one of the world's last wildernesses. It also is one of the least known; there has been no attempt at a definitive statement made on the nature of the Canadian landscape. Therefore it is necessary to piece together the scattered fragments of multi-disciplinary comments in an

79. ibid., pp.166-170.
80. There are signs of a continued tradition of Britain as a mythical landscape for emulation: Christopher Tunnard was born in Victoria, B.C. and educated and practiced Britain, then on to Yale; Ian McHarg, the latest figure on the landscape of landscape has roots in Britain.
attempt to get a rudimentary understanding of the subject. Indications are that it is to history Canadians must look for their land's identity.  

As a starting point, it is useful to note the comments of the first scholar to assemble an overview of the universal vision of landscape theory, Gothein detected an overwhelming influence of British concepts of the Natural Landscape (in its components), upon our parks and gardens. There was no Canadian conceptual landscape.

This is not surprising. Canada has been a nation of colonizers; and has had a colonial attitude toward civilization. Transfer of the infrastructure of European culture was made without question, leading to reproductions of the government, legal system, economic order, aesthetic judgement, etc. What had functioned so successfully in that environment was reckoned to be suitable for the new world. As the principal cultural filter, Britishers confidently applied their taste and principles upon the land.

They discovered the Natural Landscape style was well adapted to Canada. This too, is no accident; there is evidence to suggest the feedback from the explorations of British North America may well have stimulated the late 18th century philosophers to break down the last barriers and include all nature within aesthetic theory.

The substantial input in moulding Canadian landscape awareness was made with the arrival of the United Empire Loyalists to Upper Canada. The struggle to survive in the bitterly unhospitable wilderness after generations of a relatively tame and prosperous countryside required unrelenting effort, and set the tone of the Canadian identity as one of struggle in a wasteland.  

81. Historians and those who employ historical methods seem to be the ones to get closest to the truth. For instance, Donald Creighton, Canada: the Heroic Beginnings; Dr. Norman Pearson and Prof. Owen Scott of Guelph University are separately working now on manuscripts to describe Canada's historical landscape.  


signs of a humanized landscape began to emerge as the clearings in the woods around the log cabins expanded. The folk-designs of the cottage gardens of the United Empire Loyalists reflected the same tradition of careful tending of herbs, flowers and vegetables as had been customary in colonial New England and in Britain. Early Canadian gardens had to be primarily utilitarian. Herbs were grown to flavour food and for basic medicines; flowers made teas and pot-pourris; and some choice vegetables were grown to augment the cash crops. These gardens were almost always enclosed by some form of fence, as if to comfort those who tended it from an omnipresent wilderness.  

It took several generations before enough of the wilderness was pushed back and the land converted to a pastoral countryside. Then the garden fences could be removed and the extent of the conceptual garden assumed the present continuum of the Natural Landscape.

The first sign that the settlers were confident of taking hold in this cold and inhospitable land was the intense interest in describing the indigenous botany of the countryside. Several eminent botanists, such as Archibald Menzies, David Douglas and Charles Fothergill, visited Canada to collect specimens and describe the flora. At the same time, the Romantic interest in wild landscapes and in their scientific descriptions infected the settlers. It became fashionable for the "establishment" and their wives to spend much of their recreational time collecting and discussing the flora around them. Catherine Parr Traill's publication of a collection of favourite wildflowers made her an international authority. Both the text and the watercolours continue to be a standard. Traill also led the movement towards a more appealing adapted landscape through

84. Eustella Langdon, Pioneer Gardens at Black Creek Pioneer Village; a description of the most complete restoration in the country.
85. Elain Theberge, "The Untrodden Earth: Early Nature Writing in Canada".
86. Agnes Fitzgibbon and Catherine P. Traill, Canadian Wildflowers, p.4: "To the person who is capable of looking abroad into the beauties of nature, and adoring the Creator through his glorious works, are opened stores of unmixed pleasure, which will not permit her to be dull or unhappy in the loneliest part of our Western Wilderness."
a series of articles encouraging farmers to improve their farmsteads with the use of plant material. Gardens, she said, were a means of growing fond of even the most humble beginnings in the new land.  

The Romance of the Canadian primitive landscape drew many "tourists" in search of the elemental. Their descriptions are both erudite and an accurate account of the land. To reach a spectacularly picturesque view, these men were willing to undergo incredible privation. For instance, the record of hardship of Viscount Milton and Dr. Cheadle in crossing the Rocky Mountains to New Westminster, is one of a rough and hostile land; the book they wrote set the tone of adventure for the germinating myth of the British Columbia landscape.  

On the other hand, colonizing agents and promoters presented a different vision of the Canadian landscape. Their descriptions stopped just short of a land of milk and honey, in a campaign to entice immigration. The picturesqueness of the land became its chief selling feature; all the descriptions were full of a land ripe with game and fecund soil. The difficulties of the harsh climate and the strain of clearing the forests were minimized or ignored. The rhetoric worked: colonists flowed into British North America.

87. Guillet, op.cit., p.60: "I am the more particular pointing out to you how you may improve the outside of your dwellings because the log-house is rough and unsightly; and I know well that your comfort and cheerfulness of mind will be increased by the care you are led to bestow upon your new home in endeavouring to ornament it and render it more agreeable to the eye. The cultivation of a few flowers, of vegetables and fruit will be a source of continual pleasure and interest to your self and children and you will soon learn to love your home and cease to regret that dear one you have left."


89. One of the more reputable agents was a naturalist with a keen power of description, Adam Fergusson, Practical Notes made during a Tour of Canada, pp.120-12 "The road was dry, the day pleasant, and every mile became more interesting, as the magnificence of the forest scenery increased. Pines and Cedars (the Lignum vitae) of splendid growth, maples of several kinds, beech, walnut, and hickory, elm, cherry, and etc. stretched out their towering heads...while the ground was enamelled with lovely flowers of every hue, chiefly, I thought, of the Campanula family. The only living sound which broke the stillness of the forest...The surface of the country was often finely undulated, with copious springs, numerous rivilllets and romantic dells; and the limestone rock, under the most fantastic forms, was thickly covered over with the rock-fern, lichens and an endless variety of luxuriant vegetation. The undergrowth or shrubbery, consists of sassafras, with a bud in taste resembling a custard, the dogwood, hazel, blackberry, strawberry and many others, both elegant and useful..."
Settlement of the nation was not at an even pace. Where the eastern landscape had acquired the pastoral aspect of a prosperous and cultivated land by the time of Confederation in 1867, the West was still virgin wilderness. Until after the First World War, Canada remained a primary resource economy, with the majority of citizens living on farms. There was an entrenched distrust for urban conditions, for many had come to the new world to escape from the slums and overcrowding of the old world cities. In spite of the difficulties, the pride of Canadians was in the full range of the Natural Landscape, from the picturesque scenery to the ploughed fields. The only acceptable town residence was that of a suburban lot, the larger the better.

The pride in the land, and the increased amount of time for recreation in the settled areas of the nation, led to a burst of enthusiasm for gardening in the first decades of the 20th century. Gardens became the principal form of recreation and of neighbouring. Communities united in common purpose for the provision of parks and boulevards; for instance, the first council meeting of the City of Vancouver in 1886 dealt with the provision of Stanley Park. There were no Canadian philosophers or landscape architects to define the principles of the Canadian aesthetic. Instead, the Canadian public relied totally upon the myth of the British countryside, and employed the theories of the Natural Landscape as they remembered them, or as reinforced in the enormous volume of English literature in the growing libraries of the Nation.

Although the work of the primary philosophers of the Natural Landscape was beyond the reach of all but a few academics, the results of their theories were available. So pervasive had the love of the natural become, that few works of art did not present some aspect of the myth. An influence not to be underestimated

90. Report of Submissions made for the Choice of Location of the Proposed University of British Columbia, 1910. The vehement opposition to urban conditions is express in the submissions made.

91. Chuck Davis, Vancouver; for all the cynicism, Stanley Park has been one of the few unifiers of Vancouverites.

92. For those who did not have access to galleries to see the originals, there was at least one print of a natural landscape framed on their parlour wall. And if not that, there were cookie tin lids, calendars and penny magazines. And if all else failed, they need only look out their back door. (Clive Justice, Dec. 1975)
was found in the descriptive passages of landscape in so many of the British novels and poems. Wordsworth, Browning, Hardy, etc. filled the ready imagination of Canadians with images of the beautiful, the sublime and the picturesque. The myth of the British countryside had become so entrenched that when a few landscape architects began to practice in Canada, such as Mawson (Stanley Park) and Olmstead (Mount Royal Park), they found the standard of design acceptability already set.

There was a line of Canadian gardeners, though, in the tradition of C.P. Traill who gave a "home-grown" Canadian interpretation to the myth. One of the best was a journalist with a Montreal newspaper, Annie L. Jack. Her 1910 book on gardening begins with the great Canadian reality — snow;\(^{93}\) and then continues to tantalize the reader with descriptions of such sensitivity that you want to eat or envision or smell the plants and their products. The rich soil that was cleared by the sweat of the previous generation now yields incredible results. The continual reference to heaps of fertile soil contrast with the British garden books that were also in demand across Canada. Those books devoted at least a chapter to overcoming a poor soil and making a park thrive on wasteland, while the Canadian gardens' robustness seemed to know no bounds except for the climate.\(^{94}\)

There was an astounding lack of discussion on design in the book; the author indicates that design was a matter of personal judgement and the principles were well known. The range of acceptability was indicated by the two paintings used for the frontispiece. One shows a country land in the fall with three little girls picking wildflowers; the other depicts a park in the manner of Luytens and Jekyll. The brief paragraph on design assumes public knowledge

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93. Ann L. Jack, The Canadian Garden, pp.1-2: "When the snow lingers on the ground in broken patches...there is an invitation in the very air to explore, and enjoy, and work in the fascinating environment of a Canadian garden. Of course we have been studying the catalogues that have brought us to the verge of distraction with realistic tomatoes, cut in halves and showing their juicy richness, the pods of succulent peas lying open to be counted, and the radishes ready for a bite..." (remember, imported California and Mexican foods were a phenomenon of the post W.W. II years only.)

94. ibid., pp.100-116, monthly reminders.
of the myth, and strongly evokes the picturesque as a criterion of excellence.

It is the design sensibility implicit in the use of the individual plants as discussed in the book, that indicates the depth of acceptance of the Natural Landscape tradition. For instance: old cottage garden herbs and flowers find a renewed prominence in a Jekylllesque herbaceous border, in the selection of specimen trees, and in the use of roses. In the summary she uses images of a love of nature: "new gardens, too, contain a prospect that one may almost envy, for there is no pleasure can surpass that of anticipation, when it is for the betterment of humanity, working hand in hand with nature."

The main source of diffusion and infusion of the concepts of the Natural Landscape in Canada was painting. This began as officers trained in military reconnaissance were posted to British North America. The Royal Military Academy at Woolwich devoted time to topographical painting, with Paul Sandby as master from 1768. The practical purpose of this was to enable officers to record the features of a landscape for military intelligence. It also had the effect of providing the officers with a pleasurable recreation in remote posts. Some of the earliest records of the Canadian landscape come from the watercolour reconnaissance tradition, including the work of Thomas Davies, J.P. Cockburn,

95. ibid., pp.39-40: "How can you lay out your flower garden? It is a difficult question to answer, for there are no hard and fast rules on the subject, and what suits one taste might clash with another. A garden is a part of the home, and shows as plainly as does the house the characteristics of the residents who are responsible for it. The first thing, however, to consider is the lawn, for it is the canvas, and on it you paint with flower and shrub..."

96. ibid., p.52: "The fashion of the day changes as much in gardening as in other things, and has brought out to the front the dear old-fashioned flowers of English gardens, to which we, who are no longer young, look back with tender longing."

97. ibid., p.91: "In choosing a few trees for any ornamental purpose, large clean foliage and a pleasing form are much to be desired, as the effect on the landscape should be a matter of consideration."

98. ibid., p.4 and pp.42-47.

99. ibid., p. 99.

1. Michael Bell, Painters in a New Land, p.10: "The views they sought and delicately rendered in their watercolour sketchbooks were very much a reflection of the popular interest in picturesque landscape for itself. This interest was supported by the philosophical positions revolving around the picturesque, the beautiful and the sublime, and the trends in literature represented by the poetry of Samuel Coleridge and William Wordsworth."
On the West Coast, the tradition was continued with the topographical artists aboard both the Cook and the Vancouver voyages. Later, Lieut. Henry James Warre, R.E., was dispatched to make reconnaissance report on the possible defense of Columbia-New Caledonia from the imminent American threat. R.C. Mayne's appointment with the International Boundary Commission left time in sailing the Gulf of Georgia (and Fraser River) to do some fine paintings of the area. Some of the staff with the main contingent of Royal Engineers under Moody were also trained in topographical painting. The result of this early propensity for watercolour (or oils) was the continuation through to the Second World War of a strong interest by Canadians in landscape painting as a method of expressing our identity.

The romance of the Canadian wilderness attracted many artists to portray the landscape as a sort of travelling documentary for the folks back home. The work of Paul Kane, in particular, of the "noble savages" and the mountainous terrain and prairies, caused a sensation in the London galleries. The focus of the "grand tour" shifted, in part, from the contemplation of the ruins of Italy, to the natural majesty of the Canadian wilderness. Many Canadians also took pride in recording the land before settlement softened the edges. The work of Lucius O'Brien, architect, surveyor and painter, followed the same direction as that of J.M.W. Turner. (eg. "Sunset over the Sauguenay") in concentrating on

2. R.H. Hubbard, Canadian Landscape Painting 1670-1930, chapter 2; they also took pride in being amateur botanists as well
4. The catalogue of the most complete exposition of landscape paintings of the Province is: James B. Stanton, An Inventory and Catalogue of Historical Paintings and Drawings Done in Nineteenth Century British Columbia, pp.1-2: "Landscape paintings in watercolours was the most important branch of the English school and it was this school that influenced the majority of British Columbia's artists. This natural tendency, combined with the presence of large numbers of Englishmen produced a great many watercolours...the landscape was the dominating force in B.C. and is reflected in most of the surviving paintings. Some artists show it as harsh and cruel; others have a familiar and comfortable response to the countryside."
picturesque landscapes. A series of paintings by O'Brien were grouped together in a book called *Picturesque Canada* and formed one of the first visions of a Canadian nationhood from sea to sea. Several paintings made down the Fraser were included as part of the emerging national visual identity. It was a concept which was followed in the 1930's by the first attempt to record a visual history of the nation by C.W. Jefferies.

A few other artists chose to represent the agricultural landscape of the land. Cornelius Krieghoff followed the Dutch (Breugel) school, presenting a vibrant agrarian society; he was followed by a more mellow Daniel Fowler who, as a farmer, portrayed the agricultural landscape with sensitive accuracy. Another who presented the bucolic aspect of agricultural Canada was Homer Watson. His early years have the same degree of natural intensity as Constable.

The tradition of the various aspects of landscape painting in Canada provided a rich field for the description of the natural, but the vision was judged not to reflect the basic Canadian identity in style. The Group of Seven cleaned the cultural house with a strong wave of national aesthetic presentation. The romantic identity with a vast northland found a degree of abstract impressionism that promised to bring the Canadian conceptual landscape to a 20th century maturity. A.Y. Jackson's "Terre Savage", Tom Thompson's "A Northern Lake", or Arthur Lismer's "A September Gale, Georgian Bay" has the intensity of greatness.

A peripheral figure to the Group, Emily Carr, also captured the regenerative intensity of the natural forces of the universe. She brought the British Columbia identity one step closer to recognition of the tremendous power of the land.

5. To get a contrast in the interpretation of worth of people like O'Brien, the first president of the Royal Canadian Academy, refer to R.H. Hubbard, *A History of Painting in Canada*; and to Barry Lord, *The History of Painting in Canada*, pp. 75-79.
7. Albert H. Robson, *Canadian Landscape Painters*.
9. Gary Geddes, ed., *Skookum Wawa*, p.xiv: "No one has struggled more courageously to capture the essence of this rugged, mysterious land, where even the elements stand in awe of each other, than Emily Carr. Her canvases heave with the energy of growth and weight and scale -- with the sense of place, which is so much a part of all imaginative expression in the Northwest."
yet humanized it.  

To define the continuity to the tradition of identification of the Canadian landscape has required a broad viewpoint. In the research, you will be astounded at one fact; the tradition came to an end roughly at the end of the Second World War. New foreign influences began to flow into Canada and a revision of the Canadian identity as an appendage to Britain was revised. The ties were cut; in the process, the heritage of the description of the Canadian landscape were discarded. British Columbia was left without a reliance upon a ready made imported culture, and was not yet interested in examining legitimate examples of its own history for a source of identity in the future. They looked everywhere else for history but not to Britain and certainly not to Canada. Canada had no history that was not colonial and therefore worthless. In its place, a youth crazed consumer society unfit for planet earth swept across the land. In planning, the ultimate source of inspiration became not the magnificent reality of the Natural Landscape and its use to surround and caress architecture, but a new vision — Madison Avenue.

A very few institutions survived to describe our landscape. One was the Federal Government's system of parks, Parks Canada, entrusted with a network of recreational and historical sites across the country. The principles of the Natural Landscape survived in park planning through the small staff of landscape architects. One example is that of Point Pelee National Park. The use of the serpentine, first applied in the woods at the beginning of the 17th century, has reappeared to modulate with wood a vast horizon.

10. Ira Dilworth, foreword in *Klee Wyck*: "As surely as Wordsworth marked the English Lake District with his peculiar kind of seeing and feeling, leaving us his experience patterned in poetry, so surely this extraordinary, sensitive gifted Canadian touched a part of our landscape and life and left her imprint there so clearly that now we, who have seen her canvases or read her books must feel, as we enter the vastness of the western forest or stand before a totem pole or in the lonely ruin of an Indian village, less bewildered and alone because we recognize that another was here before us and humanized all this by setting down in paint or words her reaction to it."

11. *Architecture Canada, "Discussion: Landscape Architecture"*, Englar, Hough Strong, and Vandermeulen, p.44.
Boardwalk Nature Trail at Point Pelee National Park, illustration to "Discussion: Landscape Architecture", Gerald Englar, Michael Housh, Richard Strong & Emile Vandermeulen; Architecture Canada, Vol.43, No.9, p.44.

Figure #11
Plan of marsh section of Point Pelee National Park, Ont. showing boardwalk; Parks Canada pamphlet no. R63-8974.
But the powerful sense of a sublimated landscape permeated the Canadian ethos too deeply to be so bewilderingly ended. A few Canadian scholars remained loyal to the values of their roots and attempted to describe our unique place. Themes usually focused upon the vastness of the northern wilderness, or the cold whiteness, or the rugged picturesqueness, or the lonely isolation. The reality of the Canadian experience's natural environment set the cultural heart beating again.

In 1966, at the height of the keen interest in the new urban patterns, many Canadian scholars focused upon landscape as a means of identifying the Canadian ethic. For instance, the president of the Canadian Historical Association wrote of the Canadian who:

knows that he is both on the edge of civilization and on the verge of something new. Estranged by distance from his own kind, separated by a time-lag from the culture of his former society, he permits the landscape to intrude itself into the very pith of his self-conscious being. The symbol of his aspirations, the badge of his despair, the landscape assumes romantic proportions to compensate him for his solitude.

It is not a warm and exciting vision of Canada's identity; it is cold, wet uninviting, but it is true.

A profound revolution in civilization's attitudes toward landscape has been described in this section of the thesis beginning with a medieval society under siege in high walled courtyards, through the gradual removal of those walls to identify man with nature to permit the love of the Canadian landscape, and finally to the present return to the enclosed courtyard. For how long?

12. Northrop Frye, "The Canadian Scene: Explorers and Observers", p.2: "the sense of being completely surrounded by an indifference or a hostility that may take the form of human enemies, predatory animals, or of a desperately cold winter."

C. Village Patterns

1. Introduction:

The village is a universal form. The very first permanent human settlements were agricultural villages with people clustered for mutual protection from the wilderness and for gathering sustenance from a cultivated land. As a pattern, the village continues throughout the world today, but that is another story. Here, attention is focussed upon the historical British village.

The British village became the first small settlement pattern to acquire a place in high culture. Previous societies raised the power and magnificent display of wealth of urban centres to express their identity, but the British have responded to the need for identity with a different sensibility. Her philosophers, poets, and artists for centuries have developed a love of smallness and of country values. They have found the meaning of civilization in the various attributes of freemen held together by the simple and peaceful life of villagers and the landscape associated with the tamed countryside. Their expression, in turn, moulded the direction of the national ethos of the British people, and during the colonizing period, the village as an ideal came to be dispersed throughout the world. Remembrances of the best of their home came to influence the way pioneers in the new world would look at the countryside. These remembrances acquired, in time, the authority of myths or legends. One of the myths, the peaceful country village, set a standard to which our ancestors aspired.

There are difficulties inherent in exploring a myth in that, to get past the fabled qualities and understand the reality, the values instilled by the myth can be lost. In spite of this limitation, the writer has studied the evolution of form of one village, Islip, Oxfordshire, from its origins as a Romano-British villa to an Anglo-Saxon nucleated village and has described the gradual modifications

14. D.B. Grigg, The Agricultural Systems of the World: An Evolutionary Approach; the origin of culture was with cultivation, not cities.
Approach to Islip Village
Facing the centre of a village of about 600 people. Note the Chamaecyparis lawsoniana on the right hand side of the road - they are seedlings from relatives in British Columbia from the turn of the century.

Figure #13
Relationship of Islip to Otmoor Valley
From P. English & R.C. Mayfield, op.cit., p.33.
made in the architectonic components and in the moulding of the surrounding countryside for the next one and a half millennia. In this example, the myth was a fundamental respect for the land of the parish and a fundamental sense of place that was worthy of pioneer's admiration. This is a landscape where the needs of man and the needs of the environment mesh in an organically sensitive form that transcends the utilitarian.

To reach such a condition required time. This section of the thesis is a summary of the knowledge gained from Islip, but synthesized into the context of the whole movement of land alteration through time: the British villages have undergone about six separate phases in evolution, reflecting the general changes to the island's landscape. These are: Anglo-Saxon settlement (450-1066AD), High Feudalism (1066-1500AD), Tudor to Georgian Prosperity (1500-1750AD), Agrarian-Industrial Revolution (1750-1880AD), Victorian to Postwar (1880-1945AD), and contemporary (1945-present). To be able to understand the context of the village within the overall adaptation, a general history of Britain's humanized landscape should be consulted before proceeding.

2. Anglo-Saxon Invasion:

With the decline of Roman authority in the fifth century AD, the Anglo-Saxon tribes of north-western Europe invaded, intermarried and began an occupation which led to the British nation. The settlement pattern they imposed on the landscape was the nucleated village. This form reflected the medieval social structure of the Anglo-Saxons, with its emphasis on equality and freedom.

The procedure was for several extended families, headed by an elder or ceorl, to form an association and travel through the land to find a suitable site for

15. Terrence C. Arnett, Islip, Oxfordshire: An Analysis of Village Evolution.
16. For a summary of the evolution of the whole, refer to Lord L.D. Stamp, Man and the Land; or to W.G. Hoskins, The Making of the English Landscape; for a summary of particular counties there is a series by Hodder and Stoughton such as Frank Emery's The Oxfordshire Landscape.
a village. Extended family members were freemen held together by kinship and the mutual advantages of group cooperation for survival in a wilderness. At that time in history, most of the requirements for existence had to be extracted from the land. The woods surrounding the village were cleared and the timber fashioned into houses. The land was tilled and crops harvested. On the partially cleared land, cattle, horses and sheep were put to graze during the day. Game was hunted in the surrounding forest, and fish caught in the rivers and streams. These pioneers shared the resources equally -- the land was held in common, for all villagers to utilize.

The physical plan of their village reflected the society's emphasis on equality. The prototype was nucleated around a central open space, or green, surrounded by roughly equal plots of land assigned by the ceorls to members of their families. On this land small cottages were built with a low wall surrounding each yard to protect a garden of selected vegetables and herbs and to protect a few domestic animals from the night. The fields stretched beyond the village with rough grazing commonage beyond and surrounding the whole, the primeval forest. Intersecting the clearing was usually some form of water, such as a river with lowlands used for hay meadows. At night and during times of human hostilities, the centre of the settlement provided the safest shelter from attack. Later, ballads and literature celebrated this centre green as symbolic of peace and security.  

Historians and archaeologists are still attempting to construct a model of village site selection criteria; however, three theories have been discussed for the past few years. The first is that of immediate succession within the existing Romano-British settlement, with the preceding form being continued or later rebuilt to conform to the new culture. Second is that of persistence. This hypothesizes that the natural advantages of a site, such as fresh water and

defensible terrain, led to continual repopulation of that site even if it passed through a phase of desertion. Third, dissociation, conjectures that fresh sites for villages were chosen because of the previous form's foreignness, because of the increase in population, because of the conscious policy of non-assimilation and because of the economic potential of the previously untouched fertile lowlands. Evidence gathered to date suggests that each was a factor in site selection, and that a diversity of locations was chosen. 18

The nucleated form was the original pattern and survives as the most typical. It originated as a settlement clustered about a central green of variable size. Later, in the medieval period, another village pattern appeared -- the linear village. It was composed of buildings strung out along one or two streets. This form originated as a late medieval market appearing along a busy road or at a main intersection. The third pattern of village that has come down through the ages, is that of the diffuse village. It is characterized by a lack of unity. Buildings fall haphazardly with no visible nucleus. This form usually is the result of individual squatting on common land as a hamlet was subject to uncontrolled expansion. Of the estimated 10,000 villages extant in the British landscape, most had their origins prior to the Domesday Book with the pure nucleated pattern. 19

Description of the architectural components of the village are being revealed by archeologists. The earliest domestic construction was of two types: the subterranean pit house and the large, above-grade, timber house. The former was built with a base of a shallow pit lined with boulders and a wooden rafter system for the roof, as protection from the interminable rain. This was accommodation for the servants and lesser members of the village. The

19. W.G. Hoskins, op. cit. (1955), p.58: "The axe, fire and animals combined to reduce the dense and continuous woodlands...by the middle of the 10th century says Sir Frank Stenton, charters proved 'the existence of innumerable villages each known by a permanent name and maintained by a territory of which the boundaries could be described in minute detail'..."
Ceorl and his immediate family lived above-grade, in timbered post and beam dwellings. These were one room dwellings, the main one being a large hall varying in size from 35 feet to 50 feet long by 16 feet to 22 feet wide. A ceorl's house would be used as the village's meeting hall, so an internal partition was required at the end to screen his private household. The hall was lit and heated by a central open firepit with a hatch roof opening. The floor was from compacted earth, with straw and branches for seating. The structure was carried by a log post and beam system. Walls used wooden siding crudely split and planed. (The similarity between this construction and the longhouses of the Haida is astounding.) As time passed construction would become more refined and these houses would become walled in wattle while the post and beam structure would become the familiar half-timber frame.

From the 7th century, the ceorls' power became consolidated into one leader who became known as the lord of the manor. The household size was thus reduced to correspond to the diminishing amount of land allotted per family. The large lots around the village green became fragmented and a new form of dwelling became common, the above-grade hovel. The lord of the manor continued to live in an expanding timbered hall, while his friends accepted a diminished role. A timbered church of substantial construction was built at this time facing, or on, the green. Society and the physical planning of the village began to be more complex.

3. Late Medieval Development:

The Norman conquest restructured the political and economic order of the island into a system known as high feudalism; it lasted until the 16th century. Conversion to the manorial system was accelerated with Normans assuming leadership positions. The resulting social order was pyramidal, with the village entity as the basic managerial or governmental unit. The lord of the manor was

20. P.V. Addyman, "The Anglo-Saxon House".
institutionalized as the legislative, administrative and judicial authority. He held title to the demesne, the common land and a sizable proportion of the leasehold and copyhold land. There continued to be a few freeholders, or yeomen, but most of the freemen of the village became peasants held in fief by the lord. The vision of the village as a group of equals received a temporary setback.

The first generations of Normans were concerned with establishing control over their new territory. Their advanced knowledge of architecture and fortifications led to construction of a network of moated or hilltop castles built in stone. The new technology filtered to the villages with the reconstruction of the manor house in stone and the rebuilding of the parish church in the imported Romanesque style that was then sweeping Europe. Between 1150 and 1250 thousands of stone churches were built to celebrate the emerging period of wealth and peace. This was the first time that the villages received durable construction.

The stone church, built of the local quarried stone by masons who travelled from village to village became the centre of the community's social and religious life. The percentage of available resources that went into making these buildings in even the most modest village speaks for the age's value system. Pride and faith built for God, while the villagers lived humbly close to the land in hovels. The church tower, usually of golden limestone, appeared on the landscape as a focal point. When in the fields, villagers were constantly reminded of God and of their place. It was a warm and comforting nucleus which few left.

The economy of Britain through the 13th and middle 14th centuries boomed. More and more of the forested land and wastes came under cultivation and

21. for a description of feudal obligations and responsibilities refer to J.Z. Titow, English Rural Society.
pasturage. In particular, the country developed a brisk international wool trade. The landscape became characterized by thousands of flocks of sheep. The expanding parishes assaulted the primeval forest until the village clearings met one another and the parish boundaries were established.

The wealth that was generated found expression in the homes of the rising class of yeomen and merchants. Stone and substantial timber-framed construction became more widely available to the group. The lords of the manor were also able to rebuild. Manor houses during this period were usually moated, for protection of the village's supplies and as a symbolic administrative centre. Of 3,500 moated sites investigated by Professor Emery, the commonest shape was rectangular with dimensions of 200 feet by 250 feet. In times of hostilities, the villagers could take refuge in their manor house. This was the equivalent to the frontier fort that would appear in the new world.

In the village, life revolved around the open field agricultural system. As more became known of food production, a system of rotation evolved from the one field to the two, then the three field system. Stone walls and hedgerows were built around these prairies of several hundred acres each. The open field was subdivided into various plots, or strips for each family to till; each fall after the harvest, the field was open to village animals for common grazing. Through centuries of plowing, the fields assumed the remarkable wave pattern, or ridge and furrow pattern that can still be seen where mechanized plowing has not been introduced.

Some of the forests did remain and became utilized as a source of timber, firewood, and a storehouse of game. Throughout the parish were other woods, meadowlands and grazing lands called commons, which were set aside for the

24. F.V. Emery, "Moated Settlements in England".
25. The classic dissertation on the feudal agricultural system is C.S. & C.S. Orwin's The Open Fields.
villagers who had common rights. These were accorded to the descendants of the original settlers and to those families who had contributed to the growth and prosperity of the village. Newcomers were excluded from the use of the commons unless they acquired property that carried with it common rights. Commoners meant a group of people entitled to cooperative use of commons. (Commoners also referred to another concept with broader implications in jurisprudence called common law, but that is another subject.)

Footpaths connected the commons and open fields with the villages. The form of the village continued to be nucleated around the green, but the increasing population and the increased standard of living led to a tighter built configuration. The spaces between buildings began to be subdivided for members of a family, and new housing built. Most of these hovels (called cots) were crudely constructed in wood, mud and thatch, and have since disappeared, but a few of the cottages of the yeomen and the manor houses survive as the first domestic architectural remnants of the historical patterns. Houses still maintained a walled enclosure, called a close (for animals), and a special garden.

The economic and technological conditions of the period dictated a self-contained resource utilization. Almost all of the needs of the inhabitants had to be found in the natural resources of the area. Stone, thatch, wood, wool, grain, milk, vegetables, etc. had to suffice for all human needs. Goods from beyond the village borders were limited to a very few things traded on market day.

From 1348-1380, the country was decimated by a series of plagues -- one half of the population died. This led to a temporary retreat from marginal land followed by a slow recovery. When the nation finally recuperated, it entered a period of unprecedented prosperity. From 1500-1750, rural Britain became transformed into Europe's most agriculturally successful landscape.

26. For the best introduction to this incredibly complicated subject, refer to W.G. Hoskins and Lord L.D. Stamp, The Common Lands of England and Wales; its importance lies in the commons serving as the basis of the public open space networks that the 20th century western civilization enjoys.
4. **Tudor to Georgian Prosperity:**

By the careful use of the land, and the wide distribution of the benefits, this period laid the foundation for a strong democratic society that would survive into the 20th century without recourse to the revolutions that mauled the continent. Scholars refer to this period as the "flowering of rural England". The earlier wool trade expanded to the point in 1500 where there were eight million sheep in the country (three per human). Fortunes were amassed by monasteries, aristocrats and enterprising yeomen. A large proportion of the wealth generated was confidently invested in architectural and land improvements for the benefit of future generations.27

The wave of rebuilding completely altered the old villages. Scarcely any of the medieval vernacular architecture remained. Where all of the surplus had then been allocated to construction and adornment of the parish church, the new humanism gave acceptance to the retention of earnings applied to creature comforts.28 Fortified manors disappeared and were replaced by spacious, well-lighted country houses; but the real impact on the landscape was the proliferation of yeomen cottages.29

As feudalism broke up, a new capitalist system arose. Through diligence and circumstance, the rising agricultural middle class was able to assemble adequate resources to invest in permanent landscape mnemonics. This was the beginning of the enclosure of open fields and commons. By consolidating the fields under one owner, the amount of production could be dramatically expanded. However, as the ownership of the village sifted into the hands of fewer people, the majority came to be employees on the new aggregated farms. This meant an increased standard of living for the farm labourers. Yet there was resistance; many saw the loss of the old order as a threat to the ordinary man's rights.

28. ibid., p. 163: "Before that time life had been hard and comfortless, with little or no margin to spare beyond the necessities of living: what little there was went to the adornment and beautification of the Parish Church."
29. ibid., pp.163-167.
Under ideal conditions the old manorial system had functioned as a semi-autonomous unit with the lord dispensing all temporal order required. The rights and obligations of the villagers for one another were clear and stable. The new economic system disrupted not only the open field landscape, but necessitated a complete restructuring of the society. For instance, legal reforms had to be initiated to maintain the common law and trial by equals, yet the system had to be institutionalized at the national level. At the same time demands were made for a greater sharing of the wealth of the nation. Government took all steps to accommodate the nation to the order. The new capitalists required the support of the people to initiate the economic step forward and so were careful not to abuse the advantages generated.

The socially mobile found it possible to share in the boom. Their contribution to the landscape was the cottage reconstruction of the village core. Materials used in construction depended on local conditions. In the downs, stone was plentiful; in the lowlands, timber and wattle were abundant. Thus regional styles in cottage construction evolved. The "tudor half-timbered" cottage that has come to symbolize rural English architecture was by no means a prototype shared throughout the land. 30

A typical cottage would have one or two rooms on the ground floor with perhaps a storeroom built in the rafters at one end. This would be reached by a ladder and a hoist, and would be the store for the family's wealth: wool, saffron, seed corn, cheese, etc. Such an inaccessible place was the only protection against wandering thieves. A major improvement in the quality of shelter was that animals were separated into auxiliary barns. The kitchen was also in a separate structure to lessen the damage from the frequent fires. Windows in the cottage were small and may not have been covered with glass, since it was

30. For the differences that occurred within even one county, refer to F.V. Emery, op.cit., (1974) and to W.J. Arkell, Oxford Stone. This is the reason the villages seem to be so much a part of their landscape.
still hand-blown and an expensive import. A few pieces of oak furniture completed the dwelling. At one end of the room was a fireplace for heating. A yeoman and his family of about eight children would live in this envied form of housing. 31

Such were the humble living conditions of the middle class. Yet, when the colonists landed in the new world to make a fresh start, this was the minimum form of shelter acceptable to any family. This is the life people were willing to fight the wilderness on the other side of the oceans for.

5. Agrarian-Industrial Revolution:

After the Restoration, the government ceased to oppose enclosure of private land, and came to encourage private acts of parliament for parish enclosure. Improvements in crops and livestock and in farm equipment were made that enabled even marginal land to become economically viable as productive farms. The population and the productivity greatly increased. The nation's coffers were filled. Everywhere, the forests were removed and land became utilized for crops or animals. Towards the end of the 17th century, historians have concluded that most of the island's indigenous synecology was removed.

A campaign to restore that synecology was begun in the 11th hour. Philosophers expanded on theories of conservation. A gentleman by the name of John Evelyn in 1664 wrote a book, Silvia, and propagandized for afforestation. He touched the love of the vanished nature on the psyche of the new landlords, not to mention the pragmatics of forestry profits available for their grandchildren, and in response, millions of trees were replanted in woods throughout the land. The new cover was composed of the same oaks, beeches, hawthorne, etc. as raw nature had provided, but it would forever be different for this was a humanized synecology. The copses, the hedgerows, the parks, the lush turf, the cottage

31. For a description of a Cambridgeshire cottage through five centuries of use, refer to R. Parker, Cottage on the Green.
gardens — all were responses to the humanization of nature in an aesthetic manner. With the beginning of the 18th century, the countryside expanded to take on the qualities of a myth.32

However, a frightening era soon began. The agrarian-industrial revolution (1750–1880), transformed the economic structure of the nation beyond all imaginings. Efficient machinery, transportation, enclosure into larger holdings, etc., operated to the disadvantage of the family farm. Smallholders could not afford to meet the expenses of enclosure or the new machinery, and were forced to sell their land to the large estates. This resulted in many yeomen joining the labouring class to work the expanded farms, or converting to cottage industry, or migrating to the emerging industrial towns as factory workers, or emmigrating to the new world to start fresh.

A massive population explosion commencing in 1801 accelerated the shift in population to cities. New mouths found little support in the country and were forced into the new industrial towns to produce, propagate and die. It was not out of preference for city living that humans came to live in unbelievable urban squallor.33

The doubling population could not remain in the countryside because the need for workers began to lessen with the technological improvements. They had to go where they could make a living. The fact that the life expectancy of the new slum dwellers was half that of those in the country was not known in the beginning, and even when it was, it became difficult to counteract.

The rural villages did however, absorb some of the population increase. Two kinds of villages evolved: open and closed form. The open villages accepted

32. Brenda Colvin, Land and Landscape, part one.
33. The most effective denunciation of the system that permitted this outrage has been made by Raymond Williams, The Country and the City; the writer recommends emphatically reading this work to be able to understand the conditions our ancestors were fleeing from.
drifters for work on harvests or in fledgling industries. They would be herded together in tight cottages, sometimes having to sleep in shifts in the dormitory conditions, with no place and no possessions to give roots. These were turbulent, independent people who recognized the fact of their exploitation. The open village took on an amorphic unstructured form as crude dwellings were hastily erected to profit from the population increase. A sort of shanty town emerged around these villages that strangled the peace in an expanding urban aggregation. Hard core industry usually resulted, with the landscape for miles around blackened by pollution that will take several more centuries of environmental care to eradicate.

The other village type was the closed form. These villages refused to take any external population increase. They were usually connected with large landholdings of a family with centuries of commitment to the welfare of their villagers. These were the fortunates of the 19th century. A decent standard of living could be maintained. Here, the orderly community life of the village provided stability and farming could continue. If the community was vigilant, this healthy life continued to the present. The few thousand villages that remain around the countryside with their admirable blending of human and nature's requirements, exist only because villagers recognized limits to growth, and were prepared to protect their heritage for future generations.

Population explosion and new agro-technology were not the only forces threatening villagers. Perhaps the worst offender was the rising industrial capitalist class. The guaranteed 20% increase in profits that enclosure instantly netted attracted instant bourgeois town merchants, industrialists and professionals. They recognized the stability of profits from capital investment in

34. Hoskins, op.cit., (1955), chapters six and seven; complicating the issue was the ancient Poor Law that made parishes responsible for all paupers within their boundaries, so until new legislation made for more humane treatment of those who could not care for themselves, few were able to be compassionate to the magnitude that could solve the problem.
land and heavily invested in farm enclosure and in acquiring property in the villages. Land holdings were assembled through mortgages and continuous remortgage. Many never even bothered to see their possessions, for they were not farmers or lords of the manor. Such townspeople were only interested in land as speculation -- as capital and collateral for further loans to extend their holdings and generate profits to be spent on establishing a new social position. Half of "society" was assembling wealth while the other half was trying hard to consume it.  

The high cost of cultivating the pretense of being a gentleman caused many bankruptcies and thus placed greater pressures on the rural labourers to produce more while accepting a smaller share of the harvest. The traditional responsibilities of the gentry were ignored by these new opportunists. The inequities of distribution fostered during this period are still bitterly recalled in British politics.

6. Victorian to Post-War Pressures:

Villages were placed under overwhelming pressures of dissolution with the agrarian-industrial revolution. Farm labour was made redundant, transportation enlarged markets and supply sources, industrial urban growth occurred at alarming rates to subsume large areas of agricultural land with no sense of control, population rates exploded and had to be sheltered, class distinctions led to a depreciation of villagers as "backward louts", and the townspeople speculating in the country -- all added together to reduce the effectiveness of the traditional village as community. One other factor was the location of isolated farmsteads in the midst of the assembled enclosed fields; thus the open field system of walking from a central village to various strips became

36. Williams, op.cit., try for instance, pp.105-106: Williams is criticizing the few who assembled and built houses, but the real force of the problem were these newly rich urbanites whose commitments were to social cultivation not to the ones with commitment to farming. Refer also to Parker for the effect on the village.
obsolete and the functional economic dependence of a village with its land dissolved. The only reason for the retention of an agrarian population in the villages instead of in the individual farmsteads was the large investment of resources in the village's architecture. 37

From 1880-1945, the trend to obliterate the villages accelerated. An agricultural depression began in 1880 which made it difficult, or impossible, for most of the surviving smallholders to remain true to the freemen village ideal. 38 The government refused to help the farmers by protective tariffs or supplements, and permitted meat, grain, hides, wool, wood, etc., to be imported at minimal prices from the corners of the Empire. This was a policy intended to provide stimulation to colonization in distant places such as British Columbia, but the policy had a disastrous effect on the homeland. Villagers became convinced their only hope for a decent return for their labour was to emigrate to those distant places.

After the World War, it was recognized that the Island had to become more self-sufficient, and so the countryside began to receive some support. The Second World War peak farm production 39 and commons use 40 led to a new consciousness of the importance to Britain of a sound agricultural base.

Attitudes toward villages also began to change after the First World War. 41 Commuters and week-end cottagers began to fill the empty cottages. The new residents were "urbanites in sheep's clothing" who were dissatisfied with the crowded urban conditions and were looking for a quieter, more pastoral environment.

37. Hoskins, op.cit. (1955), chapters six, seven and eight.
40. This would result in a new management policy of the commons to maximize both food production and access to the countryside by the public -- an important step in the law of open space; refer to D.R. Denman, R.A. Roberts, and H.J.F. Smith, Commons and Village Greens.
41. Look for the roots in the writings of John Ruskin and William Morris -- for the celebration of pre-Raphaelite life.
Both the affluent and the working class became involved with this movement, the latter taking the new council houses that were tucked into the villages, and the former taking the most sadly neglected cottages. There was a renaissance of interest in the goodness of village community and customs. For instance, the poetry of village life written over the centuries was reread with pride.

7. Contemporary:

Countless articles have appeared treating villages with a reverence that identifies them close to the British ethos. In contrast with the rest of the population, most modern architects and planners have strangely held the village with apathy or disfavour, rejecting such a small settlement as a nostalgic retreat into romanticism. Instead, they have followed Sharp's lead and courted a new urban reality. This was a fortunate occurrence, for the love of village by the public was strangling their best features. The process of indiscriminantly attaching council houses onto existing villages, prevalent in the 1930's as the desire to return to the country increased, was resulting in the conversion of that gentle countryside into a sprawling suburb. The choice was simple: with only a very limited amount of land, and with a rapidly increasing population, attitudes had to change. The sharp break between town and country was recognized as the only solution.

The fabled British countryside has been respected as a park. Agriculture and forestry have been the subject of legislation to protect and to foster a continued optimum production from the limited amount of arable land. Controls have been placed on the expansion of urban envelopes. The majority of the populace is now trapped in metropolitan quarters with little chance of relocation throughout the countryside. However, recognition of the right of the urban

42. Thomas Sharp, Anatomy of the Village, after proving the complexity of the evolution of the typical form of the village, Sharp blasted the simplistic solutions of his colleagues and strove for a more urbane approach to shelter.
population to access for recreation has brought a new dimension to once remote villages. Through a complex series of parliamentary acts spanning the 19th and 20th centuries, the British public has been given the first and most comprehensive open space system in the world. The consciousness is so refined that even a century old footpath in a remote parish will be taken to court by a Londoner if need be, to keep it open for the public's enjoyment.

The physical form of villages is now determined by three sets of growth criteria prescribed by the government. The first is that of extensive growth. This can be as the result of the national planning strategy or the county's own growth plan. Under this scheme, a village can be expanded beyond its present envelope into a town or city. The second form of growth is that of infill of existing envelopes. Many studies have been conducted to demonstrate how design may be implemented in keeping with traditional village values. The third form limits growth, and even aids in restoration of historically prominent villages. Legislation protecting whole villages as works of vernacular "art" was passed during Europe's heritage year.

Villages outside designated growth areas now have a network of bureaucrats who make construction of any form not approved by the neighbours extremely difficult. However, while habitat pressures have been somewhat controlled, development pressures on the landscape surrounding the villages increase. Highways, power transmission lines, airports, etc. (all the demands of an increasingly consumer-oriented society), place burdens on the remaining small bits of countryside. Most of these pressures not easily absorbed, including: the per capita increase in automobiles that projects the island to be coated in asphalt by

43. Gordon Ashworth, The Genesis of Modern British Planning; George Chadwick, The Park and the Town; the writer has summarized the phenomenon in a paper, "Common Land in Britain".
46. Mavis Batey, "The Oxfordshire Village as Architectural Heritage".
47. T. Arnett, "Islip, Oxon.", op.cit., pp.76-77.
2000 AD, London International Airport's expansion in the fens of Essex (the mouth of the Thames River) and the superhighway-tunnel project under the Channel to France.

In studying one small valley in Oxfordshire, it was noted that two projects would have radically altered the landscape. First, London County Council proposed flooding the valley (Otmoor) as a reservoir for the distant megalopolis; then a superhighway to accommodate the increasing car and truck was substituted. The landscape has received a temporary reprieve when conservationists rallied to remind the planners of how important the valley has been in the literary life of the nation. Beginning in 1974 the fight to protect the myth of the British countryside has acquired a new persuasive argument -- the need to recognize that the limits the island's resources can sustain for consumer technology were passed generations ago. The squeeze of overpopulation is the new frightening wilderness.

Villages have become Britain's most desired form of settlement, but as can be seen above, there is little economic incentive or even justification to live there. To explain the phenomenon, irrational values must be used. The National Federation of Women's Institutes held a competition in 1965 to determine the ingredients of the "quality of life" in these rural communities. The results reaffirm that the basic values of village life continue to revolve around the relation to the countryside and the relation to a knowable community.

The difficulties of recreating on fresh sites the intangibles which have taken millennia to produce, seems an impossible task. However, for a world where all villages are becoming increasingly linked by communications and by recognition of resource limitations, the desirability of these small settlements

48. For instance, Alice in Wonderland was inspired by Otmoor Valley.
49. Distances which would never have been penetrated in a lifetime in the past are now accomplished in minutes. One half of the bread and butter eaten in the village likely comes from Canada rather than the surrounding fields.
Note: Change is a fundamental reality of even the British landscape. Behind the retention of every piece of the countryside is an environmental or historical group trying to counter irremovable destruction by development pressures.
may prove to be the best option for a good life living gently on the land. The stable social structure, the loose land-use structure that allows closeness to the land, the low energy demands, and the high quotient for satisfaction with life provided by these villagers may mean their continued importance as models for Canada.

8. Dispersal of Village Patterns to America:

Tudor and Jacobean villages served as the model settlement pattern in the New England colonies. Later these New World villages joined with the old patterns to become the source of diffusion of small settlement philosophy throughout the continent. These farm-villages do however, reflect several modifications required to tackle the New World wilderness. The most comprehensive analysis of the pattern concludes that there were five factors operating to mould the village structure.

The first factor was the transfer of the English parish heritage from which the colonists had emigrated. The model carried over the Atlantic was not a direct copy because the new land did not have the centuries of precedent. New England was a fresh start, one where the 17th century agrarian reforms could have freedom of expression; there were no entrenched commitments to archaeological structures more than a remembrance of their existence.

The second factor was the emphasis on individual responsibility. There was no longer a feudal manorial system, or a single landlord. Instead, the settlers had to cooperate as equals in clearing the land and raising the shelters.

52. Robin H. Best, and Alan W. Rogers, The Urban Countryside: The Land-Use Structure of Small Towns and Villages in England and Wales.
53. G.T. Trewartha, "Types of Rural Settlement in Colonial America", P.572: "The neighbourly, compact communities of New England were not so exclusively the result of defense needs against the Indians as some writers indicate. Their origin is by no means so simple. Rather, the farm village resulted from a variety of intermingled forces, some of them indigenous to the New England social and physical environment, others inherent in the migrating groups."
This was a return to the basic nativism of their ancestors who had founded the Anglo-Saxon villages throughout the homeland centuries earlier.

The third factor was that settlement was organized into groups for colonization. A man did not confront the wilderness alone. This led to social nucleation as a matter of ideology, to share the freedom of religion, education and the other amenities of civilization. 54

The fourth factor was that the land granted for settlement was granted to a group, never to an individual; this was the only way settlement could take hold in such a hostile environment. Therefore, the communal leadership determined the form of settlement and the distribution of the farm land. This emphasis on communal leadership has been suggested for the remarkable degree of conservative adoption of innovation in the New World. They could have utilized the full list of technological and organizational agrarian reforms discussed and being implemented in 17th century Britain. However, they chose to retain a marked number of signs of the medieval parish order, such as fragmented allotments in open fields, and common land. The stress on communal structure found such traditional symbols of group functioning essential, even though it was not as profitable.

The fifth factor moulding village structure was the need for mixed farming instead of the one crop plantations that were then beginning to be practiced in the mother country and would be practiced in the southern British North American colonies. Climate, terrain, and the battle against the forest by a limited number of people conspired to require cooperation in farming. New England comprised a group of freemen pulling together to make a civilized home in the wilderness.

54. ibid., pp.574-575.
One further factor has been added by other scholars, that of security. Similar to the response in pre-Domesday Britain, the colonists found safety in the old pattern of households ringing a central green. This nucleated village, sometimes with a surrounding stockade, was found to be the best form of defense in the primeval landscape.\footnote{Edna Scofield, "The Origin of settlement Patterns in Rural New England", p.654: "During the early colonial period in New England, then, the compact village settlement was evidently a conscious effort to effect safe settlement in a new and hostile land."}

After 1713 some powerful forces began to disintegrate the nucleated farm village. Some of the forces included: the inherent primitiveness of the agricultural system (i.e. time lost in commuting to fields), land wasted in road multiplication to fields, restrictions on crops, and the inability of land distribution and common rights to be extended with equality to newcomers. The growth of squatters at the edge of established areas contributed to the disruption of social and form organization. The most insidious force acting upon the village was the appearance of speculators as major colonizing agents in place of social or religious organizations. Toward the middle of the 18th century the frontier began to be opened up by a new kind of individualist, and the days of the farming community as the only pattern of settlement came to an end.\footnote{Trewartha, op.cit., pp.575-595.} Most of these factors were not unique to the North American colonies, for the mother country was experiencing them too. However, Britain's villages had large capital investments in nucleated habitation from the centuries of construction, plus a vanished frontier, which tended to make accommodation to the new economic realities the most pragmatic approach. Villages there did not disappear, they assumed new functions.

On the other hand, in America, many villages did not have substantial capital investments and were susceptible to modifications required by the continuous flow of immigrants. Some ceased to exist. The village as a settlement form...
survived in New England, not as the previous farm village, but as a market and administrative centre. Most farmsteads became situated on isolated, individually assembled plots of farmland. This was accomplished through gradual modification to the older land holdings, but mostly the new farmstead arrangements were built on freshly cleared sites in the diminishing wilderness.

New England's adoption of the isolated farmstead brought it in line with the dominant settlement pattern that emerged in 18th and 19th century America. The virtuous farmer and frontiersman as an individualist came to have a powerful impact on the intellectual sensibility after independence. The United States became moulded by this imagery, not that of group action. Some critics see the rise of the individualist as the key to the anti-urban argument that became entrenched in the work of influential leaders such Jefferson, Crevecoeur, Emerson, Thoreau, Hawthorne... 58, but that is another story.

As for physical form, Rep's book on the settlement history of America serves as a most important source of information on the form of early villages. Six are mentioned here. Plymouth began as a nucleated village with detached houses and yards along a street with the church and fort at the cross street. 59

Cambridge's plan was based on the bastioned towns' gridiron geometry, a form originating with the frontier insular towns of the Romans, 60 and thence transferred to many of Britain's new towns. 61 Salem has a linear form reflecting the irregularity of topography. 62 New Haven also used a gridiron plan, with nine blocks and a central green. Exeter's amorphic form resulted from following the contours of the river bank. But Boston is the New World's quintessential amorphic settlement form. The irregular street pattern was a response to the indigenous

57. ibid., p.595; and Scofield, op.cit., p.663.
58. Morton and Lucia White, The Intellectual Versus the City.
60. ibid., p.126
61. S. Moholy-Nagy, Matrix of Man.
marshes, rocky outcrops and fens, which have since been urbanized. Village form in the colonies was as diverse as it was in the mother country. The prototype consisted of a clustered architecture, a central green, with a church and meeting hall facing the green. There was a responsiveness in the scale and siting of the architecture which fitted villages closely within the landscape.

Preservation of nucleated villages after the agrarian-industrial revolution began a tenuous situation. Some were fortunate to be in isolated areas, such as along the coast of Maine and were passed by. Some of the best left now are the result of preservation by historically minded residents. The protection of such villages and the class implications has been well described by Duncan. Landscape features such as mud roads, hedgerows, copses, and fertile fields have been actively retained. This usually required control by local governments to be able to exclude through zoning any disruptive urban sprawl. The effect of recent Supreme Court rulings may spell the end to this last defense. For a description of the impact of newcomers to a reluctant village, refer to Dobriner's case study of "Old Harbour".

Most of the villages have succumbed to the pressures of suburbanization after the introduction of commuter service. Boston's environs serve as a good example. Through the 18th century, the village of Boston was transformed into a major port. After 1850, it increased tremendously in size, subsuming the older village pattern within a ten mile radius by the turn of the century. Charlestown, Cambridge, and the 12 villages of Dorchester, Roxbury, and West Roxbury became part of the Boston urban environs. The trend continued to the

63. ibid., p.146.
present creating an unprecedented urban corridor sprawling hundreds of miles along the Atlantic Seaboard.

Although the individualist was the dominant image that created the American ethos of the 19th century, there has been recurring interest in the older village concept. A few post-World War II planned communities recalled village nostalgia in the small scale of development and in the human values engendered by village political institutions (for instance, the town meeting). The appeal seems to be in the concept of government by neighbours who control their own destiny. Political analysts feel this attitude of "small is better" is gathering momentum in the current (1976) political climate.

9. The Village in Canada:

The village was the indigenous settlement form of Canada; in fact, "Canada" was a Huron word meaning village. Jacques Cartier misinterpreted it to mean the whole landscape and introduced it to European cartography as meaning the "land of the Hurons". The British extended its meaning in the 18th century.

With the colonization of Canada by the British, the village was retained as the dominant form of settlement (but of course it reflected a more complex manner of life than had the aboriginal village). There were isolated farmsteads, but the vastness and hostility of the landscape tended to promote clustering, both for the advantages of defense and to overcome loneliness within the Canadian continuum.

The arrival of the United Empire Loyalists brought a renewed pride in the values of the village and small town. Most of the Upper Canada settlements

69. William Whyte, Cluster Development.
71. Barry Lord, op.cit., p.82.
72. E.C. Guillet, op.cit., p.266.
had their beginnings, by necessity, before the surveyors could lay out a "proper" grid; and so the usual plan was no plan, simply an amorphic form which arose in response to the natural terrain and the communication patterns. These settlements grew spontaneously to what man's hands could accomplish and what the site would allow. After a century or so, they nestled into the landscape so well that they became objects which enhanced nature. Some of these villages were the focus of rural admiration throughout the society. Now this spirit is confined to Christmas reprints and insipid copies of early Canadiana.

The Conservation Commission had a wide range of responsibilities; two of these were to promote farming technological and organizational improvements, and to promote the continued prosperity of rural settlements. Reading the major report of the Commission by Thomas Adams, written in 1917, one is astounded at how correct the goals and the program were in the attempt to keep rural Canada vital. However, the growing domination by urban systems saw the end to consideration of the requirements of the rural villages and towns, and in 1921, the end to the Commission.

One important recommendation was that village life had a means of providing a social cohesiveness and as such served a valuable function in encouraging people to stay in rural areas. Although technology favoured large independent farms, the key to a permanent commitment to rural areas by settlers had to come from more than just a livelihood. Therefore the Commission recommended a program of "re-creation of the rural village in the older counties and the creation of rural villages in the new territory being opened up...to give stability...".

The shape of this proposed new commitment to village life relied upon the

73. John Neill -- recollections of growing up in rural Ontario.
74. Adams, Rural Planning and Development in Canada: A Study of Rural Conditions and Problems in Canada, p.29: "A large part of Ontario has all the appearance and features of a highly cultivated English countryside."
75. ibid., p.36.
traditional villages. Adams began a campaign to make the planning of settlements more responsive to natural conditions. The rectangular grid pattern, which had been required for the immediate accommodation of immigrants in the late 19th century, had given an instant means of order; but where it was continued into town plans, the results were usually disagreeable. Adams pointed to the instances of grid streets that ended at cliffs, of villages built on floodplains, and of settlements built without land-use priorities. Most of all, he pointed out that rigidly applied geometry lacked a sense of place which the traditional village had had. Several ideal village towns for Canada were discussed in the report, including those proposed by Sir William Van Horne, H.B. Dunnington-Grubb and Professor A.A. Stoughton, together with some model villages proposed or implemented by the Commission. 76

The other aspect to rural development focussed upon the benefits of cooperative organizations for farmers. Farmers were convinced their incomes could be greatly increased, and the rewards of fellowship increased, by supporting cooperatives. The Commission also began searching for auxiliary industry that might be located in small communities which would provide employment for farmers in the winter. 77 This was the continuation of the campaign of the former Governor-General, Earl Grey. 78

The termination of the Commission in 1921 ended centuries of trust in small settlements as the habitat for Canucks. Small settlements were now regarded as temporary inconveniences on the expanding borders of metropolitan aggregations, while those further in the hinterland were left to rot.

76. ibid., chapter three.
77. ibid., chapter six.
78. ibid., p.166; note the interconnections between rural improvement and the garden city. The natural content tended to attract the same people to the causes. For instance, Adams did not find it ambiguous to be both an authority on rural improvement and one of the leading advocators of urbanization - he saw the problems of both as interconnected. The absence of hard-edged urban spokesmen throughout the 17th, 18th, 19th and first part of the 20th centuries has profound implications for understanding the basis of Canadian settlement expectations.
As in America, continuation of some of the values of small settlements did survive to be incorporated in the more successful suburban communities of the post-war period. Although people neglected the idea of living close to the land in rural villages, they still wished the sense of identity that arises in a small propinquitous community. S.D. Clark's study of six suburban communities with a discernible neighbourhood demonstrated that where the area was a closed system, either by geography as in the case of Riverdrive Park, or by socio-economic factors as in the case of Thorncrest Village, the satisfaction with community life was high.\(^79\)

However, Clark concluded that the usual suburban patterns were having a fundamental impact on the way Canadians viewed their world, and that the new vision was unsettling. Most of the stock suburban communities had neither the "good fit" of the village, nor the "zap" of traditional urbanity. Canadians had traded their old patterns for a new one of questionable worth. This was similar to the conclusion of one of the most thorough sociological studies, Crestwood Heights. Seeley, Sim, and Loosley pointed out that isolating Toronto's upper middle class was resulting in social damage, both in leaving the next generation unaware of the reality of the needs of most Canadians, and in stimulating the ambitions of a group of people to consume.\(^80\) Canadians of the metropolitan revolution were rapidly drifting away from the puritanical ethics of their pioneer forebears into an indulgent way of life. Was this worth the effort of those colonists? Was this the dream of a fresh society?

\(^79\) S.D. Clark, *The Suburban Society*, chapters two and eight.
\(^80\) J.R. Seeley, R.A. Sim, E.W. Loosley, *Crestwood Heights*; for instance chapter one, "The Stage".
D. The Garden City

1. Evolution:

a) Urban Conditions of the 19th Century

The British Industrial Revolution accelerated the urbanization rate to an unprecedented extent, producing a new kind of civilization -- the metropolis. This was the age of entrepreneurs and operatives. Some writers suggest collusion of capitalist interests for the redistribution of rural people to urban aggregations, but it was not a conspiracy; rather, it was the inevitable result of a changing economic order. Innovation on the farms resulted in an increasing population was was superfluous. Faced with starvation, emigration or migration, most relocated in the rapidly expanding manufacturing centres. It is essential to recognize they were not attracted to these cities by the promise of social and economic benefits.

Once there, men, women and children became factory operatives. Most worked an exhausting 18 hour day for six days a week in order to survive. One of the few divertments (besides liquor), procreation, resulted in soaring birth rates which further aggravated the strained urban systems. The result was an environment unfit for the family of man. Academics describing the period compete for the best description of the appalling state of these first metropolitan industrial slums. The most devastating must surely be that of Barbara Ward.

Statistics for urban districts with populations greater than 10,000 people rose from two cities in 1377 (London and York), to 45 cities by the time of the census of 1801, to 123 cities by 1881, and to 360 cities ten years later in 1891.

81. William Ashworth, The Genesis of Modern British Town Planning: A Study in Economic and Social History of the 19th and 20th Centuries, p.19 -- casual labour force constrained to live in centralized locations close to potential work.
82. For an analysis of the factors producing population concentration refer to Adna F. Weber, The Growth of Cities in the Nineteenth Century, chapter three.
83. Barbara Ward, The Home of Man, chapter three: Ward's speech to Habitat delegates focussed upon the similarities between the 19th century slums of Manchester and the contemporary slums of the Third World.
By that date, 71.7% of Britain dwelt in urban aggregations of over 3,000 people. The process was repeated throughout the industrializing Western World. For instance, the United States census of 1800 recorded five urban aggregations greater than 10,000 people. By the 1890 census, the national population had increased by twelve times, and the urban population by eighty-seven times through birth rate and a massive influx of immigrants. Comparative statistics for the world by the end of the 19th century showed the world was on its way toward ecumenopolis.

<table>
<thead>
<tr>
<th>Urban Dwellers (% of population in cities greater than 10000 people)</th>
<th>Density (per acre)</th>
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</thead>
<tbody>
<tr>
<td>England and Wales</td>
<td>61.73</td>
</tr>
<tr>
<td>United States</td>
<td>27.6</td>
</tr>
<tr>
<td>Canada</td>
<td>17.1</td>
</tr>
<tr>
<td>Japan</td>
<td>13.1</td>
</tr>
<tr>
<td>Prussia</td>
<td>30.4</td>
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</tbody>
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With urban problems over twice the magnitude as other nations, it is understandable that Britain should have originated most of the proposals attempting to control growth and raise the standard of urban living. 84

There had never been urban conditions like Britain's slums. 85 Pollution from factories included noise, soot and slag deposits blackening all within distance of the winds. Some places were so badly damaged that still nothing grows after a century of recuperation. The cities grew by canals and waterways for transportation, thus the working class districts developed on low-lying marshy land with appalling drainage conditions. Housing grew increasingly dense as more and more people were confined to less and less space. The back-to-back

84. Weber, op.cit., chapter two: for the most complete account of urban growth rates available.
85. Mumford, The City in History, pp. 447-474: "...never before in recorded history had such vast masses of people lived in such a savagely deteriorated environment, ugly in form, debased in content."
houses had few windows and relied upon lanes for open space. There were no social facilities other than pubs and brothels. 86

The intolerable conditions became the target of satirists who described the synecdochic image of the city as a sewer. Dickens' vivid moral attacks included unpleasant organic metaphors like: "the whole metropolis was a heap of vapour charged with muffled sounds of wheels, and enfolding a gigantic catarrh." 87 He devoted his art to making the influential public aware of the enormous wrong being produced. Another critic, George Gissing, described the centre of the urban problem as "murky, swarming, rotting London". 88 The real urban world of the 19th century had surpassed all previous images of depravity.

The effect of the urban conditions on life expectancy was mortality rates twice that of the rural areas. This was true in Britain (Manchester life expectancy was 28.78 years as compared with rural districts at 51.48 years) as well as in other nations. The New York Tenement House Committee Report of 1894 stated the death rate for lots with front and rear housing was 61.97% versus the single house per lot of 29.03%. 89 The statistics for disease, insanity, crime, illegitimacy, prostitution, illiteracy and other social evils, were proven to also be twice as high as those of the rural and small towns. 90 Medical evidence was also conclusive that the survivors were physically stunted and emotionally depressed.

b) The Reform Movement

By about 1840, the informed public became aware that something was desperately wrong with the system and began to seek solutions. 91 William Cobbett, Francis Place, Richard Cobden and Lord Shaftesbury led the early demands for social

87. Dickens was the foremost social critic, see Welsh, The City of Dickens, chapter 2, p.25.
88. R. Williams, op.cit., chapter 19, p.224
90. ibid., chapter 7.
91. G.F. Chadwick, op.cit., p.112.
legislation to protect the public from the laissez-faire urban nightmare. The wish for improvement was fostered by the religious and social conviction of the leaders (who felt humanity had a right to be treated at least as well as the domestic animals of the new bourgeoisie), and by a combination of Victorian guilt, fear of epidemics and fear of revolution.

At first, the reform movement was confined to voluntary associations formed to improve conditions, such as The Health of Towns Association. Gradually local authorities were convinced of the need to implement private bills through parliament for the regulation of various aspects of living conditions within their areas. Parliament formed several committees and commissions to investigate the need for a national policy of controls, but was constrained from enacting legislation until 1848 when a serious cholera epidemic and a series of revolutions on the continent made a few concessions to the welfare of the masses politically expedient.

Progress was slow, for the reformers were aiming at the very core of the 19th century economic system — the doctrine of non-interference. Every improvement had to be justified in terms of economic viability. This usually took the form of proving how the investment in worker living conditions resulted in improved production rates, but occasionally absurd statistics were prepared showing how the money could be saved in fewer burials of workers and less cost in hospitals. Ashworth wrote:

This general inadequacy of urban reform in the mid-Victorian period is perhaps to be attributed mainly to two characteristics of the public at large: first, a zeal for economy in public administration and a somewhat narrow interpretation of what constituted economy; and second, a pervasive apathy about the whole subject of sanitary improvement, which seemed to be of relatively minor importance when set beside the contemporary achievements of industry and commerce.

However, the frustrations that had to be reckoned with in justifying every

92. Peter Batchelor, "The Origin of the Garden City Concept of Urban Form".
93. William Ashworth, op.cit., p.60.
94. ibid., p.65.
parsimonious expenditure was not entirely condemned by the reformers.

The protestant work ethic permeated the society so that the interrelation between work and the production of wealth, and the interrelation of work and salvation was unquestioned. The reformers felt an obligation to help the poor help themselves by providing decent standards of education and sanitary reform, but most were opposed to any form of charity: "charity was actually thought to worsen the condition of the poor, by undermining their character and increasing their numbers". This was a process known as pauperization; it was felt that anyone able to work had to, and then they were expected to contribute to their betterment. The pragmatics of reform attracted the respect and investment of prominent capitalists. Therefore, when a reform group, The National Dwellings Society, issued its 1887 pamphlet entitled "Homes of the London Working Classes: Philanthropy and 5\%", it was certainly not a denunciation of hypocritical charity.

The cities were not entirely uninhabitable. Upper class districts such as Bloomsbury Square and new resort towns such as Bath were spacious models of tolerable urban conditions. The reformers were enthusiastic that the rest of the city could be transformed over the years to come close to the density standards. The provision of open space was thought to, a priori, lead to healthier conditions. Large urban parks began to be considered essential to the well-being of the citizens with the conversion of crown farmland to Regent's Park from 1811 to 1833. It was followed by the first park designed for public use, St. James' Park. Most of the early urban parks were the result of donations or public subscriptions. For instance, Birkenhead Park was donated with Sir Joseph Paxton as landscape

95. Welsh, op.cit., chapters five & six.
96. ibid., p.87.
97. Ashworth, op.cit., pp.66-76.
98. C. & R. Bell, op.cit., chapters five & six; see also Walter Ison, The Georgian Buildings of Bath.
99. ibid., pp.82-90.
1. Chadwick, op.cit., chapter one.
architect. Paxton later designed the People's Park in Halifax. The principles of natural design evolved in these early urban parks would have a lasting influence on parks throughout Britain and America.

Open space began to be considered not just a luxury to be indulged upon the urban population by beneficent donors, but rather, an essential right of all citizens. This belief led to agitation for the public sector to acquire, construct, maintain and administer open space for various uses within the city boundaries and without. A parliamentary committee in 1833 advocated in their Report from the Select Committee on Public Walks, a comprehensive open space network to help overcome the congestion:

with a rapidly increasing population, lodged for the most part in narrow courts and confined streets, the means of occasional exercise and recreation in the fresh air are every day lessened, as enclosures take place and buildings spread themselves on every side.

Early leaders of the open space campaign, Edwin Chadwick and Sir J.A. Roebuck, stressed the need for tree-lined boulevards and urban parks within the towns, and retention of large areas of commonland on the urban periphery, to give relief to the oppressing miasma and lack of recreation space. They deplored the callous manner of municipalities and developers conspiring to eradicate rights to common land in order to sprawl further unfit units. Instead, they advocated the conversion of all common land to public open space uses.

By the time parliament finally enacted legislation, much of the best land had been covered. However, through a series of acts, the government managed to constrain development to within existing urban envelopes, thus ensuring access to open space for all citizens. (Refer to the General Enclosure Acts of 1836 and 1845, the Public Health Act of 1848 and 1875, the Commons Act of 1876 and 1899, the Open Spaces Act of 1906, the Greenbelt Act of 1938, the Town and

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2. ibid., pp.61-71; also Ashworth, op.cit., p.40.
Another aspect of the urban reform movement was that of public health. In a series of reports to parliament, Edwin Chadwick outlined the problem. (Refer to the Report of the Select Committee on the Health of Towns, 1840, the Report on the Poor Law Commission, 1842, and the Reports of the Royal Commission on the State of Large Towns, 1844 and 1845). The indisputable evidence presented by Drs. Farr, Simon, Longstaff and Kay proved that towns were becoming increasingly lethal. In particular, Dr. Farr's monitoring of the deteriorating conditions, as Registrar General of the nation, nudged the government to action with the passage of the Public Health Acts of 1848 and 1875. These acts provided for Boards of Health to regulate sanitary controls, ensured open space and housing standards, and enforced the planning of "bye-law" streets. Future generations would react against the sterile uniformity of the standards, but for the time, the acts served to control the desperate living conditions.

The awful conditions may seem belaboured, but it is important to understand just how bad cities had become in order to understand why the garden city movement had such powerful appeal. It is also essential to understand why the Anglo-Canadian preference for open planning is so strongly entrenched. Urban neighbourhoods in the Victorian era were the "armpits" of existence. Anyone with ambition fought to get out of the city. Canadian immigrants despised townhouses and the kind of life associated with them.

Even commitment to sanitary improvement was not magnanimous. Whether the critics were unscrupulous landlords or merely blind, deaf and lacking the sense of smell, the fact remains the government was constrained to inactivity for years as the rates for tuberculosis, cholera, and other fatal diseases mounted.

6. Batchelor, op.cit.; see also, Ashworth, op.cit., p.20.
7. Ashworth, op.cit., p.50.
9. ibid., p.68.
Imagine London with a population of two million (and soaring) deciding the old method of collecting human and horse manure by cart was not only adequate, considering it permitted a profit to be made, but was therefore superior to publicly financed sewage systems. And then there is the matter of the neocropolis. The statistics on the disposal of bodies within the city of London were absurd. For instance, between 1820 and 1850 one and one-half million humans were interred on just over 200 acres of inner city land. Dickens writes of churchyards where corpses had to be stomped on to get them underground.

The survivors were aided in their housing needs by private philanthropic organizations such as the Metropolitan Association for Improving the Dwellings of the Industrial Classes (1841), The Society for the Improvement of the Condition of the Labouring Classes (1844), the Improved Industrial Dwellings Co. (1863), Peabody Trust (1862), Marylebone Association (1854), London Labourers' Dwelling Society Ltd. (1861), Highgate Dwelling Co., Strand Building Co., and the Artizan's, Labourers' and General Dwellings Co. Ltd., (1868). The leading spokesman for housing programs which promoted involvement and improvement by self-help was Octavia Hill. The worst of the slum accommodation gradually was levelled or/refurbished. Although the original overcrowded nests had been built practically overnight on cheap land, the improvements were made painfully slowly. This was because the price of the land had inflated beyond reason, construction costs were high, the ownership legalities were complex, and some of the tenants had a measure of commitment to the awful places and required motivation to begin self-help programs. It was difficult to rise above a squalid environment.

11. ibid., p.62; see also p.63: "Chadwick's respect for the temporal dimensions of the problem is correctly scientific; his equal respect for the gaseous state of matter brings him to a vision as graphic as that of Dickens, in which the souls of the dead overflow into the hills and valleys beyond the city."
12. Refer to Ashworth, op.cit., p.85; Miss Hill is characteristic of the deep involvement with reform - she also helped form the National Trust and was involved in preservation of the common lands through the Society for the Preservation of Commons in the Neighbourhood of London.
Prior to World War I, housing was almost exclusively provided by the private sector. The government regulated some degree of minimum standards but did not interfere with housing provision. The individual was expected to find his own shelter. The more secure of the working class moved out of the slums and into units they paid for through building and co-operative societies. The middle and upper classes purchased homes built by private developers. These appeared in spacious suburbs on the periphery of the metropolis made possible by a network of railways. The early suburbs were unplanned communities characterized by rows of middle class housing with a small back garden, or detached villas surrounded by gardens for the upper class. The wealthier the family, the further from the urban nucleus the suburb would appear. The revulsion of the metropolitan conditions had set in motion an "exploding metropolis" sprawling throughout the countryside at uncontrollable rates. The potential for habitable communities in the "suburban" areas began to occupy more and more attention so that by the end of the century the international analyst, Adna Weber, wrote: "... the most encouraging feature of the whole situation is the tendency...toward the development of suburban towns". One particular aspect of the movement away from the centre, the garden city, came to lay the framework for modern planning.

c) Utopians and Communitarians

The longing for an ideal society has been an eternal theme in philosophy and is an important inspiration for the garden city. The word describing this wish comes from a book written in 1515 by Sir Thomas More, *Utopia*. This proposed an ideal society of regional towns of 120,000 people with a surrounding agricultural belt. In 1696 a Quaker, John Bellers, wrote of a co-operative for 300-3,000 people (*Proposals for Raising a College of Industry*). The 19th century produced an increasing number of utopian proposals to solve the urban nightmare. Jeremy Bentham wrote of Panopticon, an industrial house for 2,000 people. Charles

13. This was a phenomenon on both sides of the Atlantic: see Ashworth, op.cit., chapter six.
Fourier's, *La Théorie des Quatre Mouvements et des Destinées Générales* (1808), and the two volume *Treatise on Domestic and Agricultural Association* (1802), attracted much attention. Some model townships of 1600-1800 people, called phalansteries, were attempted. The philosopher, Saint-Simon, also suggested model industrial associations on a regional scale. Architect Claude-Nicholas Ledoux, one of the founders of the modern movement, suggested an industrial settlement with peripheral residences with orchards and kitchen gardens. Albert Brisbane implemented Fourier's scheme in the United States renaming it Edifice. None of the 30 communities survived more than a year. A religious group, the Moravians, built a balanced community with agriculture and hand manufacture at Fairfield in 1883. Sir James Silk Buckingham's, *National Evils and Practical Remedies*, 1849, proposed a model centralized town of 10,000 people, called Victoria surrounded by an agricultural estate. Edward Gibbon Wakefield's, *View on the Art of Colonization*, written in the same year, proposed that a system of colonization would influence foreign policy throughout the empire. He too, planned town-country integrated settlements.

Economic reformers also influenced the garden city ideas. Spencer's *Social Statistics*, J.S. Mill's *Principles of Political Economy*, and Piotr Kropotkin's *Fields, Factories and Workshops*, were specifically mentioned by Howard as sources. Professor Alfred Marshall's suggestions for relocating London's poor in the country also was influential. The historical origins of the garden city's utopian aspects, both form and ideas, have been well documented by a number of authors. It is remarkable how dependent Howard's concept was upon precedent. 15

d) Philanthropic Industrialists

The first experiment at implementing an "ideal" industrial community began at New Lanark about 1799. It is difficult to label the form of dictatorship the owner-manager of the factory-town, Robert Owen, held over the workers. For the

day, it was an enlightened organization with unprecedented social benefits. Owen proved that a well-fed, clothed, housed and educated labour force would increase productivity.\(^{16}\) The disadvantage was that although the workers were well provided for out of the profits of their labour, they were subject to obsessive moral controls. Nevertheless, New Lanark served as a landmark model in practical reform of the Victorian industrial complex.

Another benevolent industrialist, Sir Titus Salt, was determined to create a model town around his new factory at Saltaire:

> I will do all I can to avoid evils so great as those resulting from polluted air and water and hope to draw around me a well-fed, contented and happy body of operatives. I have given instructions to my architect who is quite competent to carry them out that nothing should be spared to render the dwellings a pattern to the country.\(^{17}\)

The town was built around the factory using an Italian Renaissance style throughout all buildings. The population of 2,450 was housed at 170 people per acre in a uniform grid, without gardens and almost no plant material within the town. Spiritual, social and educational facilities were provided with the same sort of attitude of improvement of the morals of the workers as at New Lanark. Later a 14 acre park was provided outside the town for recreation.\(^{18}\)

Although we today react with indignation at the despotic manipulation of individuals which wealthy entrepreneurs like Salt were able to promote, it must be remembered that at least he was concerned about the lives of his employees. This was a scarcely held belief.\(^{19}\) Most industrialists ignored working and living conditions and instead concentrated upon maximization of profits and the assemblage of luxurious estates in isolated suburbs. If Saltaire resembles our prisons of today, in its day it was shelter from a world gone mad with exploitation.

\(^{16}\) Bell, op.cit., pp.240-251; and Ashworth,op.cit.; for a description of some of the developments refer to F.E. Hyde, "Utilitarian Town Planning 1825-1845".

\(^{17}\) Bell, op.cit., chapter nine, p.253, constructed 1853-1863.

\(^{18}\) Creese, op.cit., chapter two; refer to the descriptions in this chapter of some other model communities: Copley, Akroydon, Bess Brook, and West Hill Park Estate.

\(^{19}\) Ashworth, op.cit., p.135.
The first model industrial village-town built with recognition of the dignity of the individual workers (to determine their own moral standards) was Bourneville (started 1893). The Quaker chocolate family, the Cadburys, were concerned that their products should be made in clean and healthy surroundings. Pre-industrial villages served as models for the kind of community the Cadburys intended. Open space and plant material were generously included in the plans, with seven reasons being cited: first, work on soil was considered complementary to the overspecialization of the factory; second, the low density would give access to wholesome air and open space necessary for health (six units per gross acre); third, the individual gardens provided allowed identification with the land; fourth, the families would have a more balanced and nutritious diet from the vegetables raised on their garden plots; fifth, the children would be raised in beautiful and healthy surroundings and would become better citizens as a result; sixth, the garden would keep the men out of pubs and closer to their families; and seventh, the gardens through intensive care would produce more food per acre than open field farming.

The physical planning standards and designs evolved at Bourneville had an important influence on the early garden cities constructed in the next decade. Some innovations included: the provision of individual gardens for each working family, the provision of an open space system which integrated the village with the contours of the site, and the introduction of the cul-de-sac, close and crescent forms of housing. Village focus was "The Green" with its shops, schools, churches and meeting hall. The health statistics gave conclusive proof that the open quality of an environment determined the health of the inhabitants. Bourneville (population -- 13,000) had a death rate of 5.5 per 1,000 compared to nearby Birmingham's 14.5; and the infant mortality statistics showed the village to be

20. Conditions had improved from dictatorship to mere paternalism; refer to Bell, op.cit., pp.267-277.
about three and a half times as safe. The nation was becoming more and more receptive to such planned communities.  

The other early industrial village to influence the garden city was Port Sunlight, built by W.H. Lever (Lord Leverhume), the soap magnate, as a pristine corporate image. The paternalistic control of the community exercised by Lever is a step backward from the relative independence of the Cadbury town, yet the physical planning did assist the cause of better communities for ordinary people. The village was originally built (1888) around a marsh and ravines only a few feet above flood level. Lever had an incentive program for his workers where they would receive profit-sharing; the money would be used on their behalf to improve their housing. The cluster housing that was built was to a high standard and was spacious; however, Lever dictated all activities that went on outside the home. There were no private gardens, instead the open lawn extended to the foundation planting as in North American suburbs. He also controlled the design of the buildings. The sham tudor style was meant to evoke nostalgia for the pre-industrial values.

In 1909, Lord Leverhume used a court libel settlement to found the first department of town planning at Liverpool University. This became the source of the Beaux-Arts style (rather than France) and the City Beautiful Movement, as Americans came first to this university on their European tours. In the following year, Leverhume held a competition for the next phase of Port Sunlight. A lecturer in landscape design at the university, Thomas Mawson, implemented the winning design of a student. The scheme required filling in the ravines and an axial beaux-arts treatment of the open space. Classical public buildings were placed in prominent locations in the parks. The imposition of a monumental scale upon what had been considered beneath contempt just a few years previously,

workers' housing, shows a dramatic change in societal values.24

e) The Garden City Movement

Ebenezer Howard (1850-1938) founded town and country planning. His contribu-
tion was not as a philosopher but rather as a propagandist for the idea that
communities and rural areas required a procedure for reconciling the conflicting
options of an increasingly sophisticated world. Howard, and the people he
inspired were convinced they knew how to improve the lives of the public. This
is an important distinction between the garden city and previous architectural
planning. Howard's proposals were imbedded in the turn of the century British
altruistic desire to help humanity. They were not advanced for points in
stylistic games, profits, or dictatorial whim. The proposals were perhaps too
far ranging, requiring a reorganization of society, to have survived the attacks
of critics.25

Howard was born in London and was fully aware of the abysmal living conditions
of the ordinary citizens. He became involved with social groups trying to reform
those conditions, and began to formulate a unified concept of a town where all
the best social and physical improvements which had been envisioned as ideal
solutions could be implemented. Instead of reform of existing conditions, he
began to see the answer in a fresh start. Howard admitted that his contribution
was merely in synthesizing what others had proposed before. (See parts a - d
above.) The sources were scrupulously given credit. Yet he was too modest, for
in the synthesis many creative proposals were put forth.

25. One of the few critics to consistently present and support the whole range
of garden city proposals was Mumford -- "In short, Howard attacked the whole
problem of the city's development, not merely its physical growth but the
inter-relationship of urban fuctions within the community and the integration
of urban and rural patterns, for the vitalizing of urban life on one hand and
the intellectual and social improvement of rural life on the other." Mumford,
of Tomorrow, p.35; refer also to chapter 9 of Mumford, The City in History.
The experiences in the new world have been cited as the source of conviction that in a rapidly expanding world, living conditions did not have to remain meagre. In Chicago from 1872-1875, Howard came in contact with the initial stages of reconstruction from the great fire of 1871. The city was transformed from the open plan prior to the fire (Chicago had been called the Garden City), to the dense conditions after (with the invention of the skyscraper). Land values skyrocketed. The potential for an ideal city was lost in a speculative scramble. Suburban sprawl also occurred. In spite of the destructive aspects of the uncontrolled development, there were a few areas which Howard assimilated into his ideas. F.L. Olmstead's suburb of Riverside demonstrated the advantages of designing a community close to the land.26

In a speech to the Nationalization of Labour Society and Land Nationalization Society at Farringdon Hall, 1893, Howard proposed a system of new towns called Co-operative Commonwealths. Although he gained an enthusiastic reception from this reform organization, and from other reform groups, he soon discovered utopian-socialist proposals would remain ineffectual in a nationally based campaign to improve the system. He spent the next four years refining the principles of new towns, demonstrating with pragmatic economics the viability of the idea, and also in modifying the social reform ideas to be more palatable to influential Britains. The art of compromise made the difference between the proposals being shelved as yet another utopian vision, and the proposals coming to shape the western world's settlements.27

Publication of Tomorrow: A Peaceful Path to Real Reform, 1893, began the campaign to gain wide support.28 The following year saw the formation of the Garden

26. Creese, op.cit., chapter six; and also, Dugald MacFadyen, Sir Ebenezer Howard and the Town Planning Movement, chapter three.
28. The book was later republished as Garden Cities of Tomorrow in order to gain a wider popular appeal to the British identification with nature; see Osborn, op.cit., introduction. "Garden City" was in fact the name of only one of the cities in the "Social City" network.
City Association, with a board of 12 directors. Public speaking engagements and private contacts gathered an increasing number of supporters. The 1902 reorganization brought several prominent leaders into the organization with Ralph Neville as chairman. Thomas Adams was retained as the first paid secretary of the association. By 1902 the movement was firmly entrenched. In a conference at Port Sunlight, attended by 1,000 delegates and chaired by Earl Grey, the future governor-general of Canada, a Pioneer Company was organized to secure a site and prepare a development scheme for the first garden city.  

In the introduction to the 1965 edition of *Garden Cities of Tomorrow*, both Osborn and Mumford note a disregard for Howard's book even amongst critics of the garden city. It was dismissed as being of limited academic prestige. They urge reading of Howard's proposals as a means of understanding the reason why so many enthusiastic supporters became committed to the improvement of settlements. Some of the innovations proposed by Howard included: the concept of a democratically planned settlement, the union of town and country for mutual benefit, a definite size limit for the town (30,000 acres and 2,000 acres in greenbelt), a system of expansion through clusters of garden cities around a central city (250,000 people), dispersal of population growth, the neighbourhood unit (school wards) as the basic unit in planning, infrastructure for technological improvements in services and communications, eventual ownership of the land by the community for its own benefit, civic management which permitted maximum involvement of citizens, separation of land use by zoning, preservation of surrounding countryside with a greenbelt, improvement of squalid conditions in existing metropolis by lowering property values and making open planning feasible, concern with habitability and sociability instead of architectural styles in design, a public open space system as well as private gardens, and an acceptance of medieval urban residential densities. These proposals revolutionized the industrial city.

29. MacFadyen, op.cit., chapter six. Note the support of both Cadbury, Lever and numerous celebrities including G.B. Shaw.
30. E. Howard, *Garden Cities of Tomorrow*, note in particular the emphasis on revenue and expenditure.
Howard illustrated the proposals with several diagrams meant as conceptual aids; instead, these became interpreted as concrete proposals of the form of the garden city and became incorporated in the physical plan of the first garden city, Letchworth. 31 Letchworth was commenced in 1903 using plans of the winners of a competition, the architects Parker and Unwin, on the site of a small village. The physical standards evolved through their work, both here, in books and in other projects, came to characterize the garden city as a "city of gardens" set in farm land and with a nucleus of a major park. 32

The contribution of the garden city association was not in the numbers of new towns they commenced, for only two were ever undertaken. The main contribution was rather, in providing a forum for discussion of various aspects of values which the 20th century city-country should reflect. Also the association was the main influence in the 1909 Town and Country Planning Act. As the Letchworth experiment proceeded, an ideological split in the aspirations of the members became apparent. Three discernible groups were the social reformers, the professional planners and the garden suburb advocates. 33 (Note that there was little antagonism and much overlap in interest of the people involved.)

The social reformers believed in the planning of complete towns in accord with the garden city vision of a merger with the countryside. They concentrated upon the social benefits such an environment would produce. For example — all the land was to be owned by the municipality, so that profits would accrue to the citizens. This group fragmented in 1918 with Howard setting about to build

31. Mumford, introduction to Garden Cities..., p.33; Howard had meant for a far greater adaptation to site conditions than the formal diagrams indicated. For a description of the sources of the physical images of the diagrams, refer to A.E.J. Morris, "Origins of the Garden City".
32. There is insufficient room to describe the Letchworth plan, so refer to several sources for information including: Creese, op.cit., chapter 9; MacFadyen, op.cit., chapters 8-13; and Osborn, Green Belt Cities, op.cit., chapters 3-6; it is still a desirable community as its house prices are presently 20 - 30% higher than comparable accommodation elsewhere.
Figure #15
Typical streetscape of the second Garden City, Welwyn. Contrast this housing for workers with the previous generation's industrial slums.

Figure #16
Plan of Letchworth
another model garden city, Welwyn, and Osborn becoming the main propagandist for a national policy of planning in accordance with new towns principles. The financial and social success of both Letchworth and Welwyn proved the viability of the models in spite of enormous difficulties. It remained for Osborn to slowly convince an influential majority of professionals and politicians that the concepts could indeed be applied as national policy. Through his work as director of the Town and Country Planning Association (from 1907), as administrator of Welwyn, as a lecturer and author, and as a member of the Reith committee, Osborn came to influence the Greater London Plan of 1944, and the post-war new town construction programme. The acceptance was not without compromise. Open space standards and the principles of extensive local control of the community by the citizens were abandoned.

The professional planners became increasingly interested in implementing proposals for extensive settlement areas. Some of these planners included: Patrick Geddes, who was vice-president of the garden city association; Thomas Adams, who set up a practice and did extensive work in Britain, Canada and the United States; and Professor Sir Patrick Abercrombie, who combined his practice with teaching at university and wrote a book which became a standard text. Slowly, the planning profession increased in ability and public acceptance.

It was the physical planners, here termed garden suburb advocates, who had the most pronounced influence on the design of new communities in the western world prior to World War II. The leaders were Sir Raymond Unwin and Barry Parker.

34. MacFadyen, op.cit., chapter 15; and Osborn, Green-Belt Cities, op.cit., chapters three-six.
35. For a description of the stages in the campaign refer to A.E.J. Morris, "From Garden Cities to New Towns"; Ashworth, op.cit., chapter 8; F.J. Osborn, Green-Belt Cities, chapters 7 & 8.
36. For a description of some of the new towns that were implemented after 1946, refer to Creese, op.cit., chapter 14; F.J. Osborn, and Arnold Whittick, The New Towns: The Answer to Megalopolis.
37. Patrick Geddes, Cities in Evolution.
38. Patrick Abercrombie, Town and Country Planning, in particular Part II.
who set the standards of design for an open space community. Plant material was used to define the space as a part of an organic aesthetic reference to villages. The hard edges and dense conditions of an endless urban aggregation became softened, and made more responsive to the surrounding countryside. In their architecture, the search was for an idealized cottage with features including: an open plan for heat circulation, orientation south to maximize sun, pitched roofs for rain, and a small private garden. The concern with simple forms, cleanliness and sunlight was termed environmental functionalism. This was abandoned after the Second World War in favor of the continental aesthetic of mechanical functionalism.

Unwin's work at Hampstead Garden Suburb became the masterpiece of the suburban trend. It was built as a part of the proposal to extend Hampstead Heath for the use of the poor of London. Dame Barnett's intention was to provide a suburb where all classes could live together and enjoy the natural beauty of the site. This unfortunately was not entirely accomplished as costs rose. The accomplishment is measurable in terms of physical planning. The grouping of clustered houses and public buildings maximized the potentials of the upland site.

The principles of urban social structure for which the garden city stood were abandoned as the public in Britain and Canada generated an overwhelming enthusiasm for the garden city form of physical planning. Suburban developers and local councils supported and codified the design standards of the prototypes to meet the demand. On this continent, the clustered housing intended for the model was abandoned in favour of single family dwelling densities. The unified suburbs

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thus produced were of a quality immeasurably better than the speculative row housing sprawling around metropolitan centres, but gave rise to several problems. Some of these problems are discussed below.

f) Criticism

The first criticism of the garden city model came from Trystan Edwards in 1913. The problem he identified was the increased amount of space garden cities and their imitators, garden suburbs, required to accommodate a population. The desirable open space systems were accomplished by covering larger areas. Edwards insisted that the low density housing standards had to be abandoned in order to protect the countryside.43 This idea was echoed later by an unlikely alliance of rural preservationists, architects and sociologists who were concerned that with the rapid rates of population increase, there seemed to be no way to contain the growth of conurbations.44

This criticism has been effectively answered by garden city proponents. The original idea of Howard was for the continuation of medieval patterns of densities, with units on 20 feet by 100 feet lots.45 However, Unwin, when preparing the plans for Letchworth, noted that there was no need for high densities. His standard of 12 units per acre became the accepted density.46 That such a density should be considered wasteful of land may seem impossible to Canadians, many of whom consider four units per acre an urban density. The sprawl critics were also answered by a leading authority on rural land use, Dr. Robin H. Best. His conclusion was that new towns were more efficient in their use of land than were pre-industrial towns. He also noted the total amount of land required for new towns was less than 0.7% of the total urban area of Britain, and these were

44. J. M. Richards, "Failure of the New Towns"; see also R. Best, Land for New Towns, introduction.
45. Osborn, editor, Garden Cities of Tomorrow, pp.31-32.
46. Unwin, Nothing Gained by Overcrowding; this was reinforced by the Reigh Committee's report.
carefully located on infertile soil.⁴⁷ The contention that open space provision squanders the countryside had been discredited.

The first sustained criticism was voiced by Thomas Sharp in the early 1930's. The only way to savour Sharp's attacks on the garden city is to present some typical passages:

Tradition has broken down; taste is utterly debased. There is no enlightened guidance or correction from authority. The town long since degraded, is now annihilated by a flabby, shoddy, romantic nature-worship. That romantic nature-worship is destroying also the object of its adoration, the countryside... In a few years all will be neutrality. The strong, masculine virility of the town; the softer beauty, the richness, the fruitfulness of that mother of men, the countryside, will be debased into one sterile, hermaphroditic beastliness. The crying need of the moment is the re-establishment of the ancient antitheses. The town is town, the country is country: black and white: male and female. Only in the preservation of these distinctions is there any salvation.⁴⁸ The Victorian complaint had caused such a shocking debasement of the traditional features of the town that the quacks who took upon themselves the treatment were inherently wrong.⁴⁹ [And the closing pitch for urbanity]:...Little dwellings crouching separately under trees on either side of a great space — how can they look other than mean and contemptible? We want something to reflect our achievement, our great over-topping of Nature: something that is a worthy symbol of civilization, 'of society, of broad expanding sympathies, of science, art and culture.' That we can only get through pure medium, the town. Town-country, garden-city will never give it. Only sheer, triumphant, unadulterated urbanity will.⁵⁰

The next generation of critics agreed with Sharp and pushed for increasing densities and a more urban treatment of the townscape. The pastoral values nurtured by the garden city were discarded as too sentimental for:

an era that called for greater innovation, toughness and backbone — a New Brutalism if carried far enough... all that could be obtained was confectionery; Welwyn was a frosted town and the suburbs were underdisciplined, hence garden cities before and new towns after would be undesirable because they appealed too cleverly and insidiously to the emotional sweet tooth of the English people. ⁵¹

⁴⁷ R.H. Best, Land For New Towns: A Study of Land Use, Densities and Agricultural Displacement; see also Osborn, op.cit., p.147.
⁴⁸ Thomas Sharp, Town and Countryside, p.11
⁴⁹ ibid., p.136. Sharp also reveals a fascist contempt for the working class on p.139 which should not be missed.
⁵⁰ ibid, p.163.
⁵¹ Sir John Summerson, Ten Years of British Architecture, 1945-1955.
Cosiness was replaced by crowded, feverish activity as the most respected criterion of planning on both sides of the Atlantic.  

Under pressure from the urban proponents, and the upward costs of land assembly and construction, minimum spatial standards were lowered. From 1952 onward, professionals and governments accepted the policy of tightened densities. Many critics now agree with Lord Stamp, that a mixture of types of accommodation is the answer to the settlement problem. It is useless to continue the urban design with nature debate; each has advantages and disadvantages.

2. Dispersal of the Garden City:

The British were the first to feel the impact of industrialization, the first to formulate a coordinated model of settlement to be able to cope with the new order, and were amongst the first to reach a near capacity population. Throughout these three stages of urbanization, they have been able to maintain a landscape imbued with a sense of mythical proportions throughout the anglophone world.

North America has benefited from the three British urban stages by a diffusion of planning principles, and by an awareness of the advances and mistakes that have been made. The first official medium for this dispersal was the International Garden City Federation founded in 1903. Its main purpose was to promote an understanding of the objectives of the movement through publications and conferences. Numerous countries in the western world absorbed the ideas into the formation of

52. Supporters of the concept of the metropolis as the centre of power and culture and opposed to the garden city dispersal theories include: W.H. Eden, "Ebenezer Howard and the Garden City Movement" and "Studies in Urban Theory II" J.M. Richards, "Failure of the New Towns"; Gordon Cullen, "Prairie Planning in the New Towns", and Town and Townscape; and the Smithsons, "An Alternative to Garden Cities".

53. Critics of the urban bleakness caused by the decreasing use of plant material include: Creese, op.cit.,p.339; and Best, op.cit.,p.50. They have been in the minority.

54. Stamp, op.cit., p.251.

their own unique models for coping with the changing urban conditions. Continual reinterpretation makes assessment of the extent of the influence of the garden city in the universe of ideas almost impossible. Most attempts to discuss the full range of urban theories narrows analysis of the garden city contribution to only the first few years of the movement, and dismisses it as inconsequential since only two towns were built. Yet, as a cursory review of the subject will reveal, the principles became ingrained in the way a majority of western people perceive their ideal city.

a) The Garden City in the U.S.A.

The first impact of the garden city movement upon the United States was in the form of a reinforcement of the trend towards suburbanization. This had been an ongoing process since Alexander Jackson Davis created the first suburb in 1853, Lewellyn Park. This was followed by a series of park-like "estates" for the wealthy, the most outstanding being those of Olmstead. While the core areas of the rapidly growing cities received enthusiastic support for monumental quasi-baroque design proposals throughout the city beautiful era, the peripheral areas applied a loose interpretation of the garden city physical planning ideas to unify the communities. The principles were never understood though, and the phrase was used to justify a "city of gardens", where individual rights were paramount. The city as a co-operative venture of citizens could not be advanced. As more and more socio-economic groups became disenchanted with the increasingly blighted conditions of inner-urban areas and as their incomes rose, a mass exodus to the suburbs began. The substandard sprawl that was produced by the private sector for most of these people gave rise to the support of legislation.

56. In an assessment of 19th century progressivist-culturalist urban theories, Francoise Choay shows the British contribution was neither isolated nor unique, but spawned the most influential model. Refer to Choay, The Modern City: Planning in the Nineteenth Century, for an international review.
57. Another comprehensive analysis of historical urban theories is Giedion, op.cit., Parts II, VII and VIII.
58. J. Reps, op.cit., chapter 12.
59. ibid., chapter 18, for a description of the growth and development of the city beautiful movement, especially p.514.
to control planning. Gradually the suburbs took on the characteristics of today.

Proposals for new towns by the decentralists led to the awareness that communities required comprehensive planning to foster the "better life" for their citizens. The inspiration for this school of thought was the British garden city movement. 61 Serious interest continued with Charles Harris Whitaker, editor of the Journal of American Institute of Architects. Through the 1910 Royal Institute of British Architects' international conference on planning, and through war housing reports of Unwin, he became convinced of the soundness of the ideas for the planning of ordinary urban conditions. He sent Fred L. Ackerman to Britain in 1917 to prepare a report which would influence the war housing policy of the Wilson government. After the war, interest in planning increased and Whitacker enlarged the J.A.I.A. to include a planning section under the editorship of Clarence Stein, 62 a well-connected architect. In 1922, the Russell Sage Foundation hired Thomas Adams to prepare the influential Greater New York Regional Survey. In 1923, a group of planning advocates formed the Regional Planning Association of America. The group included F.L. Ackerman, Tracy Augur, Catherine Bauer, Fred Bigger, A.M. Bing, Benton MacKaye, Lewis Mumford, C.S. Stein, C.H. Whitacker, Henry Wright, and Edith E. Wood. They met regularly for weekend retreats to discuss ways of solving the urban future of the nation, 63 and became increasingly committed to garden city principles.

60. An understanding of the complexities of the American suburbs is necessary to begin to recognize the areas of influence of the garden city; a short reading list would include: Bennett M. Berger, Working Class Suburbs; William Dobriner, (ed.) The Suburban Community; R. Sargent, The Suburban Dilemma; Dobriner, Class in Suburbia; Scott Donaldson, The Suburban Myth; Herbert J. Gans, People and Plans: Essays on Urban Problems and Solutions; Gans, The Levittowners; Charles M. Harr, The End of Innocence: A Suburban Reader; Masotti & Hadden, Suburbia in Transition; W.M. Whyte, The Organization Man.

61. John Nolen was involved with the international federation; he used principles of garden city design for several new towns — see Reps, op.cit., pp.430-438; also see Creese, op.cit., p.300.

62. Stein had recently visited Britain and was a friend of Unwin and Howard.

63. Mumford, "Introduction" to C.S. Stein's Toward New Towns for America, pp.11-17.
Other early ties with the British experience came through the appearance of Howard, Unwin and Parker at the 1925 International Town, City and Regional Planning and Garden Cities Congress in New York City. Unwin returned frequently on visits to his married daughter, and became involved with the R.P.A.A. meetings. He influenced the New Deal legislation and was appointed to the Commission for the National Association of Housing Officials. From 1936 until his death in 1940, Sir Raymond accepted the directorship of Columbia University's Planning and Housing Faculty. Another source of connection was the friendship of Osborn and Mumford. For thirty years they exchanged ideas on the future of settlements.

The leaders of this generation's implementation of planned new towns in the mould of the garden cities, were C.S. Stein and Henry Wright (note that Wright trained as a landscape architect). Experience was gained on smaller developments beginning with Sunnyside Gardens in 1924. Radburn followed in 1928. This community is probably the most renowned of American new towns for its design introduced separation of vehicles and residential core. Chatham Village followed in 1930; this was the first attempt at implementing a recreational greenbelt, albeit on a limited scale. With the change in federal administrations during the depression, Roosevelt promoted public involvement in the creation of new towns. The Emergency Relief Appropriations Act and the National Industrial Recovery Act of 1935 enabled the construction of greenbelt towns.

Members of the R.P.A.A. became involved with various aspects of the Resettlement Administration, (R.G. Tugwell, administrator). The first town, Greenbelt, Maryland, was a dormitory city designed for a classless society. Greenhills, Ohio; Greenbrook, New Jersey; and Greendale, Wisconsin; were planned or constructed

64. Creese, op.cit., chapter 13. As President of the R.I.B.A. and architectural gold medalist, Unwin was one of the most respected professionals in the world.
65. C.S. Stein, op.cit., chapter one.
66. ibid, chapter two and pp.332-339.
67. ibid., chapter three; for a criticism refer to Jane Jacobs, Death and Life of Great American Cities, p.317.
68. Ibid., chapter eight; for an analysis of the community a generation later see W.H. Form, "Status Stratification in a Planned Community".
before the Second World War ended the programme. After the war government involvement in urban development became politically undesirable so the new towns were sold to private enterprise. In the post-war buoyant economy, individual spending power increased making possible a massive increase in suburban single family housing. The resulting planned communities, or more often piecemeal development, lead to urban sprawl interconnecting whole regions in an unprecedented phenomenon, the conurbation. Critics urged higher densities in new towns and in established metropolitan centres to absorb the future increases in population instead of spreading the urban front in a wider and wider zone. In the 1960's a new generation of new towns began to make an appearance. The large corporate investments produced new towns, such as Reston and Columbia, modelled after their counterparts in Britain, with significant differences in housing standards, environmental constraints and private input. A recent comparison between ten residential patterns suggested consumers in the "new towns" were more satisfied with a number of key factors than in the unplanned communities. Thus new towns in the United States may come to account for one third of urban growth for the rest of the 20th century.

In the process of stopping the suburban low density expansion, arguments were advanced to counteract the tendency for the urban centre to be downgraded as residents with financial resources relocated in peripheral areas. Most inner

69. Such as the various Levittowns, refer to Gens, op.cit.
70. Jean Gottmann, Metropolis; Gottmann is a strong supporter of an expansion of conurbations into a form of ecumenopolis. Many other critics have reservations on the advisability of such a phenomenon.
72. For a discussion of the differences in the two systems, refer to Marion Clawson & Peter Hall, Planning and Urban Growth: An Anglo-American Comparison; see especially chapters 6 & 7.
74. Bailey, op.cit., p.150.
75. The urban exodus was at a faster pace from 1930 on than was the growth of core areas, so by 1970 the suburbs were the dominant community pattern in the U.S.A. Refer to Charles M. Harr, op.cit., p.15.
cities in the nation had identified, by the early sixties, the fact of impending bankruptcy unless renovation and financial assistance for social programmes could be found. Enormous investments in the core areas were threatened, and the resources of various levels of government and real estate corporations set about to find urban solutions to counter the unwillingness of the population to accept high density patterns. Academic funding for alternate solutions nearly disappeared in the scramble to convince the public that life on the ninetieth floor presented options which would expand their human potential.  

Garden city theories became the target of respected critics for the erroneous interpretation of generating suburban low density cities of gardens, for advocating a fundamental reordering of urban experience into smaller units through a policy of decentralization, and for advocating redevelopment of core areas at lower densities. Howard's attempt to create a humanized industrial settlement was ignored:

just let us imagine what the urban landscape would become if most of the industrial heavy plants, the warehouses, the highways, the parking lots and the railways would disappear from the ground -- most being replaced, of course, by well-tended public parks and gardens. Well, it would be a beautiful, enormous garden city, the like of which even Ebenezer Howard had not visualized!

The advocacy of urban plant material became a sort of crime: "There are also to be found in highly civilized communities certain advanced groups...who worship all forms of greenery indiscriminately...even the garden city, dissolved in green, lacks appeal to any but the dedicated." High density concrete designs became fashionable.

The most frequently encountered phrase in the pro-megalopolis literature was "realistic urbanism". There was a rejection of "organic wholism" in favour of an empirical-rational attitude to produce "relevant solutions". Garden city

76. Jean Gottmann, "The Skyscraper Amid the Sprawl", p.149.
proponents such as Mumford were dismissed as anti-urban communitarians. The urban values of a global city became the ideal: "the wilderness, the isolated farm, the plantation, the self-contained New England town, the detached neighbourhood are things of the American past. All the world's a city now and there is no escaping urbanization, not even in outer space."\(^\text{80}\)

High density inner city living conditions which had previously been regarded as suitable only for demolition, became the subject of numerous sociological studies the findings of which showed how opposed to change the residents were. Continuing the theme of the richness and diversity of experience found in high concentrations of people, Jacobs attacked garden city open space planning. She convinced many that the action was really on the streets, not in the parks.\(^\text{81}\)

Other critics dismissed the garden city as failing to respond to the social realities of a complex world with overlapping social structures in a semi-lattice. Some would recognize the contribution of Howard as the initiator of many of the theories promoting livable cities, but they would insist that the changing conditions since the turn of the century required a re-evaluation of those theories, and extension. For instance, Keller suggested a new category of neighbouring, that high density conditions were required to permit a maximization of social interaction.\(^\text{82}\)

The intense dedication to the core areas of megalopolis has produced a series of advocates of high density cities regardless of the evidence that they are unfit places to live. They scoff at the desertion of a lifelong New Yorker, Mumford, for the country,\(^\text{84}\) but how can the disenchanted migration of Mrs. Jacobs be ignored?

\(^{79}\) Morton & Lucia White, op.cit., chapters 13 & 14. For a rebuttal of the claim that the nation's leading advocate of urbanity should be considered opposed to anything but giganticism (anti-individual), refer to P.D. Goist, "Lewis Mumford and 'Anti-Urbanism'".

\(^{80}\) White, ibid., p.239.

\(^{81}\) Jane Jacobs, op.cit., pp.79-90.

\(^{82}\) Christopher Alexander, "A City is Not a Tree".

\(^{83}\) Keller, The Urban Neighbourhood: A Sociological Perspective, chapter 3.

\(^{84}\) For instance, an advocate of larger and more dense conurbations, Ledermann, "The City as a Place to Live", p.84.
A review of recent literature on urban studies suggests that the garden city concept has so thoroughly been discredited by critics on both sides of the Atlantic that even logical continuations are shy of acknowledging their heritage. One of the most perceptive of the urban historians, Giedion, identified the fundamental cause 35 years ago:

It is easy to see why the original idea of the garden city... was doomed to failure. No partial solution is possible, only preconceived and integrated planning on a scale embracing the whole structure of modern life in all its ramifications can accomplish the task which Ebenezer Howard had in mind.\(^85\)

b) The Garden City in Canada

Expansion in Canada in the first two decades of the 20th century led to a demand for settlements across the land. The people who were willing to pack and venture off into the New World did so in the belief their lives would improve. For many, it was to be their first taste of freedom and democratic government. The promise of a more bountiful material life added to the stimulus. Conditions in most of the Old World were appalling. The centuries old crowding in decaying slums of urban centres had become unbearable with the additional burdens from industrialization and population increase. Thus the spatial openness of Canada was a strong attraction.

No one wished to see a repetition of past urban mistakes, where the few rich lived in palaces and the masses lived in hovels out of sight. This was to be a land where each individual held as equal a right to a good life as his neighbour. Thus the concept for structuring new cities for this fresh land, which held the most attraction, was that of the garden city. Where the Old World required a change in economic order, etc., to find acceptance of the proposals of Howard and his friends, Canada offered an almost blank sheet for the realization of the "utopian" schemes.

Ingrained British heritage and the spaciousness of the Canadian landscape led to a natural flow of ideas on the garden city to form the foundation of

\(^{85}\) Sigfried Giedion, op.cit., pp.784-785.
Canadian urban patterns, and the concept was given an extra "boost" by the Governor-General, the fourth Earl Grey. Grey's commitment to social reform was well known and extended through co-operative agriculture, small business promotions and improved housing, to a keen interest in the garden city movement. Grey served as the honorary chairman of the Garden City Association, and the president of the Hampstead Garden Suburb Association. 86 Although he had limited parliamentary authority, Grey functioned as a respected force in moulding Canadian social attitudes. Canadian business and government leaders asked him to press friends in the garden city movement to accept invitations to speak on the advantages of planned communities throughout the country. 87

In response to the requests, Vivian, Mawson, Adams, Couchon, Unwin, and others made the journey. Some remained to set the framework of planned communities in motion. A member of the British House of Commons, Henry Vivian, was one of the leaders of the co-operative movement. His book, Co-partnership in Housing and Its Health Relationship, was widely distributed and helped convince a number of people on both sides of the Atlantic on the soundness of self-help programmes. Later, his 1910 speaking tour of Canada (including Vancouver) discussed co-operatives, land-use legislation and the advantages of a garden city. 88 Vivian is considered the founder of the co-operative movement in Canada.

Another garden city advocate, Thomas Mawson, was one of the first to establish a private planning practice in Canada. His design philosophy was atypical of garden city purists since it was a synthesis of separate elements -- part American beaux-arts, part neo-renaissance formalism, part ecological picturesque -- but it was pulled together as an integrated unit by a commitment to social awareness

86. Ashworth, op.cit., pp.158-164
implicit in the garden city. His list of projects speak of a fundamental concern with improving public space; projects in Britain included the second phase at Port Sunlight and Pittencrieff Park. He also had an international practice, working in Canada, the United States, Greece, France, and the Netherlands. From 1912, in Canada, Mawson influenced urban design. Some of his influence can still be seen in the Ottawa National Capital Plan, Stanley Park, Vancouver Civic Centre, Regina Civic Centre, Saskatoon Campus, Dalhousie Campus and Calgary Master Plan. He also submitted several proposals to the Conservation Commission for New Towns. Mawson's professional ties included membership in the R.I.B.A., R.A.I.C., A.S.L.A., as well as being a charter member of the British Landscape Architects' Association and the president of the British Town Planning Institute (the successor to the Garden City Association). Mawson was professor of landscape design at Liverpool, visiting lecturer at Toronto, McGill and Columbia Universities, as well as honorary Ph.D. at a score of universities on both sides of the Atlantic. Within this exhausting schedule, Mawson found time to serve as the catalyst for discussion on the standards the form of Greater Vancouver would have in its formative years.

The most influential of the garden city planners on the Canadian scene was Thomas Adams. His credentials included: first secretary of Garden City Association, editor of Garden City Association magazine, first manager of Letchworth, first president of the Town Planning Institute of Britain, and first president of the Town Planning Institute of Canada. Adams' contribution to Canada dates back to before his 1914 appointment as advisor on rural and town planning, to the Commission of Conservation, since his articles were widely circulated in the design field here.

89. E.G. Vandermeulen, "Mawson, A Landscape Architect at the Turn of the Century", p.36. Note: Mawson's public interest was too monumental for the tastes of the Garden City purists.
90. Chadwick, op.cit., pp.221,225.
91. T.H. Mawson, Civic Art: Studies in Town Planning, Parks, Boulevards, and Open Spaces. He was also responsible for Banff National Park planning.
The Commission of Conservation of Canada, of which he was principal consultant, owed its start to members of the business community who recognized in 1909 that the world's resources were exhaustible. A new era of resource conservation and planning for future generations was thought to be an essential ideology for Canada. Parliament was convinced to establish the Commission to foster a spirit of "proper" land use and conservation throughout all aspects of Canadian society. The legislation was based on the British Town and Country Planning Act and the American Conservation Act. Sir Clifford Sifton served as its first chairman. The power conferred to the Commission was extensive, but it was meant to co-operate with existing governmental departments and private enterprise to make the new ideology of conservation for heritage operative. During its twelve year existence, the Commission initiated many of the laws and beliefs which make Canada an agreeable land. Some of these include: establishment of health standards, fostering of agricultural modernization, forest conservation management, the initiation of town planning, and the establishment of a National Parks and Historic Sites system.  

The earliest concern of the Commission was that of public health. Canadians were fearful that the slum conditions of industrialized Europe and tenement New York would be repeated in Canada. This point cannot be emphasized enough. To people who had known the miseries of poverty, the slightest whiff of slum conditions spelt terror. This was to be a new land without the mistakes of the past. The first advisor to the Commission on public health, Dr. Charles Hodgetts, reflected the overwhelming Canadian conviction that dense packing of humans and unsanitary conditions were not to be permitted. For instance, Hodgetts describes tenements as, "a damnable architectural invention"; apartments as, "an architectural monstrosity"; and skyscrapers as, "emanations of a freakish mind".  

92. Alan H. Armstrong, "Thomas Adams and the Commission of Conservation"; refer also to Adams, op.cit.(1916), chapter one, for objectives of the Commission.
was a land of 2,306,502,153 acres — crowding was thought to be absurd. (The human dimension of the Canadian spatial perception then appeared to be far greater than any of the nationalities discussed by Edward Hall in The Human Dimension -- i.e. it seems as though one of the principal national characteristics of Canadians is the requirement for immense amounts of open space.)

The concern of Dr. Hodgetts was well founded. There was a growing number of deaths in Canada due to crowded, poorly serviced conditions (deaths resulting from typhoid, influenza and tuberculosis). To remove these threats, Dr. Hodgetts proposed the rehabilitation and termination of high density conditions. In their place, he supported the model communities of the Old World such as Bourneville, Port Sunlight, Letchworth and Hampstead Garden Suburb. He convinced the Commission and the Canadian public of the importance of the standards established in Britain to provide the basic dignities of man: clean water, sunlight, fresh air, prevention of diseases, minimum health standards, and every step which could be taken to prolong life. 93

These notions seem rather basic to 1976 ears, but the point must be understood that the standards now enjoyed were once fought for by dedicated citizens and public servants. Canada could so easily have slipped into the inequities of some "banana republic"; or Canadian planning could have gone in another direction -- that of providing monumental schemes on the scale of Baron Haussmann and Ludwig of Bavaria, with which the Americans were so enthused. In the United States, during the age of expansion from the 1890's to 1929, discussion focussed on the City Beautiful, the city as a stage for the display of wealth and power. Instead, the British flavour of Canadian society led to different goals. 94 Adams summed up the differences between Canadian values and those of the rest of the New

94. James Ewing, "The Evolution of Canadian Planning": "We were getting down to broader and more democratic lives in the cultivation of health, comfort and amenity in living conditions, especially the underprivileged classes."
World at a 1914 conference: "You can afford monumental structures as matters of luxury, after you have considered the real essentials of the home life of the people -- the human units of the community."  

Adams' concern for improving the living conditions of ordinary people gained widespread support and enabled him to accomplish in seven years the foundation of planning in Canada. One of the first steps was the establishment of the Civic Improvement League, whose objective was the creation of Town Planning Commissions across the country. By 1916, seven provinces had introduced planning legislation to regulate the improvement and growth of settlement areas, and the others were formulating bills. He served as consultant to 40 municipalities, recommending planning procedures and specific proposals. For instance, after the 1917 explosion he redesigned Halifax. He also assisted in model house plans and the Veteran's Land Act of 1917. In 1919, he helped establish the Town Planning Institute of Canada, becoming its first president. Its journal became a source of innovation diffusion until its suspension in the 1930 depression.

The extent of his role in rural and urban planning may be reviewed in his book written for the Commission of Conservation. It outlines the work of the Commission primarily throughout the rural areas of the nation. Policies recommended or implemented included: plans to counteract speculation around urban nuclei by retaining crown land for leasing as productive farmland (greenbelt); reinforcement of trend of industry to decentralize to rural and satellite towns to promote a more diverse nucleus for the rural population; modification of rectangular grid planning to take into consideration natural elements (several examples provided); undertaking of a land classification and survey to show the Canadian

96. Armstrong, ibid., pp.21-32.  
98. ibid., p.43; refer also to J. Howard Richards, "Perspective on Regional Planning", pp.24-28  
99. ibid., p.49.
resources; the recognition of the importance of gardens within cities; reduction in the extravagant use of urban land by tightening grid plans to reduce public expenditure in roads and services (comparative statistics offered to show the advantages of more efficient use of serviced land); technological improvements to be increased in rural areas including sanitation, motor cars, telephones, surfaced roads, fire departments, mandatory public health standards and zoning of compatible land uses; a list of programs to be extended such as rural credit, national and local parks, tree afforestation, co-operative farming, national agricultural societies, comprehensive education and scientific research; comprehensive regional planning at the provincial level supported; and finally, Adams concluded with the promise of new towns to be constructed:

New town settlements (garden cities) should be established where there are good facilities for profitable production and distribution, where manufacturing and intensive farming can be successfully carried on, and where advantage can be taken of the tendency to remove industries from crowded centres to rural districts or to establish new industries near water power and raw materials.

The book served as an explanation of the policies of the Conservation Commission. It was also the propaganda platform for the Canadian government to show the people the sort of improved society they were fighting for. (Such reports were common elements in the war effort in all the allied countries of both world wars.) Thus, this book represents the quintessential statement of the ideal Canadian society. Unfortunately, not all of the proposals were implemented before the repeal of the Conservation Commission in 1921. The changing political atmosphere saw the rise of provincial rights, and the extensive power of the Commission came into increasing opposition. The Commission was disbanded

1. ibid., p.70.
3. ibid., p.92-95
4. ibid., p.127.
5. ibid., chapter 6.
6. ibid., chapter 9.
7. ibid., chapter 10, pp.168-175, 214-216, and quotation from p.244.
and its functions became absorbed into the existing federal departmental bureaucracy, thus terminating a co-ordinated policy of stewardship of the land. The net effect of the increased provincial control over internal resource and settlement affairs was to permit free enterprise virtual unrestrained development.

Adams returned to an international private practice based in Britain until accepting the appointment as director of the Regional Plan of Greater New York from 1923-1930. In 1934 he helped organize the Institute of Landscape Architecture of Great Britain, serving as the first vice-president. His career had been multifaceted: administrator, designer, author, editor, professor, professional and executive of numerous professional organizations. Through personal persuasion, Thomas Adams directed the enthusiasm for planned settlement into practical legislation aimed at improving the lives of ordinary people.

The next generation of garden city enthusiasts were just as idealistic in their vision of a democratic Canadian society. Dr. A. Grant Fleming continued Hodgett's determination toward the introduction of public health standards to Canadian settlements. He wrote:

To my mind, the most important contribution which will be made is that proper homes will be provided, in which people can live with health and comfort. The abolition of slum areas, the correction of over-crowding, and provision, instead, of real homes with elbow room for everyone.10

Noulan Cauchon was given the opportunity to review several previous plans for Ottawa, and prepare a master plan for the National Capital Commission. In this, he proposed an extensive greenbelt of farm land and recreation land to surround the city, as well as an integrated open space network throughout the inner city's Rideau Canal. It was the realization of the conceptual diagram of Howard. Cauchon's proposals were accepted, and he spent the rest of his life implementing it. The integration of town-country and the integrity of each in Ottawa now

may serve as the model for the rest of the nation to follow.  


By the time of Howard's death in 1928, the editor of the *Journal of Town Planning Institute of Canada* could write, that although no purist garden city proposals had been constructed in Canada, the principles of the movement had formed the basis of all facets of rural and urban planning here.

The unquestioned leader of the garden city movement in Western Canada was Frank Ebenezer Buck. From 1920-1950 this gentleman influenced the introduction of gardening to temper settlements, the creation of plans and zoning restrictions for British Columbia communities, the improvement of the farming community, and the preservation of parkland throughout the west. Professor Buck's contribution will be elaborated in chapter IV, section F. The human landscape of the Chilliwack Valley owes much to the principles for which he stood.

Considering the contribution to Canadian life the garden city advocates made, one would be astounded to find criticism, but criticism there has been in the past 20 years. In the process of creating the metropolitan corridor for a consumer nation, any proposal which aimed at decentralization and fundamental human requirements had to be shifted out of the centre of planning beliefs. A new generation of architects and planners emerged with a dedication to the centralization of power.

12. For a summary of their contribution, refer to F.E. Buck, "Some Early Pioneers of the Town and Rural Planning Movement in Canada."
14. The last implementation of the garden city proposals was by Clarence Stein for the new town of Kitimat, B.C.
the major topic of conversation. Where a previous generation had worked tirelessly to escape from the meanness of overcrowded and harsh conditions, the new generation raised crowding to a social art: "a greater opportunity to interact". Where the previous generation discussed the possibilities of an ideal society, the new discussed the joy of living.

A few of the new critics of the garden city were openly hostile to the garden city as being the worst of all evils, "anti-urban"; but most critics found it more effective to ignore its existence. However, the garden city had touched the Canadian consciousness too profoundly to drift into obscurity.

16. This went under the banner of "considering the spaces between". Numerous articles and lectures were given under this title.
17. For instance, Anthony Adamson, "What is Planning".
18. In six years of architecture at U.B.C. this student heard only two references to the garden city movement, both derogatory.
19. For a defense of the movement refer to Gerecke and Wiesman, op.cit., p.xiii; P.J. Smith, "Where Are the Plans"; and to Humphrey Carver, Cities In the Suburbs, p.33.
E. Proposed Evolution-Dispersal Model

1. Evolution and Dispersal Theory:

The evolution concept is one that regards history as the product of continual change, but with a fundamental sense of continuity underlying action. This may appear a tenuous concept in the transitional world of the 20th century; however, the case for continuity appears to be stronger as concepts of material progress in a limited resource world become revised. Advocacy of the past as a source of values and as a beacon for future action may become less nostalgic and more essential. The belief that Canadian society is on the edge of a renaissance of historic proportions appears to be gathering momentum.

To gain an appreciation of the functioning of the past on a landscape, it is usual to study the humanized landscape of the Old World rather than the relatively primitive conditions of the New World. The most treasured countryside for a history laboratory is that of the British Isles; it is also one of the most useful areas of research to be able to understand the roots of Canadian experience.

The ideas which have influenced the Isle's landscape (conceptual and physical space) were not entirely original. It was the result of the flow of Western Civilization as carried to the Islands by several waves of invaders such as the Romans, the Anglo-Saxons, the Danes, and the Normans. It passed out of the pioneer state into a state of aesthetic awareness when the conceptual "luggage" of the dilettante was brought back home. Thus the ideas which served as the catalyst for a humanized landscape where man and nature nestled into the land were not isolated phenomenon, but rather were the product of the

20. Giedion as quoted in Collier, op.cit., (1972), p.42: "Both above and below the surface of our present age there is a new demand for continuity. It has again become apparent that human life is not limited to a single life-span but goes far beyond. It is as impossible to sever its contacts with the past as to prevent its contacts with the future. Something lives within us which forms part of the very backbone of human dignity. I call this the demand for continuity..."
accumulated cultural resources of the continent. To quote Toynbee:

Thus British national history is not, never has been, and almost certainly never will be an 'intelligible field of study' in isolation; and if that is true of Great Britain, it must surely be true a fortiori of any other national state. Therefore, if we are to pursue our quest, it is clear that we must take some larger entity than the nation as our field.21

The landscape of Britain reached an aesthetic zenith with the 18th century creation of a landscape of natural beauty in all its forms. The spatial input of the continent and beyond had been reinterpreted on an unprecedented scale. It seemed as if the whole island became a park. The extent of appreciation and commitment towards the land must have been due to the Britisher's ethos, as well as to the special qualities of the landscape. They are more closely tied to the countryside as the cornerstone of societal belief than any previous civilization.22 The various ideas that had come to realization in the British Isles were celebrated by artists, architects, poets, and writers, giving birth to the Romantic Movement. Yet this was but one aspect of the whole; the Britishers developed the most consistent stewardship precepts towards all aspects of nature.23

During the centuries of Pax Britannia, the aesthetic acuteness toward nature spread throughout the globe.24 Often colonists would err in directly applying the old to the new, for nostalgia was powerful, but most used the conceptual framework as a means of relating to their new surroundings.25 The overwhelming

25. Michael Bell, op.cit., p.9: "During Canada's early years under English rule, exciting cultural developments were taking place in England and Europe. Almost contemporary with the Seven Years' War, England and Europe were enthusiastically reaffirming the roots of Western Society. Yet at the same time they continuously sought out other societies, lands, and experience alien to one Mediterranean classical world...Secure in their belief in the moral, spiritual, and philosophical superiority of their society, Englishmen exposed themselves without fear to the influences of alien cultures and permitted the introduction of new themes and attitudes into art and literature.
presence of nature in the New World could not be ignored by a society infused with romance. Even, or more correctly, especially in remote areas such as British Columbia, this landscape appreciation came to structure the interpretation of the indigenous qualities of the West Coast and how people related to it.

To understand how these ideas were diffused can simply be explained in terms of Canadian exploration and colonization, but a detailed analysis of specific aspects of belief transfer requires the methodological security of a wide range of disciplines such as communications, historical geography, architectural history, and general cultural history.

It was soon recognized that each approach has its own theory on the functioning of diffusion. Perhaps a weakness in architectural history is its too eager acceptance of the proof of diffusion without abstraction of the implications or the result of that transference. Most architects welcome innovation as implicit. The recurrence of classical order, the travelling masons of medieval Europe, the 20th century Bauhaus internationalism; all testify to a substantial acceptance on the part of architectural heritage toward a boundless philosophic and technic outlook.

Other disciplines, on the other hand, are keen to describe not the result of transference, but the process. For instance, sociological historians have followed the interpersonal characteristics of innovation dispersal to the point where the people who invent, those who assume leadership in introducing the discovery, and those who are late in adopting the innovations, can all be isolated and their behavior analysed in structuring a theoretical model.26

Historical geography's definition of cultural diffusion is even more precise. Its theory enables the mapping of the transfer process over a set time period

26. For instance, Everett M. Rogers, Diffusion of Innovations, chapters 4, 5 & 11.
to permit analysis of its effects. For the purposes of this thesis, it would be possible to map the diffusion of the natural landscape, the village, and the garden city, however, this would require a more detailed analysis than is possible (without funding). Instead of showing the gradual spread of these beliefs from one landscape to another and so on to the Chilliwack Valley, it has only been possible to discuss the predominant effects of dispersal on enormous geo-political areas.

Generalists have a comfortable attachment to cultural diffusion theories which offer the most comprehensive analysis of the intellectual world around them. Unfortunately, the early generalist works have a naivete which make them useless. More recent studies have found the need to rely upon a more definite methodology. This in turn has led to a conflict in purpose: in order to gain valid results, studies must focus upon specific problems and then apply the results to further understanding of a general communications theory. This creates obvious difficulty in trying to justify the extrapolated results being extended further than the hypothesis boundaries will justify. Few generalists today remain who have credibility in enough fields to put forth an encompassing overview of their world.

Thus statements of a general nature must be cautiously put forth. Only those statements with credence with the majority of authorities on a subject can be accepted. One thing about cultural diffusion is unquestioned: that before World War II, beliefs flowed from Europe to mould and dominate Canadian

30. A study that influenced this thesis was P.C. Echols, "The Development of Shell Architecture in the United States, 1932-1962", pp.3-42 which shows how one particular innovation was introduced and then accepted via the professional and academic circuit.
creativity. Since World War II, the flow has ebbed to the point where European cultural influence on Canada are barely felt. At the same time, Canadian innovation has not developed as a vital force in defining the nation's goals. Indeed, many authorities would have one believe that Canadians should be embarrassed about nationalism. This leads to the question, if cultural diffusion from Europe has ceased to be relevant, and if there is a lack of appreciation for Canuck innovation, then where is the present source of the cultural diffusion that is having such a powerful influence upon the Canadian milieu?

2. Model:

The conceptual "tools" used for structuring the model are outlined by Kubler as a set of graphic symbols and nomenclature as accepted formats for identifying the direction of cultural flow. This format, when used according to the rules governing presentation of promorphic and/or neomorphic series, are an unquestioned assistance in the documentation of an argument. Toynbee's simple diagram of the influences moulding British consciousness serves as the classic example.

The sequence of influence of each of the patterns analysed in this chapter (natural landscape, village and garden city) have been diagrammed for time/place flow, but for simplicity only the sum of the three networks are shown. Here, then is the model generally accepted by historians as the acculturation process for Canada during the years 1497-1962. After 1962 the Canadian mosaic exploded into confusion.

32. Dixon Ryan Fox, Ideas in Motion; The clearest statement of the stages in colonization, rejection, expansion and acceptance of European history upon the American mentality. Canada appears to be going through a similar cultural turmoil as the U.S.A. of 50 years ago.
34. ibid., pp.50-56
3. Defense:

The barrage against British influence upon Canadian life has been a major focus of attention of the intellectual community for the past 20 years. One cannot read Gowan's *Building Canada* without coming to the conclusion that the British have been imperialistic opportunists who do not deserve a place in Canada.³⁶ (These are our great-great grandparents?)

There can be no denying that British influence in Canada has softened.³⁷ Perhaps people will eventually regard themselves as Canadian. In the meantime it is preferable to examine positive contributions to this country rather than degrading our ancestors, of whatever origins.

³⁷ Norris, op.cit., p.75.
The model of cultural diffusion formulated above shows that the Canadian cultural identity has been the product of external influence. This is a process which will continue as the world becomes closer in its interconnectedness. The only question seems to be from where the source of that influence will come. British influence is destined to continue to fade, but what is to take its place? Wherever the source is to be, will it be an improvement to the cultural life of Canada? As Collingwood remarked:

The idea of historical progress, then if it refers to anything, refers to the coming into existence not merely of new action or thoughts or situations belonging to the same specific type, but a new specific type...but from whose point of view is it an improvement?38

One indication of what is to replace the British as the source of cultural diffusion may be indicated by the work of L.K. Eaton. Professor Gowan, whose competency on United States historical architecture is pre-eminent,39 invited yet another Harvard alumni, Professor Eaton, to accept a year's position at the University of Victoria. While there, Eaton prepared an exhibit and publication on the work of British Columbia's first professional architect, Samuel Maclure.

The result is most remarkable. Eaton manages to disguise or insult the actual sources of influence on Maclure's art, and then twists the study into not a discussion of Maclure, but of Frank Lloyd Wright.40 To those students of architecture who have read all of Wright, and have made the pilgrimage to his work, it is almost impossible to criticize any reference to the master. However, it is disagreeable to find the work of our first professional architect so poorly respected. His parentage was ignored, the major influence upon his work was insulted; and worst of all, to confine the discussion of what made his creativity a unique response to this part of Canada to one sentence is

outrageous. Canadians must be the stupidest people in the world for financing their own cultural destruction.\textsuperscript{41}

Surely American architectural history and its contribution to Canada should stand on its own merits without distorting the work of Canadian talent. Even advocates of an internationally open Canada\textsuperscript{42} concede some place here for Canadian artists of recognized competence. Is it unreasonable to suggest one of the forces producing the Canadian fabric might, in the future, come from within this nation; and that as one method of identifying the character of that internal force, history might be useful?

4. Summary:

The concepts discussed in this chapter (the natural landscape, the village and the garden city) formed the basis of the ideas which eventually reached British Columbia, and came to mould the landscape of the Chilliwack Valley. Knowledge of these concepts is necessary for understanding the analysis presented in the next chapter.

\textsuperscript{41} A theme argued by S.M. Crean, "Canada, the Invisible Country" in \textit{Canadian Forum}, June-July 1976, pp.7-14. If one discards the extreme ideas there is the jist of a valid interpretation.

\textsuperscript{42} For instance, Murray Ross, "Canadian Village: A Retreat From the Global One", the \textit{Vancouver Sun}, Jan.13,1976,p.5: "I am concerned that the extreme nationalists' views, now widely expressed in the popular media, represents a regressive movement which denies the reality of 'the Global Village' and restricts Canada's development as a participating member in that village." Ross says only internationally acclaimed authorities have a right to discuss Canada.
CHAPTER IV - ATTITUDES SHAPING CHILLIWACK'S LANDSCAPE

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CHAPTER IV - ATTITUDES SHAPING CHILLIWACK'S LANDSCAPE

A. Scope

This phase of the hypothesis analysis reflects each generation of settlers' values regarding the environment. The procedure is to identify the indigenous landscape including its morphology and the genesis of organic life, by the time of the first recorded history in 1808. The second step is to describe the effect of the Stalo people on the landscape over their millennia of settlement, both from the material and the spiritual culture aspects. The third step is to discuss the new wave of pioneers to the valley. Since it is they who set the infrastructure for what would later occur, care has been taken to discuss the cultural framework they superimposed on the land. The final step in this phase is to discuss the stages of transformation of the valley through the past century to 1971. This follows the six chronological patterns created for the environmental history analysis of Chapter II.
Figure #18
Chilliwack from Agassiz

Figure #19
Chilliwack Mountain from Fraser River
(on 168th anniversary of Fraser's journey)
B. Prehistoric Period (prior to 1808)

1. Synopsis of Landscape at Datum Line:

In the search for descriptive images of the Chilliwack primeval landscape, three elements stand proud: the mountains, the rivers, and the rainforests. The mountains surround the valley, giving a sense of continual containment from the outside world. This rim was not composed from the rugged, massive ranges associated with the Provincial hinterland, but was of softened edges, lower profile, and more human scale.

Mount Laughington, Mount Thurston, Elk Mountain, Mount Barr, Bear Mountain, Mount Agassiz, McGuire Mountain, Mount Keenan, Nicomen Mountain, Dewdney Peak and Sumas Mountain were some of the names given to the ridges rimming the area. Though the highest, Cheam Peak, has an elevation of only 6,913 feet above sea level, it has always served as the anchor point for human orientation in the valley. Each mountain has an individual character, from its snow covered crown to where its shoulders joined its neighbours to encircle the flat alluvial plain. It was as though the valley was enclosed as a natural park.

The only entrance to the park was carved by one of the world's most powerful flowing rivers, the Stalo, or Fraser River. Mud carried off the hinterland mountains was carried by the river to the Lower Mainland and deposited in a continually spreading alluvial fan.¹ The whole estuary, including the Chilliwack Valley, gradually was raised to its postdilluvian level floor.² In the process

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¹ The range of this fan throughout the Gulf of Georgia is astonishing: refer to I.S.I.S. catalogue band 9 image recorded by the sensors of Canada's Earth Resources Technology Satellite, position 51-26.

² Hanson, op.cit., p.14: The sediment from the hinterland is in suspension until Hope. Then the hydro dynamics of the floodplain result in a gradual accumulation of sediment throughout the Lower Fraser Valley and the delta proper, for there is only a drop in elevation of 100 feet over 100 miles to the Gulf of Georgia. The continually changing reality of this physiographic alteration results in perceptible microenvironments of fens, sloughs, etc.
two tributaries, the Chilliwack and the Harrison, came to flow from the surrounding mountains to join with the Fraser. The valley's surface was a maze of lesser aquatic elements: streams, creeks, sloughs, marshes, lakes, fens, swamps, and beaver ponds.

A rhythm was established of flooding at least twice a year. A chinook wind on the local mountain ranges each spring, coupled with heavy rainfall, caused rapid snowmelt. This resulted in tributaries and creeks flooding the Chilliwack plain. However, the main event was the May-June flood (mistakenly called the freshet by most authors). Regularly each year, the Fraser rose from the effect of hinterland snowmelt. The great Canadian whiteness momentarily seemed to relent as its liquid ran freely into the Fraser channel; the river effortlessly overflowed to submerge the Valley's floodplain in a swift deluge five miles wide.

The Pacific Northwest Coast rainforest sheathed the valley with a luscious vegetation fed by oceanic journeying rainclouds and by the birth-decay cycles of its own organic mulch. It was an ecosystem alive with regeneration. It was not a monsoon forest, for the rain came steadily and surely; neither was it a tropical forest, for the temperate climate introduced the full range of seasons. Vegetation had paradisaic fronds of the big-leaf maple, but it also had the

3. According to Casey Wells, the freshet is unpredictable. The worst freshet occurred in a November. Wells further elaborated on the other aspect of the valley's water system: tidal influence. Ocean tides are usually limited to somewhere around Sumas Mountain in months when the Fraser is low. For instance, the oolicans come in late spring with the tide as far as Seabird Island. However, ocean tides can have greater significance if high tide corresponds with the annual flood. In this circumstance, the Valley's waterways become saturated and easily overflow. The threat of a major disaster is still present in the Valley when the high tide, the flood, and a minor freshet all occur at once. When this happens none of the dykes will hold. Refer also to Prettious (1969:13) in Hanson, op.cit., p.14: "The Fraser River during its low-flow season which extends from December to March inclusive is tidal as far upstream as Sumas, approximately 56 miles from the mouth. Flood tides during this low-flow season can cause the surface currents in the river to reverse direction (i.e. move upstream); this flow reversal being noticeable as far upstream as Fort Langley."

4. For a subjective description of the river as one of the predominant images of the British Columbian landscape refer to Bruce Hutchinson, The Fraser.
toughness of the great Pacific fir. It was a forest of a character and botanical composition resembling that of the British Isles, but with a rugged magnitude more expressive of nature's ultimate, awesome energy.\(^5\)

The gestalt of these three landscape components can be summarized by the following diagram:\(^6\)

2. **Stalo Colonists:**

Into this paradise came the Stalo people. They appear to have arrived at the headland of the post-glacial fiord at what is now known as Yale by continental migration beginning in the 12th millenia BP. The refuge of the fiord extended with the receding waters, and by the 9th millenia BP, Milliken colonists were

\(^5\) Carr's work surpasses all others in her descriptive ability to empathize with the primeval — Klee Wyck, pp. 17-18: "There was no soil to be seen. Above the beach it was all luxuriant growth; the earth was so full of vitality that every seed which blew across her surface germinated and burst. The growing things jumbled themselves together into a dense thicket; so tensely earnest were things about growing in Skedans that everything linked with everything else..."

\(^6\) Miksell, op.cit., p.11: tacit agreement with the gestalt approach to describing a landscape as argued by Sauer: "Departing from...group in a specific series."
able to expand throughout the stabilized morphology of the Chilliwack region.

Milliken colonists were continually joined by interior and coastal tribes over the centuries to evolve the cultural division known as Coastal Salish. The people of the Chilliwack region were a distinct branch of Coastal Salish known as the Upper Stalo consisting of seven tribes: Sumas, Nicomen, Scowlitz, Chehalis, Pilalt, Tait, and Chilliwac. They evolved a culture with attributes separate from every other people's, including those of their neighbours on the delta downriver. The isolation of the coastal communities tended to produce the most tenuous of social ties, cultural or political. Even the tribes along the Stalo had a poor sense of unity.

The analysis of Stalo culture, relative to environmental attitudes, will be described below under four headings: village form, house form, human use of plant material, and attitudes toward landscape embedded in culture.

a) Upper Stalo Village Form:

The Upper Stalo had to take precautions to protect their villages from attack from the deltic and coastal marauding war parties by secreting their settlements. Theirs was a small populous easily subject to attack and enslavement. (Similarities between the Anglo-Saxon's vulnerability to attack by the Norsemen in the Dark Ages can be drawn.)

One tribe, in particular, chose to establish its villages in the highlands rather than risk the more fertile floodplain. The Chilliwac's ancestral grounds were along the Chilliwack River from Chilliwack Lake to the headland, near what would become Vedder Crossing. At that point there was a lookout tower constructed on a high rocky ridge which gave a clear view west to Sumas Lake and the main channel to permit early warning of raiding parties. This place was called Titás.

7. The pre 3000 BP cultures are something of a mystery. Borden's forthcoming book should be of great assistance. For instance, Hanson, op.cit., pp.2-4: "Borden contends that the advent of pithouses at this time (1st millennia BC) marks an abrupt change in the 9000 year culture sequence in the Lower Fraser Canyon."
The population of the Chilliwac tribe was never more than 300 people. They lived in a series of villages scattered along the Chilliwack River Basin (and at Cultus Lake). Duff's archaeological survey of the region lists at least 20 village sites in this area, though these would not all be occupied at one time. There appears to have been one relatively permanent principal village at Xélas, a mile above Titás. Most of the population lived in smaller communities of less than 50 people.

In this the Chilliwac shared the same settlement patterns as their neighbours. Seven hundred Tait lived in 20 villages with a density of 35 people per average village, and 300 Pilalt lived in six villages with a density of 50 people per village. There typically were one or two extended families per village with the higher status family head as nominal leader. Since the society was exogamous, contact with other villages and with other tribes was stressed. People tended to have relatives throughout the Stalo. Villagers were fluid in their commitment to one site. The village as a unit or as factions would frequently move along to another site to utilize richer fresh resources of food and firewood; or as the result of inter-family friction or the split-up of extended families; or simply for want of a change of scene. There were very few sites with permanent settlements like those at the present Yale, Hope and Langley (and Xélas). The smallness of the village pattern has been hypothesized to be a major reason for the simplistic social structure relative to the other Coastal peoples.

8. Duff, op.cit., pp.28-29, the population of the whole Stalo was never more than 4,000; a census in 1839 showed 2,074 total and 151 Chilliwac.
10. Donald Hector Mitchell, op.cit., pp.19-22: "These winter houses were generally built in the valleys of the principal rivers, within easy distance of water, and were inhabited by groups of families related to each other, who although scattered during the hunting and fishing seasons, dwelt together during the winter. These dwellings rarely number more than 3 or 4 at one place, and often there was but a single house. The size conformed to the number of people (from 15-30) to be accommodated."
The form of the villages was consistent with the Pacific Northwest Coast prototype: usually a single line of houses in a loose group along a main means of transportation and communication -- in this case, the Chilliwack River. Front doors of the houses faced the river; the closeness of the houses probably depended upon the cohesiveness of the social ties, but usually they were clustered. Since the village followed the river, it was subject to its meandering path, though typically a relatively straight part of the river with a stable bank was chosen.

The riparian village form was constant throughout the coastal highlands. Alexander MacKenzie in 1793 encountered one similar to the Chilliwac as far north as the Bella Coola River Valley. The form was not endemic to the river areas, but reached its fullest expression throughout the coastal villages from Northern California to Alaska. A single row of housing (or a double row in larger villages), paralleled the ocean. Examination of one study after another supports the settlement pattern. On the other hand, river villages in the Northwest tended toward a looser lineal frontage. The pattern of the Upper Stalo was consistent with other villages hundreds or a thousand miles apart. The sensibleness of the riparian form for coast life was its reason for universal application regardless of profound cultural variations along the coast. Very little clearing was required beyond the river bank, and the river of fresh water which was also a ready-made highway gave easy access from each house. (In the 20th century Valley tributary river frontage remains one of the most desirable residential locations.)

The anticipated lineal village pattern holds true for all of the tribes of the Stalo save for one. The principal winter village of the Katzie on the northern bank of the Fraser River across from Barnston Island had a U-shaped

15. the Great Marpole Midden -- study from 1926.
Figure #21  Contour Map of the Katz Site

From Gordon Hanson, "The Katz Site, a Prehistoric Pithouse Settlement in the Lower Fraser Valley, B.C.", p.67.
community plan composed from eighteen houses with the open side facing the river. Since the only other place this settlement form occurs on the Continental West Coast is in California, south of the Yurok, and thus beyond the range of the cultures of the Pacific Northwest Coast, considerable interest was generated in determining the origins of the deviation. Was there substantive contact with the southern cultures such as massive immigration to Katzie that has eluded the anthropologists, or could the village be a creative solution to a particular set of local environmental conditions? The answer appears to be that the Katzie did not have a village on the Fraser at Port Hammond until after the establishment of Fort Langley. The ingenious U-cluster probably was the result of emulation of the rectangular enclosed space of the fort stockade that the Katzie looked at across the river and frequently visited for trading. This hypothesis is confirmed by the knowledge that the Katzie's other villages followed the traditional pattern. It seems spatial innovation can be added to the list of innovations introduced to the Northwest peoples by the Hudson's Bay Company.

In the late summer the Coastal Salish migrated to their summer villages to harvest the spawning fish. The Upper Stalo headed to their ancestral fishery at Esilao (Yale). For five miles above this village, the level ground was dotted with the summer villages of the various tribes. The Lower Stalo was the summer preserve of the Cowichan, Nanaimo, Saanich and Squamish. The Chilliwac rarely ventured down to the floodplain but this season was an exception. Early Fort Langley records show the size of the lower villages to be immense, by Salish standards. The 1829 records state 5000 people assembled to fish near the fort. A few of the Lower Stalo and coastal people would venture up river

16. Wayne Suttles, Katzie Ethnographic Notes, pp.8-9: "At that time (1880's) the village consisted of 3 rows of houses, two rows at right angles to the bank of the river and the third row behind them and parallel to it, so that the three formed a rectangle open at the river side. The houses were mainly of native made planks and (with 2 or 3 exceptions) had shed roofs sloping away to the rear. There were eighteen houses in all, separated only by narrow passages, so that if anything large had to be carried through from the river, house planks had to be removed from two of the walls."

17. Richard A. Gould, Archaeology of the Point St. George Site, and Tolowa Prehistory.

18. Duff, op. cit., p. 24, as per Fort Langley Journal.
to join the Esilao group, but mostly the canyon was filled with Upper Stalo tribes. This was the best opportunity to catch salmon during the year so much of the activity was spent in fishing and preserving the catch. It was also the time for renewing acquaintances and visiting with relatives. Once a year between August and September, the river became peaceful. Even the warrior coastal tribes suspended hostilities and joined in the agreeable harvest.  

The summer villages reflected the lineal form wherever sufficient room could be found, but throughout the canyon, makeshift structures were put together in a haphazard pattern following the narrow contours. The easeful life in these summer villages has been described by Carr.  

b) Upper Stalo House Form: 

The house forms of the Upper Stalo have been used by anthropologists as the principal indicator of cultural variation from coast to interior. The Interior Salish used circular (and occasionally rectangular), semi-subterranean pit houses, called Ska'mel (after the Yale culture). These were usually between 20-35 feet in diameter by 4-5½ feet in depth (though the authority, Teit, reports a diameter variation of 12-70 feet). The rafters for the timber formed roof construction were supported on four struts over four posts anchored securely to the wall of the pit. Sides were made from saplings laid against the struts and secured with earth. The roof was formed from split wood covered with pine needles or dry grass, all covered with earth beaten and stamped down. Access was usually from the top smokehole down an off-centre notched pole. 

The house form of the Coastal Salish was of plank construction. This was not the magnificent longhouse of the northern tribes (as displayed at Totem Park, UBC) but rather was a simplistic shed roof design. Cedar log posts were
Figure #22
From Donald H. Mitchell, Esilao, A Pit House in the Fraser Canyon, B.C., p.57. (Refer also to the map of Esilao Village, p.46, for its location in the village.)
This becomes so much more personal when I realize this may have been my great-great grandmother's house.

Figure #24
Longhouse Village — Nootkan Village at Yuquot
(from Creighton, op.cit., p.12)

Figure #25
Salmon Fishery at Fraser Canyon
(from Provincial Archives)
secured in place to support a beam system of similar dimensioned cedar logs. On this, a lattice of smaller logs was laterally arranged every four to five feet as roof joists. The roof was made from hand-split and adze finished planking with cedar plank siding forming the walls. It was not impervious to rain. A low square or oval doorway facing the street was the only entrance. Heat and light was supplied by the central firepit in the packed earthen floor. There was considerable investment in time and labour in building such a plank house, so whenever a family would move to another village site, they would disassemble the house and carry it by canoe to the new site.23

Shed roof construction facilitated joining units together to form longhouses. Unit sizes varied, but 46 feet by 32 feet seems average. When combined, the segmental longhouses could stretch for hundreds of feet. Simon Fraser reported such a longhouse at what became Langley of extraordinary dimensions: 60 feet by 640 feet for 200 people. External walls sometimes remained to form internal partitions, but most often they were removed and mat screens substituted to permit flexible use of the space. The other type of longhouse was also of shed roof construction but formed one large room.

The Upper Stalo were remarkable in that they used both forms of housing. The reasons for this have been hypothesized as follows: due to the harsher climate of the valley, escape from the mosquitoes afforded by pit houses, and the inability for downriver people to utilize pit houses for fear of moisture seepage. These explanations are not convincing. The actual reason can more probably be attributed to cultural conditioning.24 The tribes of the Chilliwack Valley were the cultural buffer zone between the two separate people, and thus were able to share

24. For instance, the Tait of the Fraser Canyon have been analysed by Donald H. Mitchell in Esilao, A Pithouse in the Fraser Canyon, B.C., and based on ethnographic information have been determined to be 67% aligned with interior Salish and 33% aligned with coastal Salish (see pp.135-141). No similar analysis of cultural traits has been prepared for the Chilliwac, but the results would probably be reversed.
the technology and beliefs of both. The advantages of the plank construction made it the preferable form of construction on a year round basis; but in the winter, the insulative properties of the pit house made this more advantageous. There also seems to be social hierarchy operating. High status families used the laborious plank construction, while the lower orders retained the pit house construction. The Upper Stalo were unique on the whole West Coast in the extent of their cultural blending. There usually was a sharp differentiation between the oceanic and continental cultures, even where river systems permitted penetration past the Cordilleran mountain range.

Life in the houses occurred in one large room with partitioned "rooms" from cedar mats for individual members of the extended family. Winter dancing brought whole tribes together in the larger houses, and to gain more room the partitions were removed. Entrance was monitored by access through the one small doorway. To come in, one had to stoop giving the householder a valuable means of defense. Carved totems were customary in front of the more important families' homes, showing for all to see their heraldic identity. Very few of the Chilliwack Valley tribes could afford the additional carving inside the house or paintings on the siding which enriched the coastal villages. Perhaps the most striking aspect of the houses was the robust smell of the place. John Webber, the artist with the 1778 Cook expedition, was one of the first Europeans to enter a longhouse (at Nootka Sound). He passed out from the overpowering mixture of rancid oolican grease, rotting whale blubber, smoked salmon hanging from the rafters, urine soap, etc. Undaunted, he recovered and made the first sketches of the interiors. These apparently are accurate in all but the omission of the dense smoke from the central fire which filled each house.

25. Duff, op.cit., p.46: "The Tait and (perhaps to a somewhat lesser extent) the Chilliwac, Pilalt, Chehalis, and Scowlitz aligned themselves with the Plateau in using pit houses as their ordinary winter dwellings. The tribes farther down-river knew of pit houses but used them only sporatically as a luxury. These tribes aligned themselves with the Coast in the use of plank houses as winter dwellings. The Upper Stalo also had plank houses."

There were several other forms of construction. 27 Grave-houses were built outside the immediate village boundaries. These were of gabled roof construction on poles raised four feet or more above the ground. The more modest use of grave-boxes in trees was common. Where the coastal tribes built one of these per individual, the less wealthy and less culturally organized Upper Stalo used grave-houses and boxes for whole families over an extended period of time.

Another structure was the sweat-house. Sweating was a custom used by the Salish for ceremonial, medical and pleasure purposes. They were a sort of primitive sauna. Small domed shaped huts were constructed for one or two people from vine maple saplings secured around a pit. The frame and floor was lined with fir or balsam boughs and with a layer of maple leaves for an airtight wall. Hot stones were placed in the centre and water was sprinkled on to create the steam. Cold plunges in the near-by river or stream followed.

Other structures included the puberty hut built from brush at the edge of the village to house a girl during her first menstruation. The Upper Stalo differed from the interior in that they did not segregate for later menstruations. Smoke houses of shed roof construction were built around the village for storing and drying fish and game. In the summer camps, the Upper Stalo usually used simple mat lodges. The Yale area was considerably drier and warmer than any place on the coast, so simple structures were all that were required for the brief six week stay. Thus, the villages were more complex in plan than a grouping of all-purpose housing arranged in a lineal pattern.

The architecture of the Upper Stalo can be compared with the general theory of primitive housing advanced by Rapoport. His anti-determinist theory seems to hold -- the impact of the site on the form was not as significant a factor as was the influence of socio-cultural expectations. The various sites of the

valley could have brought forth an infinite variety of forms, yet there was a conservative adherence to only a very limited range of both village patterns and housing forms. 28

c) Upper Stalo Use of Indigenous Plant Material:

Nature supplied all the material needs of the Valley's people. It was a simple hunting and gathering society which took only what it required. Pre-planning was restricted to storing winter provisions. The limited population was assured of a constant renewal of plants and animals to meet its needs. In the last few thousand millennia there had never been periods of feast and famine. It was always a time of plenty. 29

The most useful tree to the coast was the Thuja plicata, or western red cedar. The soft-wood preservative qualities, even-grained cleavage planes, and giant size of the cedar made it ideal for use in housing, boats and in crafts such as totem poles; it was also used for utensils, containers and tools. The bark was carefully stripped from the living trees and hand worked to various degrees of soft malleability for use in weaving baskets, mats and clothing. It was gathered for firewood. 30 Other woods were rarely gathered since they were more difficult for the primitive tools to model. The time involved in felling even a cedar with only adze and chisel was considerable. Some hardwood was used, however, for utensils where strength was a factor. Vine maple, Acer circinatum, was used for spoons, bows, etc. Big-leaf maple, Acer macrophylla, was used for paddles, and for tool handles such as adze, chisel, wedge, hammer, maul, drill, knife and sander. The hardwood of the western yew, Taxus brevifolia,

28. Amos Rapoport, House Form and Culture, pp.29 & 47: refer also to Drucker, op.cit., pp.7-8: "This natural environment, as does any natural environment, offered certain resources to its human occupants. But how these resources came to be used, or even whether they were used, depends on historical and other factors, not on simple automatic responses to geographical surroundings.'
29. Refer to Hanson, op.cit., Table #2 -- Ecological Resource Variables, pp.37-38; and to Figure #3 -- Flow Chart Showing 42 Ecological Variables over 52 Weeks, p.39; and to Figure #5 -- Smallest Space Analysis Showing Riverine Resource Variables over 52 Weeks, p.41; and to pp.53-47 on ethnographic conditioning.
was used for aggressive items such as war clubs.  

Vegetable and grain crops gathered from the forest included the rhizomes of the bracken fern (*Pteridium aquilinum pubescens*), sword fern (*Polystichum munitum*), wild potato (*Sagittaria latifolia*), and several roots and bulbs (*Lilium columbianum*, *Balsamorhiza* spp., and *Lomatium* spp.). The young shoots of the ferns were gathered and boiled as fiddle-heads in the spring. Their flavour resembles asparagus. Mushrooms were collected as well. Wild rice and wheat grew in modest amounts in the marshlands of the Valley and were laboriously gathered to supplement the diet.

Fruits and nuts in season were plentiful. These included: red and blue huckleberry and some bog cranberries (*Vaccinium* spp.), as well as salmonberries, thimbleberries, and wild trailing blackberries (*Rubus* spp.), salal (*Gaultheria shallon*), oregon grape (*Mahonia aquifolium*), elderberries (*Sambucus glauca*), wild crabapples (*Malus diversifolia*), and hazelnut (*Corylus californica*). Roots and berries were also used for dyes for the various arts and crafts.

The environment also supplied an endless amount of fish and game including five kinds of salmon. In the early spring, the spring salmon (*Oncorhynchus tshawytescha*) could be caught in abundance and in the late summer and fall the main staple, the sockeye (*Oncorhynchus nerka*), spawned. Sturgeon (*Acipenser transmontanus*) of enormous size were caught with spears in the sloughs and lakes. Eulachons (*Thaleichthys pacificus*) filled the Stalo every spring around the beginning of May. Under normal conditions, the eulachons only went as far as Chilliwack, so the tribes upriver came down to scoop them up. Trout, such as steelheads (*Salmo gairdnerii*), Dolly Varden char (*Salvelinus alpinus malma*) and

32. Duff, op.cit., p.73; refer also to Provincial Museum Monograph on the edible plants of B.C. and to the monograph on mushrooms. Also see Drucker, op. cit., p.20.
33. Duff, op.cit., pp.73-74; refer also to the book on the botany of Lighthouse Park; refer also to Hanson, op.cit., pp.25-29, for list of flora available to Stalo diet.
cutthroats (*Salmo clarkii clarkii*) were plentiful in the tributary rivers and fresh water lakes. A few shell-fish reached the valley in trade with the coast but the great middens of shells that identify every coast village site did not occur. Neither was the whale hunted.  

Hunted as game were black bear (*Ursus americanus*), mountain goat (*Oreamnos americanus*), deer (*Odocoileus hemionus columbianus*), elk (*Cervus canadensis nelsoni*), grizzly bear (*Ursus horribilis*), groundhog (*Marmota monax*), beaver (*Castor canadensis*), racoon (*Procyon lotor*), squirrel (*Tamiasciurus douglasi mollipilosus*), marten (*Martes americana caurina*), ducks, geese, eagles, grouse, fish crane, robin, bluejay, and crow. Animals not eaten but in the valley included: dog, wolve, coyote (all members of the *Canis* genus), cougar (*Felis concolor*), seal (*Phoca vitulina*), weasel and mink (*Mustela* spp.), rat, mice, loon (*Gavia imber*), owl and woodpecker. The moisture of the coast made leather impractical, but some skins were used in clothing such as ceremonial robes. The fur from mountain goats and pet dogs was gathered to make especially fine blankets.

d) **Attitudes Toward Landscape Embedded in Upper Stalo Culture:**

The functioning of the society revolved around a near communal property system. Everyone was able to gather whatever he needed. However, there were a few important regulations. Everyone was not equal. There was a pronounced hereditary class system which allocated superior social status to a few families throughout the Stalo. The ambitious who could demonstrate natural leadership qualities were permitted to join this small group through intermarriage. The pick of the valley's resources such as the best fisheries, the largest plank houses, and the choicest food went to the higher ranks. They also received social deference, the most prestigious spirit dances, and were permitted polygamy. Since it was a simple society, the form of leadership given by the top hierarchy

35. ibid., pp.71-73.
was more social than political or economic. 36

The basic unit of the society was a weak system of kinship. 37 Extended families held rights to houses, to real property, to salmon fishery stations and to the family vault. They also held rights to personal names, totem symbols, the sxwaixwe mask, and to spirit dances. Through the exogamous system, each member of a family gained ties to other families throughout the Stalo. As expressed above, kinship was relative to the class system. Every family was not equal. To gain leadership of any extended family, the individual had to display superior qualities, but usually this passed to the eldest male. He nominally held all rights to the family's property and titles. The heads of families held council to keep the next unit of the society functioning, the village.

Villages were composed on average in the valley, of about 50 people who were members of one or more extended families. These would join together for a time in one of the traditional village sites to co-operate in hunting and gathering, etc. When conditions fell to a time for change, the village would be dissolved and members would move along to one of their kinfolk's villages, or to a new site.

The largest social unit was that of the tribe. 38 Land ownership was loosely vested with the various tribes for the benefit of their members. Ordinary

37. ibid., p.75; refer also to p.86: "...Lacking such traditions, the Upper Stalo had no such mythical kinship units and the functions usually possessed by such units were either less developed conceptually or performed by such groups as did exist. Concepts of ownership of resources were not well developed beyond the level of family ownership of fishing stations. Ownership of names and privileges rested in non-local kinship lines rather than in local kinship units."
38. ibid., p.77: "Exclusive tribal or village ownership of resources of areas was practically unknown to the Upper Stalo, partly, no doubt, because the units themselves were not very sharply defined...As a result, resource areas such as sturgeon-fishing sloughs, berry patches, and hunting grounds were used freely by all near-by groups. Such patterns of apparent ownership as did develop grew out of customary use rather than claims of exclusive right. An apparent exception is the case of the Chilliwack who were said to shoot intruders on their hunting grounds."
hunting and gathering grounds were not permitted to be utilized by intruders, and would be defended by force if serious infringements occurred. Ownership of major annual resources was subject to different conditions. Tribes with geographic advantages, such as the salmon fishery at Esilao or the eulachon fishery at Chilliwack, shared their land with other tribes on the river during the season. The sharing became the year's most pleasant social event, when old ties could be renewed. For instance, the Chilliwac would return to their ancestor's home at Yale in the late summer each year. The resource sharing operated socially like the potlatch by adding points to the tribe's stature on the river.

Tribal unity was a weak bond. Only the Chilliwac had a definite sense of unity. This was perhaps because of the enclosed environment chosen as their turf. Geographical boundaries were defined through traditional use and muscle. Boundary posts were landscape landmarks such as rivers or mountain peaks. For instance, Cheam peak appears to have been the dividing point between the Tait, Pilalt, and Chilliwac.

In the social stratification there were winners and losers. The Upper Stalo were under continual attack from the southern Kwakiutl (Yeukeltas and

39. Hanson, op.cit., p.56: "The social organization and the social structure of the Stalo were well adapted to the diversity and seasonality of the resource base of the Lower Fraser. The extended family was a mobile and efficient economic unit capable of exploiting the resources of variable micro-environments. By kinship and reciprocity, each Stalo group gained access to resource areas which would not have been exploitable if rigidly exclusive territorial boundaries existed..."

40. Duff, op.cit., p. 87.

41. Duff, op.cit., p.21: "The Chilliwac...held a small stretch of the south side of the Fraser between the mouth of the Chilliwack River and Léxewé, a village half-way between Chilliwack and Sumas Mountains. From here the boundary ran due south, skirting the east side of Sumas Lake, to Maple Falls on the Nooksack, and thence east along the north fork of the Nooksack and across the mountains to Chilliwack Lake. From the lake it ran west again to encompass the valley of the Chilliwack and that part of the Fraser Valley south of a line joining Elk Creek Falls with the mouth of the Chilliwack River."
and from the Coastal Salish (Cowichans and Kwantlens). The various tribes were victimized also by the more hostile interior tribes.

It is difficult to label the Upper Stalo spiritual beliefs. There was a weakly defined supreme deity who brought order to the world, but he was seldom worshipped during the year. There was not a series of lesser gods who together ruled the world. Instead, the spiritual world was seen to be integral with every part of the valley, and contact with it could be pursued by every member of the society. Ritual required everyone to search for a quest-vision and obtain the help of a guardian spirit. A very few trained for years in making contact with the supernatural to acquire the special powers of a shaman.

Guardian spirits would come to the individual at the end of the quest to reveal some truth of the universe which would help the person relate to his environment or his community. The experience and the creature was known as sulia. Shamens would also seek the more terrifying experience of an encounter with a slalakum. These creatures dwelt in mountains, deep in forests and in some bodies of water. To pursue these awesome creatures required confidence for they were known to devour the unprepared. If the individual survived from his ordeal, he was thought to have acquired some of the supernatural aura and secrets. The best myths and legends about contact with the slalakums occur in the depths of lakes. For example, the Slollicum of Cultus Lake encountered by one man transformed him into the greatest of shamans. In another legend, an old blind man is given sight by the gift of a sulia in the guise of a loon who permitted

42. ibid., p. 26
43. ibid., pp. 44 & 96
44. ibid., pp.97-126: "In Upper Stalo aboriginal culture, contact with supernatural beings and forces was essentially an individual affair. The universe contained no pantheon of ranked deities or spirits interested in the welfare or influencing the conduct of groups of men. The most immediate supernatural beings, the most rewarding sources of supernatural experiences and powers were the individual guardian spirits."
45. ibid., pp.117-119.
46. Ramsey, op.cit., p.XI: one of the Sepass poems.
the man to climb onto his back and then dove four times the length of a lake with the man on his back.  

In addition to the mystical experiences of the dream world, there was a strongly developed sense of animism. Human characteristics were given to birds, fish, beaver, etc. Mountains were given the closeness of a friend with the storyteller's recitation of how they were originally human. Cheam peak was a woman, Mount Baker was a man, and the six mountain ridges between the two were said to be their children. The landscape was charged with a tangible and spiritual energy with which the Upper Stalo felt intimate.

This treatment of the land as a conversation with the universe permeated all aspects of the culture. Even daily activities of survival were governed by ritualistic ethics. Ecologists today often cite the prayer to the cedar spirit given by the West Coast Indians as they prepared to take cedar bark -- the tree was thanked for its gift, then strips were pulled sharply upward and care was taken to leave enough bark for the tree to live for another century. This, in spite of the plethora of cedar.

Throughout the cultural infrastructure, harmony with nature was stressed. The Stalo people were a society whose millennia of aboriginal life in the valley had blended human requirements intricately with those of the environment to where they were but one more element in the synecology, brothers to the cedar and to the beaver.

47. Douglas Leechman, "The Loon's Necklace", in Skookum Wawa, pp.116-120
48. Oliver Wells, Myths and Legends of the Staw-loh Indians of Southwest British Columbia. See also the legend of the thunderbird who was said to live on a bare peak near Harrison Lake and cause lightning by opening its eyes. See also Ramsey, op.cit., p.3.
49. Franz Boas, Ethnology of the Kwakiutl, item 619; this book includes a detailed description of coastal technology in the 19th century -- some applies to the study area.
C. Exploration (1808-1862)

1. First Visions:

Five thousand years of the accumulated wisdom and authority of civilization separated the Stalo from the arrival of the European explorers. Within a few generations of the substance of this contact, the rich life of the West Coast cultures would disintegrate with hardly an objection from anyone.

The newcomers arrived on sleek sailing ships with crystal and silver set in the officer's mess, with scientific equipment for measuring global position, and iron congealed in powerful canons. Sir Francis Drake was the first to view the coast in 1579 during his world cruise. The similarities of the primitive landscape to his own country inspired him to name the Pacific Northwest, New Albion. He was not followed until the late 18th century when several secretive voyages up the coast from California by the Spanish and from Alaska by the Russians appear to have been made. It was not until the third world voyage of Cook (1776-1780), that detailed knowledge of the Pacific Northwest began to be accumulated and shared.

This was one of one of the last places on the globe to be brought within the cognition of western civilization. Beyond the main oceanic communications networks, its remoteness was reinforced by the natural barriers of towering mountains and a people whose culture did not require sovereignty beyond the horizon. When Europeans finally got around to exploring Salish territory, they ostensibly did so not on the lure of fabulous eldorados, like so many of the

50. G.P.V. Akrigg & H.B. Akrigg, British Columbia Chronicle, 1778-1846: Adventurers by Land and Sea, pp.4-7: There is some dispute as to where Drake was turned back by fog, wind and cold -- it probably was the 50th parallel near Pacific Rim National Park.

51. Akrigg, op.cit. (1969), Albion was the name given by Caesar to Britain in 50 BC. The political significance of his name was to give the impression of colonization claim to North America between New Albion and New England.

52. Akrigg, op.cit. (1975), pp.20-28 for the description of the landscape encountered: refer also to the three volume publication of Cook's Voyage which was the first journal available to the international community.
preceding new world adventurers, but by the desire for extending the boundaries of science. Early explorers were even hoping to find not land, but water -- a navigable river to a vast inland sea, the Northwest Passage.  

The second great scientific expedition to the Pacific Northwest, was commanded by Captain George Vancouver. From 1790-1795, his staff methodically prepared the first accurate hydrographic charts of the coast from 30 to 50 degrees latitude. In June of 1792, Vancouver passed by the Stalo territory. Because of restrictions of time, resources and orders, he failed to notice the river, though the delta was carefully recorded for future expeditions to explore.

Vancouver's description of the coastline from Oregon to the Sunshine Coast was that of a temporal paradise. He envisioned the whole lowland area as one day supporting a rich farm and parkland community; it was the lyrical image of the pre-industrial, peaceful, pastoral British countryside. Everywhere the members of his expedition looked for and found similarities to their homeland. Place names still reflect this vision.

53. Ormsby, op.cit., chapter one.
56. George Vancouver, Captain's Log, in "Place Names", Skookum Wawa, p.89: "The intermediate space is occupied by very low land, apparently a swampy flat, that retires several miles, before the country rises to meet the rugged snowy mountains, which we found still continuing in a direction nearly along the coast. This low flat being very much inundated, and extending behind Point Roberts, to join the low land in the bay to the eastward of that point; gives it high land, when seen at a distance, the appearance of an island: this, however, is not the case, notwithstanding there are two openings between this point and Point Grey."; refer to Akriigg, p.73: first set foot on B.C. at Point Grey.
57. Akriigg, op.cit. (1975), p.71: "In the delightful spring weather, Vancouver sailed along the southern shore of the Strait, enchanted by the beautiful scenery that unfolded."
58. George Vancouver, in Skookum Wawa, p.65 and also in Donald Craig Andrew's thesis p.41: "To describe the beauties of this region, will on some occasion, be a very grateful task to the pen of a skillful panegyrist. The serenity of the climate, the innumerable pleasing landscapes, and the abundant fertility that unassisted nature puts forth, require only to be enriched by the industry of man with villages, mansions, cottages, and other buildings, to render it the most lovely country that can be imagined;..."
59. What they couldn't, they soon would; aboard as ship's doctor and botanist was Archibald Menzies, who was making his second trip to the coast for Sir Joseph Banks of Kew to gather a herbarium and specimens (eg. Arbutus menziesii), refer to K. Lemmon, Golden Age of Plant Hunters.
60. The high ground in the estuary flats became known as English Bluff, and the bay around the point became English Bay, refer to Akriigg, op.cit. (1969).
The love for the coast ended, however, as they journeyed further. The bleak, desolate coast wearied even the enthusiastic Menzies, and when the last inlet had been recorded (60 degrees -- Alaska), cheers went up and the Discovery and the Chatham turned their bows for home. 61 The message this expedition carried home was: the rough edges south of the 50th parallel could and should be tamed.

At the time of the Vancouver voyage of exploration, another heroic figure entered the narrative. Between 1789-1793, Alexander MacKenzie explored the most environmentally hostile sector of Canada: the Arctic and the northern part of what would become British Columbia. His attempt to locate the Northwest Passage led throughout the Cariboo and finally down the Bella Coola Valley to the Pacific. 62 In the process, he travelled the first 400 miles of the Fraser River, and created the map that permitted Fraser, some 15 years later, to continue down through the Cariboo to the Chilliwack Valley. Knighted for his services, Sir Alexander became one of the few people in Canadian history to acquire international admiration. As a favoured subject of the Romantic Movement, the areas he had discovered began to acquire legendary stature. 63

The expansion of markets of the newly formed Northwest Company resulted in a junior partner, Simon Fraser, being assigned the task of establishing trading posts west of the Rockies. During his first year Fraser established four posts and named the territory "New Caledonia" after the rugged Scottish Highlands. 64

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61. Akrigg, op.cit., (1975), p.97: Menzies writes: "We do not know how long we may still remain in this dreary country, of which we are all heartily tired."; refer also to Vancouver in Andrews, op.cit., p.42; "The low fertile shores we had been accustomed to see...no longer existed; in their place was now occupied by the base of a stupendous snowy barrier, thinly wooded, and rising from the sea abruptly to the clouds; from whose frigid summit, the dissolving snow in foaming torrents rushed down the sides and chasms of its rugged surface, exhibiting altogether a sublime though gloomy spectacle, which animated nature seemed to have deserted. Not a bird, nor a living creature was to be seen..."

62. For a brief account refer to Akrigg, op.cit., (1975), pp.82-90; or to Ormsby, op.cit., pp.29-34.

63. For a more detailed account refer to Daniells,op.cit., and his bibliography.

One of the prime objectives of the traders came to be the location of a suitable route to the Pacific for inland fur and supply brigades to travel. The coastal exploration had disproved the inland sea argument, and had determined the Columbia River to be the most promising route as a navigable river. Fraser assumed that the river with headwaters in New Caledonia flowing due south must be the Columbia and on May 28, 1808 he and a party of 23 men began the descent to the Pacific.

For the first few hundred miles the journey was through the more pleasant section of the Cariboo; but on June 2, the spring freshet caused a sudden rise of eight feet in the river in 24 hours, and travel began to be difficult. June 20 saw the group pass into the Fraser Canyon where shoes were worn out in a single day. The worst was yet to come — at Hell's Gate the terrain became a sheer cliff hundreds of feet high. It was only with the co-operation of the Thompson Indians that Fraser managed to reach Eisalo village at what is now Yale.

On June 30 Fraser passed down the Stalo, past Mount Cheam and through the Chilliwack Valley. As the party approached the delta, the Indians became belligerent; Fraser dared not go further than the tip of Point Grey village of

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65. Lamb, op.cit., p.63: "This country, which is interspersed with meadows and hills and dales and high rocks, has upon the whole a romantic but pleasant appearance."


67. Lamb, op.cit., p.96: "We had to pass where no human being should venture. Yet in those places there is a regular footpath impressed, or rather indented, by frequent travelling upon the very rocks. And besides this, steps which are formed like a ladder, or the shrouds of a ship, by poles hanging to one another and crossed at certain distances with twigs and withes, suspended from the top to the foot of the precipices, and fastened at both ends to stones and trees, furnished a safe and convenient passage to the Natives..."

68. ibid., pp.101-102: "In the afternoon we continued our course with a strong current for nine miles, where the river expands into a lake. Here we saw seals, a large river coming in from the left, and a round mountain... at sunset we camped... at this place the trees are remarkably large, cedars five fathoms in circumference, and of proportional height. Mosquitoes are in clouds..."
Simon Fraser, in 1808, descends the River bearing his Name

the Musqueam. The open hostility of the Lower Stalo people made a hasty retreat in order, and by July 5 Fraser had retraced his passage past Mount Cheam and had left the Chilliwack Valley forever. This brief account of the landscape marks the first recorded event of the valley's history. The second was the inclusion of Fraser's River on explorer-cartographer David Thompson's 1814 map of North west America compiled from Fraser's journal.69

Fraser was less subtle in his assessment of this landscape than his predecessors had been of the northwest. Disappointed in not reaching the mouth of the Columbia,70 Fraser's projection was not optimistic. He knew it would be useful as a fur reserve, but since the river did not provide the solution to the primary criterion of an easy route to the hinterland forest, he surmised its utility must remain limited. For the immediate future his prediction proved accurate, for with the subsequent discovery of the Columbia's true course, the Fraser Valley was neglected.71

The drama of the initial contact between Salish and Europeans cannot be understated — for instance, Cook and Vancouver acted like and were treated as deities.72 Fraser had a similar experience. After about a month down the Stalo in 1808, Fraser's surly beard and deerskin clothing evoked little appreciation from the Thompson Indians. When threats were made, Fraser recognized the need for a fresh act. He ordered his men to shave, wash, and put on their best clothing. The result was the immediate reverence for the heroic white man.73

70. Lamb, op.cit., pp.26-27: "Like MacKenzie before him, Fraser completed his great journey in a state of frustration and disappointment. He had discovered a great river and traced it to the sea, but it was not the Columbia, as he and everyone else had assumed, and its character made long stretches of it useless as a travel and supply route for the fur trade."
71. Akrigg, op.cit. (1975), p.162: the first supplies passed over the brigade route from the Columbia through the Okanagan to the St. James in 1814.
72. Duff, Impact of the White Man, P.56: "the first impressions the Indians had... they thought they were supernatural creatures."
73. W. Kaye Lamb, op.cit.
The awareness of the sense of theatre as the only possible defense strategy in this hostile territory resulted in one of the most peaceful transitions between history and prehistory in the world. Godlike countenance and bearing of these gentlemen accomplished an incredible feat.

2. **Hudson's Bay Company Influences:**

While the sea explorers envisioned a land ultimately filled with prosperous farms and parks, the fur traders had a different expectation for the land in mind. The Pacific Northwest was to be a preserve for the harvesting of its most valuable natural resource -- furs. However there were two kinds of fur traders. The first were the independent traders, men in ships who bartered with the Indians for outrageous exchanges. If the Indians resisted, the furs were pilfered and the Indians were butchered. Chief villains were the Americans or "Boston men" who continuously exploited the coast. After a time, the Indians began to retaliate with massacres. The total lack of scruples of the American profiteers created tensions that will forever disgrace some of the initial contact of the whites with the Pacific Northwest Indians.

The other group of fur traders were members of two trans Canadian concerns, the Northwest Company and the Hudson's Bay Co. The latter's commitment to sustained use of resources and a responsible relationship with the native peoples of British North America, has a long and honourable record. From the 17th century, the H.B.C. was granted a charter to Rupert's Land and with the 1821 merger with their chief competitors, the junior Northwest Company, the Hudson's Bay Company extended their domain throughout the Pacific Northwest from California

74. This corresponds to Collingwood's category #2, refer to Chapter I.
75. This corresponds to Collingwood's category #1, refer to Chapter I.
76. The final indecency was the spreading of the "The Columbia River Fever"; refer to Akrigg, op.cit., p.262: "This threat and its terrible, even if coincidental, fulfillment increased Indian hatred for the rapacious 'Boston men'".
Operations in the Pacific territory came to be divided into two districts, New Caledonia and Columbia. As the second oldest company in the world (Lloyd's of London is the oldest) the Hudson's Bay Co. had a sense of commitment to the land which only time can give. This was the fundamental difference between the American independents and the H.B.C.

Governor Simpson of the H.B.C. became apprehensive of the imperialistic expansion plans of the fledgling United States of America, and in 1824 he determined it wise to consolidate his company's interests and British sovereignty by relocating the main depot on the Pacific from Fort George on the Columbia, to the Lower Fraser Valley. In this, he had the support of both George Canning, the British Foreign Secretary, and the Board of Governors of the H.B.C.

Chief trader McMillan and his clerk, John Work, together with a party of 38 men were dispatched to make a reconnaissance of the area in December 1824. Their canoe and portage from Semiahmoo Bay to Fraser's River along the Nikomekl and Salmon rivers was undertaken to avoid the rough waters of the Fraser's delta and as a precaution against meeting hostile tribes encountered by the earlier expedition. Reconnoitring the river, McMillan determined a favorable site for the fort and marked some trees at the water's edge with a carved HB, then

77. For a brief summary of H.B.C. presence in Columbia and New Caledonia refer to Akrigg, op.cit. (1975), pp.180-208: "By and large, examining the record of the H.B.C., it is impossible not to be impressed by the fairness and equity, and at times the kindness and understanding, with which the H.B.C. dealt with the Indians."

78. Akrigg, ibid., p.239.


80. ibid., pp.219-227: "Instead they went to the head of Semiahmoo Bay then (impeded by driftwood and thick growths of willow) worked their way up the little Nikomekl River and portaged over 'a plain made soft and miry by the heavy rain'. The land, they noted, consisted of rich black mould, and they saw plenty of beaver. On December 16th, they put their canoes into the little Salmon River and, after paddling about eight miles, reached the Fraser opposite McMillan Island, only a mile from where Fort Langley now stands. Annance noted in his journal: 'Feeling inadequate to give a full description of the river, we only can say it is a noble and majestic stream: and the surrounding country marks thousands of beaver that exist therein and its environs'.
proceeded down the river and home.

Although Simpson required a secure depot on the 49th parallel, he had no intention of abandoning the Columbia, and so in 1825 he instructed the building of a fort, Fort Vancouver, on the north side of the Columbia on a site of military and agricultural strategic value. Following up the McMillan report, the first attempt to found a fort on the Fraser was also started, but was soon abandoned.

1825 was also the year the botanist, David Douglas, arrived to analyse the forests of the Pacific Northwest. For two years he travelled throughout the area collecting specimens and making notes on the flora. Menzies had brought only a herbarium back to England, but Douglas is credited with bringing the cones and seeds to Kew Gardens and hence to cultivation. He introduced 215 plants to cultivation. One was a new genera, *Pseudotsuga menziesii* or Douglas Fir. Its dimensions of 220 feet high by 50 feet at the base staggered the imaginations of the British. Other plants he brought back included: western white pine (*Pinus monticola*), white fir (*Abies amabilis*), noble fir (*Abies grandis*), Sitka spruce (*Picea sitchensis*), vine maple (*Acer circinatum*), Oregon grape (*Mahonia aquifolium*), hawthorn (*Crataegus douglasii*), salal (*Gaultheria shallon*), huckleberry (*Vaccinium ovatum*), black raspberry (*Rubus leucodermis*), and kinnikinnick (*Arctostaphylos uva-ursi*).

In July of 1827 Simpson ordered establishment of the fort on the Fraser, and dispatched the newly appointed chief factor, McMillan and a company of 25 together with Lieut. Aemilius Simpson in the H.B.C. schooner *Cadboro*. After

81. Akrigg, ibid., pp.228-229; also Ormsby, op.cit., p.59
82. There is some confusion about this fort: mention was made by Carlisle as being constructed downriver on land which flooded; Akrigg suggests the 1827 fort was built on the site of the carved HB, but Simpson's map shows this tree to be downriver, on the south side, across from Annacis Island; see also Ormsby, p.61
83. Lieut. Simpson was a relative of the governor; when he retired from the Royal Navy he accepted the position of head of H.B.C. coastal fleet; Akrigg, op.cit., pp.236-237
reassessing the fort's location, McMillan again chose the site selected three years earlier. Its advantage was deep water to permit the Cadboro to come close to shore, something difficult for ocean vessels this far up the channel. From July 29 to September 8, the party constructed the stockade. The form was common to H.B.C. Canadian territory; it was a rectangle 120 feet by 135 feet, with two bastions and one gate. Inside was built a small dwelling measuring 15 feet by 30 feet. The design of the fort was meant to create a formidable appearance from the outside.

While this was being constructed, Lieut. Simpson extended the 1793 hydrographic charts of Vancouver by taking soundings up the river from Robert's Bank to McMillan Island. He appears to have travelled in a longboat further upriver from the fort through the Chilliwack Valley to what became Fort Hope but left mapping for another time. Later in the fall, Francis Ermatinger came down from Fort Alexandria along Harrison Lake through Harrison Bay to the Fraser in a preliminary search for the brigade route. A description of the environmental conditions at that time occurs in the fort's journal, including the first recorded earthquake and the winter conditions.

The next year was critical for the development of the Lower Fraser Valley. Governor Simpson travelled from Fort Kamloops to Fort Langley to inspect the progress of the fort. Passing through the canyon, he recognized the impossibility of the Fraser as a navigable route for the brigade, and reconsidered his

84. Paul Murphy, op.cit., pp.19-36.
85. Akrigg, op.cit., pp.239-241: it was a small post compared to the others.
86. ibid., pp.242-243.
87. Murphy, op.cit., p.45.
88. ibid., p.253: Governor Simpson writes, "Fraser's River, can no longer be thought of as a practicable communication with the interior; it was never wholly passed by water before, and in all probability never will again: the banks do not admit of Portages being made, and in many places it would be impossible to use the line, on account of the height of the projecting rocks which afford no footing..." Refer also to Ormsby, p.65.
Columbia policy. Fort Vancouver would have to remain the main depot, while Fort Langley was relegated to the position of just one in the H.B.C. chain.

In spite of the loss of international port stature, Fort Langley held its ground and flourished. The negotiation of the Alaska agreement of 1839 resulted in increased importance for the agricultural capability of the Lower Fraser Valley, and so a new fort was built in that year two and a half miles up river, closer to the prairie fields of the Puget's Sound Agricultural Company. This expanded fort was more in keeping with the larger establishments on the west coast. In May of 1840, this fort was destroyed by fire but was rebuilt. Within a week a stockade of 100 feet by 70 feet had been erected. The fort expanded over the years to cover 630 feet by 240 feet with three to four bastions and 15 buildings inside the stockade.

Until the 1820's there was a firm policy of the Hudson's Bay to inhibit farming settlement in their territory. Furs required a frontier and it was recognized that settlements created pressures that altered the ecology of the wilderness making fur bearing animals incompatible with increased human intervention in the landscape. Consequently only a few retired company employees were permitted to clear farms in the last frontier on the continent.

In 1824 a significant change in this policy was initiated by Governor Sir Simpson. He was appalled at the cost of staples imported from Europe to support the Columbia region's staff. The first reform he began was to make staples the responsibility of each fort. Columbia and New Caledonia forts were obligated to plant gardens around the fort as other H.B.C. operations had done for centuries. The importance of agriculture to the security of a fort can be

89. Akrigg, op.cit. (1975), p.316; refer also to the construction of Fort Simpson which was said to be typical on pp.191-194.
90. Fort Langley National Park folder.
91. Ormsby, op.cit., p.60: "in the interest of retranchment, he ordered imports to be reduced and attention paid to agriculture."; refer also to Akrigg, op.cit., p.218: (Simpson): "all this time they may be said to have been eating gold; such fare we cannot afford in the present times, it must therefore be discontinued."
seen by the criteria for selection of the Fort Vancouver site in 1825. Later, Simpson wrote with satisfaction of transforming the wilderness of the Columbia estuary into a pastoral landscape.

This same concern for Fort Vancouver's gardens was manifest throughout the Pacific Northwest, so when McMillan came to establish Fort Langley in 1827, he was reminded to select a site conveniently located to arable land. In the spring of 1828 McMillan and his staff cleared ground and planted the first crop in the Lower Fraser Valley, 91 bushels of potatoes. His successor, Archibald McDonald harvested 2,010 bushels that fall giving some indication of the phenomenal fertility of the alluvial land. The first cattle (dairy and beef) were introduced in 1830.

The Russian American Company and the Hudson's Bay Company were instructed by their respective governments to co-operate in the use of Alaska. The H.B.C. were given trading rights in the panhandle partly in return for supplying the Russians with food. To fulfill this order, the H.B.C. formed a subsidiary, the Puget's Sound Agricultural Company. The productivity of the Fort Langley farm soon resulted in it supplying supplementary food for the New Caledonia

92. Akrigg, op.cit., p.228.
93. Ormsby, op.cit., p.59: "it will be two years hence be the finest place in North America...indeed I have rarely seen a gentlemen's seat in England possessing so many natural advantages and where ornament and use are so agreeably combined."
94. Gibbard, op.cit., chapter three.
95. Winter, op.cit., p.105 (from Judge Howay). Peter Warren Dease accomplished this (Dease is writer's great great grandfather).
96. The crops harvested in 1830 included wheat, barley, corn, potatoes, cucumbers, pumpkins, melons, gourds, cabbages, turnips, radishes, carrots and red and white currents. Also see Murphy, op.cit., pp.54-55: In the following year McDonald searched for more farmland. He found a plain three miles up river but this was too far from the fort, so instead they made do with the flood plain around the fort -- "Instead more ground was cleared in the immediate vicinity of the fort and seeded with wheat and peas. At the beginning of May a small kitchen garden was put in and a fence of wood brought to encircle it."
97. Akrigg, op.cit., pp.312-313: list of supplies includes 160 cwt. flour, 130 cwt. dried peas, 130 cwt. grits and hulled pot barley, 300 cwt. salted beef, 160 cwt. salted butter, and 30 cwt. pork hams annually.
98. ibid., pp.313-316
forts, so with the call for the new enterprise, Fort Langley was chosen to help supply Alaska as well. The success of this venture resulted in an estate of 2,202 acres at the time of colonial settlement in 1864. There were many retired company employees who were constantly expanding this area further into the forest.

After 1839 fur trading became a secondary industry at Fort Langley. The once plentiful beaver declined in population throughout the Valley, but other resources were developed. Lumber, cranberries, butter, cedar shingles, and salmon were exported to Britain, Hawaii, Alaska, California, Hong Kong, Mexico and Australia.

H.B.C. policy was revised to encourage settlement of the Oregon territory in 1830. However this policy ran into the opposition of American expansionary pressures. In 1841 the first American settlers claimed the Willamette Valley on the south side of the Columbia. Uncertain whether Britain would support its claim to the south, Simpson took steps to consolidate the north site of the Columbia. In 1837 he sent Captain McNeil in the freshly arrived steamship, the Beaver, to assess the potential for a fort on the southern coastline of Vancouver Island. McNeil's choice over all other coves was the one with Camosun Indian village. Simpson followed this up in 1843 with the establishment of Fort Victoria as Pacific depot. James Douglas was entrusted with the selection of the site and construction of the fort. He too, chose the Camosun site. The fort began as a sizeable enclosure -- a stockade quadrangle of 330 feet by 300 feet with eight buildings of 60 feet each.

99. Murphy, op.cit., pp.84-86 & p.98.
1. Gibbard, op.cit., p.97; refer also to Winter, op.cit., p.105.
2. Akrigg, op.cit., p.264: "Whereas only 1400 beaver pelts had been obtained the preceding year, in 1831 the tally went up to 2500."
3. ibid., pp.264-265, p.191, p.316; for instance, in 1831, 300 barrels of salmon were exported from the Fraser to Honolulu.
5. ibid., p.349: "...being the most picturesque and decidedly the most valuable part of the island that we had the good fortune to discover."
6. ibid., pp.356-359; refer also to Ormsby, op.cit., p.85.
The American flow into the Columbia Valley became an issue in the 1844 election; the successful candidate, President Polk, won on a platform of vigilant expansion of the continental territory of the U.S.A. at Britain and Mexico's expense. The public demanded the whole west coast of North America and wanted the Congress to annex the territory. Polk was prepared to go to war to back up his demands. Although there were steps made to protect the coast, the eventual result was the appeasement by the British government in acquiescing to most of the American demands. All the territory south of the 49th parallel, except for Vancouver Island, was ceded to the Congress.  

British Columbians can blame this weak decision which robbed the future Province of the best portion of the west coast to three factors: American military aggression on land they held with only a flimsy claim; pacifism of the British Foreign Secretary, Lord Aberdeen, who refused to go to war over any issue; and to the betrayal of Columbia's Chief Factor, Dr. McLoughlin. The effect of this loss of Oregon territory on the Lower Fraser Valley was to intensify its use.

With the agreed border settled the Hudson's Bay Co. was granted a continuance of its lease of the remainder of Columbia and New Caledonia. The Company's policy toward the land had to again be revised. The effectiveness of colonization of the southern border was clear from the use the U.S. government had made of their Oregon pioneers. Both the Crown and the Company were to encourage settlers to populate the 49th parallel, beginning with Vancouver Island. The bulk of the Mainland was to remain the preserve of the Hudson's Bay Co.'s frontier forts.

7. Akrigg, ibid., pp.394: "On 15 June 1846, by the Treaty of Washington, the Americans without any shadow of right or justice but solely by the threat of war, obtained a great part of the future state of Washington and deprived the future province of B.C. of some 50,000 square miles of territory."

8. Akrigg, op.cit., pp.269-272, p. 323, p.337: McLoughlin's republican politics were to result in the frustration of every British attempt to settle in Oregon, but at the same time he gave every assistance, including thousands of pounds of goods to American settlers. In the end, the American's greed would not even permit McLoughlin to retain ownership of his own retirement home.
Puget's Sound Agricultural Company relocated the centre of its operations to Vancouver Island and encouraged settlers to come and join them. In 1849, British Parliament under the urging of the Colonial Secretary, the third Earl Grey, created the Crown Colony of Vancouver Island. Earl Grey's plan was to implement the colonization principles of Edward Gibbon Wakefield. The island was to be covered with large farms granted to gentlemen, similar to the seigniory system of New France. Soon the countryside was transformed into a repetition of the British Isles with the new townsite around Fort Victoria as the country village nucleus.

Alterations to the landscape included importation of the botany of the mother country. Herbs and flowers grown for centuries in the cottage gardens of Britain added a sense of home to the remote colony. Fruit trees and ornamental specimen trees were also brought to supplement the indigenous cover. Through hard work, the countryside took on the qualities of the preindustrial tamed landscape, and the pioneers were well satisfied with the results.

In contrast, the Mainland was presented as a harsh environment of mountains and fiords fit only for remote outposts of tough fur traders. In the days before railways and superhighways, movement in the future Province was by canoe, horse and foot. The mountainous terrain exhausted human energy just passing through, let alone remaining to clear the wilderness in the valleys for farmsteads.

10. ibid., pp.100-101: "Vancouver Island...should be a colony of British landholders who would hold high the social and ethical standards of mid-Victorian England and who could be counted to despise the crasser values of 'the irregular squatters' who flocked to the new lands in search of material benefit."
11. ibid., p.102
12. ibid., p.107: "There were many outward signs of inner adjustments, but none more symbolic than the flower garden inside the log pickets, where the..." Dr. Helmcken wrote: "The country was soon as civilized as any respectable village in England."
13. For an outline of the hardships refer to Craig Donald Andrews thesis, "British Columbia: A Study of the Influence of the Themes of Hardship and a Sterile Land upon its Literature, both Descriptive and Historical". Andrews hypothesis was it was a myth created by the H.B.C. to protect its control over New Caledonia, and that only the Americans really appreciated the potential of the land, therefore the territory should become American. Instead, I believe after a brief enthusiasm with technology, we are again recognizing the land's limitations.
Visitors to the territory constantly repeated the theme of the land's limitations.

The one exception was the Lower Fraser Valley, for farming at Fort Langley was gradually expanding. A few settlers, such as a Captain Ferguson, were attracted to the Lower Fraser Valley to establish farms. The image of the landscape they left for the future was one of a forest swallowing any attempt at cultivation. The isolation is a constantly repeated theme in pioneer correspondence.

The Oregon boundary resulted in the loss of the Columbia brigade route, and so a new one had to be found to connect the coast with the New Caledonian forts. By 1849 Anderson's route from Fort Kamloops to the Tulameen, Smilkameen and Coquihalla Rivers to a newly established Fort Hope, then down the Fraser on boats sent by Fort Langley, was in use as the brigade route. For 14 years the Fraser served as the essential transportation link.

With the discovery of gold in the Cariboo in 1858, the H.B.C. lost control of the mainland, and a new set of land ethics came to be imposed. Fort Langley briefly served as the capital of the Crown Colony of British Columbia, but soon the fort and the company's farm became redundant in the new society. In 1864

14. George Godwin, The Eternal Forest, p.7: "he had been told that there was virgin land for a man's taking, a land of mineral wealth, gold, silver, copper, great waterways alive with salmon, vast forests; and a climate soft as that of southern England and more sunny."

15. ibid., p.9: "The river lay, wider than any river he had navigated, like a silver path through the silent land. And as the Maria Ellsworthy, at the apex of two quivering lines of quick-silver, glided upstream, the timber wheeled like a lock gate, and closed the pathway to the sea. It was as though the ship was sealed in the forest."

16. ibid., pp.6-11.

17. Ormsby, op.cit., p.91: "With the Lower Fraser River thus opened as a commercial highway, Fort Langley at last took on the function for which it had been established."; refer also to Akrigg, op.cit., p.188; refer also to Murphy, op.cit., p.92.
Figure #26
Fort Langley from Window of Factor's Residence

Figure #27
Fort Langley Sketch 1858 (from Provincial Archives)
the long period of security appeared to be permanent (the fort had never been attacked) so the pallisade was dismantled. Eight years later the company buildings had been demolished or converted to new uses; 1886 saw the termination of the fort with the construction of a new post in the village that had grown to the south-west. The company farm suffered a similar fate. Between 1878 and 1886 it was subdivided into farmsteads and sold. It was a time of individual initiative, and a farm of two thousand acres could not attract staff. Now all that remains of the past is the hedgerows and roads marking the fields.

As for the Chilliwack Valley, the first reconnaissance report had been prepared in 1827-1828 by Annance. This was followed by recreational adventures by company employees over the years. The rich game made it a favourite spot for hunting, however this sport was not extensive enough to conflict with the native's interests. The Upper Stalo were left in peace to use the valley as they would. It was not until 1846 that the first Caucasian adaptation of the valley was made. A cannery was constructed from logs at the mouth of the Chilliwack River. A small fish weir was placed upriver as well. It was a small clearing at the side of the Fraser River that served as a landmark for the passing H.B.C. brigade. Salmon were packed in salt in barrels and shipped around the world.\(^{18}\) The cannery appears to have been destroyed by a brush fire set by the Indians when clearing land for berries. This would have been before the 1858 gold rush, for it does not appear on any gold rush maps. Flooding of the Fraser led to its "burial" under layers of silt and the site was reclaimed by the wilderness.\(^ {19}\)

In summary, the fur trader's values had differed from the prevailing attitudes of western society. The H.B.C. men viewed the land not as a cultivated and tamed countryside, but as an awesome wilderness. Sustained harvesting of the natural fur resources explicitly required maintenance of a frontier

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18 Gibbard, op.cit., chapter three.
19. Refer to Ray Aitken who discovered the site of this cannery.
ecology. The employees' livelihood depended upon good relationships with a stable Indian population and also upon the least possible interference with the existing ecosystems.

At the same time, though, the Hudson's Bay men became the first to mark the presence of western civilization upon the landscape. Cartesian geometry was first introduced with the 1827 fort's stockade; resources became utilized for an international trade which saw bits of the lower Fraser's landscape distributed around the world; and most importantly, the company introduced agriculture to the valley. The whole operation made but a slight clearing in the rain forest and this was in keeping with the Hudson's Bay Co. policy of preserving the primitive landscape.

3. Stalo Resettlement:

Yet in spite of the intention to harvest and nothing more, Fort Langley came to have a significant impact on the patterns of the whole valley. The Hudson's Bay presence restrained war parties on the river to such an extent that the Upper Stalo felt secure enough to abandon their traditional habitat and relocate on the plain. Here they could take advantage of bountiful resources.

The Chilliwac built new villages throughout the valley, but focused the main settlement in the Sardis-Vedder Crossing area with a few bands venturing to the banks of the great river. The Pilalt came across the river from the Harrison area and built villages on the east bank of the Chilliwack River across the marshes of the eastern section of the valley. Sumas tribes continued to live on the high ground around the lake, but added villages at the mouth of the

20. McKelvie, Fort Langley, Outpost of an Empire: there is the suggestion that force was used to establish peace.
21. Wilson Duff, op.cit., pp.30-45. "Within the next few years the Fort Langley traders so deterred the raids of the dreaded 'Yucletaws' and in general so discouraged intertribal strife that the Chilliwack were able to move out toward the river without fear of harassment."
Sumas River. They also constructed a platform village on posts in Sumas Lake, an innovation unprecedented for the Pacific Northwest. Trails interlinked the villages.

Until the coming of the Europeans, the Indians were locked into the stone age, but with the 18th century this all changed. An advanced technology was introduced to the coast which permitted an expanded economy. Bone and stone tools were replaced by iron and steel. As a result, the technological abilities of the coastal tribes acquired greater flexibility. There was a surge of aesthetic energy as the new tools were applied to woodworking. Many authorities consider this to be the birth of the carvings and totem poles which have come to characterize the Pacific Northwest cultures.

Early accounts of B.C. history abound in stories of the importance the Indians attached to refined metal. For instance, within a few hours of the abandonment of Fort San Miguel, the Nootka had demolished the place in search of nails. Pioneers were said to use wood dowels and dovetail construction to limit vandalism. However, most of the metal was acquired through peaceful trade. The prized fur of the west coast, the beaver, was plentiful throughout the Lower Fraser Valley when the first trading post was established. Beavers were hunted and their pelts exchanged for new blades. Stalo axemen replaced the beaver as the Valley's most prodigious architects.

Similar advantages were realized by the native people through the introduction

23. Oliver Wells, Indian Territory, 1858: Tribal areas of the Chilliwack, Sumas, Pilalt, and Nooksack, this is the only source of Indian trails and topography available; use Duff's maps for villages, though.
24. Duff, op.cit.(1964), pp.54-60: the impact of the white man was a stimulus to further growth of existing culture.
27. Akrigg, op.cit., p.99
28. ibid., pp.190-191: one beaver pelt could bring a hatchet, two could bring a large axe.
of simple cultivation. The potato (*Solanum tuberosum*), a vegetable first introduced to Europe from the Inca Highlands, returned to the new world to be the first crop planted around Fort Langley. The fort became the major source of diffusion of potatoes throughout the Stalo and Gulf of Georgia region.\(^{29}\)

The Indians recognized the superior abundance and dependability of the potato over the various indigenous rhizome roots which they had been gathering for starch, and immediately adopted it into their diet.\(^{30}\)

Small clearings were made throughout the valley and were planted each spring; they were then left in the care of nature until the fall harvest. Potatoes, being one of the few cultivated plants that require minimal attention, did not much change the functioning of the Stalo society. A more advanced form of agriculture was adopted by future generations, but only after the primitive culture was saturated and replaced by the new culture.\(^{31}\)

The relocated villages in the main valley were a dramatic alteration to the landscape, but in terms of human manipulation, the land ethics of the Upper Stalo continued to be dominated by the willingness to bend with nature. Villages continued to be only small clearings on the banks of rivers. Housing patterns continued to reflect the traditional linear form, with the traditional mixture of cedar longhouses and pit houses. However, this was a time of

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\(^{29}\) ibid., p.280: the spread of potatoes from tribe to tribe can be shown in the tracing of the etymology of "potato" in the early ethnographic linguistic evidence of the Salish.

\(^{30}\) Wayne Suttles, "The Early Diffusion of the Potato Among the Coast Salish", p.274: Douglas wrote -- "The Cowichans around Fort Langley, influenced by the counsel and example of the fort, are beginning to cultivate the soil, many of them having with great perserverance and industry cleared patches of the forest land of sufficient extent to plant, each 10 bushels of potatoes . . ."

\(^{31}\) Suttles, ibid., p.283: "A culture's ability to accept an item presented to it by diffusion tells us something about the structure of that culture. The ability of the Coast Salish culture to accept the potato shows that food-gathering societies may be set up so that they can take over food producing without wholesale change. But what has happened here is that the kind of cultivation which resulted looks quite unlike that prevailing at the source of the plants. Coast Salish cultivation took the form of something rather close to the simplest form of agriculture known elsewhere."
cultural innovation and a few exceptions began to occur, such as the platform houses in Sumas Lake.  

Acculturation's most effective institution, Christianity, extended the hand of fellowship to the Stalo people beginning with the 1841 visit to Fort Langley of Father Demers. Demers and his colleague, Father Blanchet, were Jesuit priests sent as missionaries by their Bishop in Quebec to the Pacific Coast in 1838. They made base in Fort Vancouver and actively sought to convert the coastal and interior tribes. The extent of the territory kept these first men of God occupied for three years before time could be found for the Stalo.

The Stalo were searching for a new religion, and had been open to the several messianic movements that swept the west in the first half of the 19th century. They required some omnipotent force to give strength to their animistic theology during the confusing time of change. Consequently, when a white shaman arrived with the Word of God, there was an overwhelming interest and acceptance. Father Demers preached each day of the week while he was at Fort Langley to between 1500-3000 Salish Indians. Gathering in a meadow by the Fraser, the flock listened as Demers outlined salvation. He used the famous "Catholic ladder" which had been devised by Blanchet to illustrate the chronology

32. Duff, op.cit. (1952), p.44: "Wileliq V moved the main headquarters of the tribe from ©æamals to a small flat at Vedder Crossing called qaqálelal. Here, with the aid of friends from the neighbouring Stalo tribes -- Sumas, Matsqui, Pilalt, Chehalis, Scowlitz -- he built a great house with carved figures on the inside posts. The most amazing feature of this house with its roof, which was built in the form of an inverted gable. The roof-planks sloped down to the centre, where the ridge-pole was a hollowed-out log which caught and held the rainwater from the roof. At one end was a gate which could be opened to let the water run out. The roof was so high that the pole used to push the planks aside to let the smoke out had to be 10 fathoms long. This flat at Vedder Crossing has since been eroded away." Refer also to W.A. Kenyon, op.cit., p.14.
33. Akrigg, op.cit., p.300.
35. Ramsey, op.cit., pp.15-16: the crowds were in the neighbourhood on the annual salmon run in September. Demers was especially pleased to have converted the tribes of the Upper Stalo.
of Biblical history, and spoke fluently in the Salish language. The result was the baptism of 758 Stalo children in the now holy Stalo water. Permanent missionaries would not arrive to the Valley until the gold rush. The euphoria of Demers' visit was but an appetizer for what would follow.

Part of the reason for the spread of religious fervour was the high mortality rate experienced from the contact with new micro-organisms associated with the whites. The first and most devastating of the smallpox epidemics began in the Missouri basin in the early 1770's. It spread throughout the west, and is considered by some authorities to have decimated three-quarters of the Stalo people. (This was before the Cook expedition charted the area.) Periodic epidemics became commonplace throughout the 19th century and added to the tensions experienced by the escalated cultural changes.

The abandonment of Oregon to the Americans in 1846 led to a sudden influx of settlers from the eastern States. Their first demand on the social environment of the West Coast was to attempt to drive out all the Hudson's Bay men who had married Indians. They then began a co-ordinated attempt to drive out the Indians. This lack of understanding of the rights of Indians was common throughout American history. Throughout the west, bounties were offered for dead Indians. The result was massive unrest and in 1847 the Indians of Washington and Oregon retaliated with a bloody rebellion. The terrified settlers took refuge in Hudson's Bay Company posts when they discovered those were the only places safe from the Indian's wrath.

36. Akrigg, op.cit., pp.328-329: the importance of this action was the new generation would live to see the new God, question the whole basis of their culture, and as one consequence, discard the special relationship the Stalo had for the landscape.
37. ibid., pp.15-16: "the smallpox epidemic remained a terrible memory among the survivors, pitted by the disease, who later were to be encountered by Vancouver's crews."
38. Duff, op.cit. (1952), pp.28-29
39. ibid., p.362: "Deep in the bloodstream of the emerging community was the spirit of violence and lawlessness so notable in American History."
In sharp contrast, the history of Canadian side of the border is remarkably free of Indian bitterness and hostility. The Salish people and the new colonists here strove to co-exist in peace. This was in large part due to the tactful leadership of the Hudson's Bay Co. This company softened the initial contact between the two cultures by their sharing a similar respect for the environment. It was even a time for an expanded economy and an enriched society. This was the period when the thousand year old West Coast culture reached the peak of its aesthetic acumen. In addition, peace had come to the valley. The inter-tribal warfare that had made victims of the Upper Stalo people was ended. But the Stalo culture was doomed. The full impact of the outside world could not be staved off indefinitely.

4. Gold Rush:

When word of the gold strike spread in 1858, thousands of men began to converge on Fraser's River. The first wave set up camps throughout the Lower Fraser River and went about panning for nuggets from the sandbars. The 1858 winter saw 3000 men scattered along the Fraser's banks between Fort Langley and Fort Hope. They sheltered themselves in canvas tents and crude lean-tos, while a handful appear to have had the confidence to build small one room log cabins. The effect on the landscape of the Chilliwack Valley of the invasion was minimal. Timber cut for shelter or firewood, and the game killed for food regenerated quickly when the horde moved on to the main strike in the Cariboo in the spring.

The daily image that developed over the next few years was that of hundreds of men clustered onboard river steamers plying between Fort Langley - New Westminster and the Chilliwack Valley; they either turned up Harrison Bay to a

40. Ibid., p.208.
Figure #28
"St. Thomas" Church at Fort Douglas
(from Provincial Museum)

Figure #29
Paddlewheeler, Fraser River, circa 1860
(from Notman Photographic Archives - McGill)
destination at the north end of Lake Harrison, or continued up the Fraser to
the last navigable section, Fort Hope. Disembarking, the miners found the
confusing scene of a boom town with saloons, supply stores, camps and hotels.
Here the adventurers gathered the last of their kit together and, if they could
afford it, acquired pack animals.

There was also a network of overland trails for those who could not afford
the nominal fare on the steamers. These were the old Indian trails which were
utilized to pass through the forest from the south to Hope. The Whatcom or
DeLacey trail from Bellingham to the Cariboo via Chilliwack River and Chilliwack
Lake became famed as the route for anyone wishing to avoid the officials at the
port of entry. 43

Some 60,000 men in all passed through the Valley on their journey to the
gold fields. They were a heterogeneous group composed of a core element of
transients who gravitated from one hope to another: first California, then
Australia, then Fraser's River. Most however, were just enthusiastic greenhorns
convinced they could make their fortune and return home in triumph.

Closely following the miners were a group of opportunists who were shrewd
enough to recognize that the real fortune was not to be made extracting gold
from the earth, but from selling goods and services. The few who became suppliers
of life's staples were the ones who had a more lasting effect on the landscape.
The Chilliwack Valley had the advantages of fertile soil, moderate climate, and
accessibility to the hinterland; it soon attracted a merchant who wished to
establish his own farm to supplement the imported supplies. J. Reece acquired
the first pre-emption in 1859 from London to 160 acres and cleared ground for
the valley's first ranch. Dairy products, meat, and pasture for wintering teams
were his first products. This expanded in 1862 when his cousins, the Kipps,
took over management of the ranch, and put more ground under tillage.

42. Ormsby, op.cit., p.158
43. Roy, op.cit., p.71; refer also to Earl MacLeod, "The Whatcom Trail".
The clearing in the forest gradually expanded with increasing crop production. The forest was fashioned, in the clearing hub, into log barns and log cabins. Cedar timber fences came to modulate sun released meadows. The Kipps remained when the gold played out and were joined by their wives and families and a few other pioneers who had faith in a vision of a prosperous countryside.

By 1863 the dream of instant wealth had ended and the prospectors left the Northwest a year or so after arrival, never to return, richer only by experience. A very few remained to face the hardships of the primitive landscape. For a span of five years there had been an influx of a pluralistic society of a diverse ethnic composition with their associated values. They had been held together by gold fever in temporary associations and temporary settlements. When they arrived the mainland was the preserve of the H.B.C. and a few thousand Indians; when they left, the basic landscape infrastructure of the future Province had been established.

5. The Royal Engineers:

The miners were not the agents for the cultural infrastructure. They were only on a resource spree and lacked the commitment necessary for permanent settlement. It remained for the British government to take hold of the situation. Whitehall recognized that the gold rush was a transitional phenomenon but decided it could be used as a means for establishing permanent structures: a stable colony of agriculturalists who would bring civilization to the wilderness.

Whitehall quickly supported the judicious extension (by Governor Douglas of Vancouver Island) of his authority to maintain law and order over the crazed mainland. The Colonial Secretary in the Derby Government, Sir Edward Bulwer-Lytton, took personal responsibility for guiding a bill through Parliament to

44. Akrigg, op.cit., p.385.
create the Crown Colony of British Columbia. His involvement with B.C.'s creation became extensive—for Lytton set policy, selected government officials, and prescribed their terms of reference.

James Douglas was offered the joint governorship of Vancouver Island and British Columbia on condition that he would sever ties with the H.B.C., which had caused some dissension between early settlers and the administration. This he accepted. To assist him, Lytton selected a group of well educated officials including the Cambridge scholar, Judge Matthew Begbie, as Chief Justice, Captain Gossett, the Royal Engineer retired surveyor general for Ceylon as Treasurer; and Colonel Richard Clement Moody of the Royal Engineers as Deputy Governor (inactive), Land Commissioner, and Commander of a detachment of Royal Engineers (Columbia detachment).

Colonel Moody and his three officers: Captain J.M. Grant (construction), Captain R.M. Parsons (surveys), and Captain H.R. Luard (military operations), together with a detachment of 165 Royal Engineer volunteers also selected by Lytton, embraced almost every trade and profession the new colony would require: architects, surveyors, daughtsmen, artists, photographers, carpenters, masons, blacksmiths, structural miners, etc. Lytton was said to have only wanted the best of the best for this mission, for since they were going to a remote wilderness possessed by "gold fever", only disciplined and intelligent representatives could be trusted to maintain the integrity characteristic of Britain's colonial administration.

All this was to be accomplished with 165 men, a handful of officers and a shoestring budget in an area that was four times the size of Britain. Nevertheless

45. Ormsby, op.cit., chapter 5, the four positions held by Douglas on Vancouver Island Crown Colony included: Governor of Vancouver Island, Chief Factor of Hudson's Bay Co., agent and stockholder for Puget Sound Agricultural Co, and Land Agent for H.B.C.
46. The Victoria Gazette, November 20, 1858: "such as only the Royal Engineers can produce" (in Cope, p.17-18).
this group accomplished the impossible and set the basic infrastructure for the future Province's cultural landscape. The amazing list of accomplishments by the Royal Engineers throughout the hinterland has been documented elsewhere, focussed upon here are only those activities which occurred in the Lower Fraser Valley.  

The architect of the proposed settlement pattern throughout the Lower Mainland was Colonel Richard Moody. In preparation for his role he had been introduced to all the concepts of his age and used the accumulated heritage of architecture and regional planning to formulate conceptual plans. Moody was educated at Woolwich.  

This was prior to the consolidation of the School of Military Engineering at Chatham in 1865, but his courses must have been similar to this list: 140 days of fieldworks, 430 days of surveying, 140 for architecture, 20 for siege planning, 40 for telegraphy, and demolition, and options for photography and chemistry. The old surveying course at Woolwich was taught each summer in the hills of Wales, so Moody was aware early in his career of the need for a simple method of settlement to be able to map rough terrain.  

This coursework was followed by 26 years of officer experience throughout the world.  

The Royal Engineers had begun as military engineers about 1618. They progressed to be a distinct corps of the British Army by 1716. The engineers were first trained in town survey in 1740 to enable the planning of defenses of forts and cities. Gradually the duties of the R.E. expanded from military operations to a wide range of civil responsibilities. By the end of the 18th century they had been called upon by Parliament to prepare the first ordinance survey of the British Isles. In the next century, the R.E. became involved with various

49. Born 1813 in Barbados, as second son of Colonel Thomas Moody, R.E. Richard Moody entered Woolwich in 1827, see Cope, op.cit., chapter two  
50. Major General W. Porter; History of the Corps of Royal Engineers, Book II.  
51. For summary of Royal Engineer History refer to Frances M. Woodward, "The Influence of the Royal Engineers on the Development of B.C.", pp.4-7
public boards in planning for social welfare of urban populations. A R.E. was entrusted with the Chairmanship of the Great Exhibition in London in 1851. With the expansion of the Empire, the R.E. solid training and reputation saw officers posted to remote colonies as Governors of Trinidad, British Guiana, New South Wales, Falkland Island, Bermuda, Western Australia, West Coast of Africa, Straights Settlements, New Zealand, Gibraltar, Bermuda, St. Helena and in various other capacities in India as well as across Canada. They became a major force in dispersing 19th century European civilization throughout an empire where "the sun never set". The activities of the British Columbia detachment receive but a few passages in a two volume history of their activities.

The Moodys were a R.E. family so Richard's education was arranged early, and upon graduation, he was assigned to Ireland 1832, Woolwich 1833, St. Vincent 1833-1837, Devonport 1837, Woolwich (professor of fortifications) 1838-1841, Falkland Islands (governor) 1841-1849, Colonial Office (special duty) 1849, Chatham 1850, Newcastle-on-Tyne (commander R.E.) 1851-1854, Malta (deputy commander) 1854-55, and North Britain Region (commander R.E.) 1855-1858. The last appointment brought him to the notice of the cabinet and to Queen Victoria for the plans he drew for the restoration of Edinburgh Castle. As a result, when a man was required for one of the most remote and picturesque areas of the empire, Moody was remembered and appointed.

Before leaving for the colony, Moody spent some time deciding his strategy. From studying the available charts and reports, it appears he even had decided the approximate location of the Colony's capital. When the first contingent, under Captain Grant, left a few months ahead of Moody, Grant carried orders to

52. Cope, op.cit., p.16.
53. Peter Collins, Changing Ideals in Modern Architecture, the romantic sensibilities of Gothic Revival: the sublime, and the picturesque, were the prime aesthetic ingredients of the project Moody undertook, and they also characterized the image of the landscape to which he was dispatched. There must be a connection.
54. Peter Oberlander, "And in the Beginning", p.2; refer also to Cope, op.cit., p.74.
reconnoitre the area on the north side of the Pitt and Fraser River's junction and the best route to Burrard Inlet as the site for the capital. 55

During the three month voyage across the Atlantic and Pacific to Victoria, Colonel Moody had further time to reflect upon the planning of the Lower Fraser Valley. Speculations on the options open occur within the traveller's shipboard newsletter. 56 Ormsby expressed the state of the new Commissioner's ideas upon arrival thus: "Already the Colonel had pictured in his own mind the conversion of forested hillsides to garrison towns which he would enoble with reproductions of the public squares and the fine architecture of European capitals." 57

Environmental considerations would play a significant role in design, but one gets the impression the landscape was considered more of a constraint than an inspiration. The cerebral cartesian geometry of the gridiron was to be the predominant concept applied. Site analysis data from admiralty charts, H.B.C. maps and various rough reconnaissance reports served to generate a model for Moody to follow. 58 The implicit plan for the Lower Fraser Valley was that of a gridiron capital city (to double as port of entry) at the defensible part of the western end of the Valley (New Westminster), and a gridiron town of similar though less pretentious form at the eastern end of the valley (Hope -- which would also serve as terminus of river traffic with connection to a road and trail network to the hinterland). In between, there were to be one or two market towns with subsidiary villages, all united by a gridiron township plan. The conceptual diagram of this plan would be as illustrated on the following page: 59

55. Moody to Parsons in Cope, pp.19-20: Moody describes the criteria for the proposed capital's siting.
56. Cope. op.cit., p.32.
58. Cope, op.cit., p.23: "It is shown by letters to Captains Parsons and Grant that Col. Moody was familiar with the geography of the country to which he was going." Moody was aware of the need for significant modifications to this plan due to topography, from this preliminary material.
59. This is an abstraction of the writer based on some of Moody's correspondence -- I am still looking for such a sketch by Moody.
Figure #30  Moody's Conceptual Diagram

Precedent for the gridiron plan applied by Moody has a long history. It ostensibly dates from classical Greece, but proof of its universality lies deeper within antiquity. A number of summaries have been made to describe the progress of implementation of the grid concept. Suffice it here to mention the western "origin" with the Miletian grid, through the Roman castrum fortress town, to the new towns of Edward I, and culmination in the London Plans of 1666. The gridiron proposals of Robert Hooke (together with the baroque plans of Wren and Evelyn) directly influenced the designs of Edinburgh and Philadelphia, and Moody was familiar with both of these. Philadelphia had in turn an enormous influence on the shaping of the North American Continent. Oberlander states Bath, Bloomsbury and Kensington were some other developments which influenced Moody.

60. It is not limited to western civilization, for it is the basis for classical Chinese urban form as well - refer to Andrew Boyd, Chinese Architecture and Planning.
61. For instance, Sybil Moholy-Nagy, Matrix of Man; or for a simpler summary refer to Dan Stanislawski, "The Origin and Spread of the Grid-Pattern Town".
64. ibid., pp.100-107.
65. Reps, op.cit., p. 160: see also p.163: "but perhaps the most influential in furnishing the ideas on which the plan of Philadelphia was based was that greatest of all 17th century city planning events -- the reconstruction of London after the Great Fire"; see also p.174: "Philadelphia served as the model of many of the new frontier towns."...notice how patterns emerge inter-linking conceptual ideas on planning which eventually influenced Chilliwack.
Familiarity with the gridiron in this, the capital of the newly independent country (Philadelphia), as well as the simplicity and conceptual clarity, and ease of subdivision, led to the adoption of the gridiron by the Continental Congress in their Land Ordinance of 1785 as the format for the survey of all expansion land on the frontier. A similar system was adopted for the Canadian frontier and so as a consequence, most of the continent received a rectangular grid of six square miles with further subdivision into 36 sections of 640 acres each. Settlement planning became an exercise in subdivision of the gridiron into a street and block network with slight modifications due to terrain.

To the list of rationales for the choice of gridiron settlement pattern for the Lower Mainland, one further element must be added, "primitive" surveying technology. Transits in mid-century were large and awkward to move. Anyone who has surveyed an amorphic plan in a forest using the most sophisticated 20th century instruments knows the immense difficulties the first surveyors must have had. Without the use of gridiron geometry settlement would have been postponed for years, and that would have caused chaos. Thus, considering all the factors, the plans created and then implemented by Colonel Moody were a predictable and wise form of settlement.

When Moody finally arrived in the Gold Colony, he found the Governor, Douglas, had already designated Fort Langley as the capital, had instructed Captain Grant to lay out the new town (Derby), and had proceeded with the sale of lots. Uncharitable critics claim Douglas opted for Derby because his former employer, H.B.C. had large holdings around the site, but more rational examination must

67. Reps, op.cit., chapters eight and eleven
69. Reps, op.cit., p.217: "The effect on city planning was to reinforce the natural inclination for the gridiron street system, the easiest of all to lay out when speed or the desire for land speculation guide the hand of the surveyor."
70. Oberlander, op.cit.
71. Ormsby, op.cit., p.174; Cope, op.cit., p.46; and also Gibbard, chapter four.
see the site from Douglas' frame of reference. He had spent most of his life on the West Coast, and any settlement to date had been agricultural villages. Consider one of the main criteria given for the original establishment of Fort Langley -- it was to be close to farmland. Derby was to be on the site of the 1827 fort. It had another advantage in that the site was one of the few areas already partially cleared, so survey and development could be almost instantaneous. It was a predictable location for someone of Douglas' experience.

Moody came with a different vision and with different criteria for selecting the capital's site -- a cosmopolitan vision of a world traveller. He immediately tried to convince Douglas of the inappropriateness of Derby. In a brief outlining the disadvantages, Moody listed Derby's vulnerability to floods, closeness to the border, inaccessibility as an ocean harbour, and lack of natural military defenses. 72

In contrast, the hill site at the future New Westminster had, in Moody's words:

An abundance of room and convenience for every requisite in a seaport and the capital of a great country. There are great facilities for communication by water, as well as by future great trunk railways into the interior, there is good land for garden ground, if one may judge by the forest and rich meadow lands surrounding it. It is raised above the periodical floods and yet the low lands are close adjoining and easily made available (for docks, etc.).

Moody then continued through several pages of the brief to describe the advantages of the military position, giving precise explanations for making the site impregnable. 73

The emphasis upon the military features may have been due to his training as a military engineer, but it is more likely due to the terms of reference conferred by Sir Lytton. Moody was instructed to place the capital so it

73. Moody to Douglas: Jan. 28, 1859, Papers Relative to the Affairs of B.C., Part 2, 1859 (Cmd. 2578), p.60.
Figure #31
Plan of New Westminster, circa 1860
(from Provincial Map Archives)

Figure #32
Fraser River from Bishop's House, New Westminster
(from Provincial Archives)

Figure #33
New Westminster Harbour circa 1870
(from Provincial Archives)
Figure #34
New Westminster, circa 1860
(from Provincial Archives)

Figure #36
New Westminster, circa 1861
(from Provincial Archives)
could be defended from the anticipated United States aggression. Douglas was instructed by Lytton to accept any military decisions made by the Colonel. Douglas accepted the advice, and on February 14, 1859, the new capital was proclaimed.

Implementing the plan for New Westminster proved difficult. Moody envisioned a capital with a defined grid punctuated by spacious parks, to enoble the future of the colony; but the dense forest cover and the slope of the New Westminster hill made progress slow. Within the first year, speculators, future residents, and the governor became impatient with the progress and applied pressure on Moody to accept second-grade surveying techniques, discard the amenities and let development boom.

On the other hand, Hope was laid out quite easily on the flat plain next to the old H.B.C. fort. The similarity between the plan for Hope and that of New Westminster is remarkable. Comparing the plans shows a central town square, a semi-circular park, a broad set-back from the Fraser, and a rigorous adherence to the gridiron. The differences were in the scale of expansion allowed for, and while the New Westminster site became the major docking facilities for the colony, the Hope waterfront became the landing ground for the miners and a place for them to outfit, and was thus more chaotic -- with tents, animals, supplies, and restless men. Hope's earthen streets were easily cleared and made ready for the tents and instant wooden structures.

In choosing the dimensions of the gridiron plan for the Lower Fraser Valley survey and settlement patterns, Moody recognized the need for modifications to

74. Lytton to Moody, Oct. 29, 1858, in Cope, op.cit., p.35; refer also to Lytton to Douglas, Feb 11, 1859, in Cope, op.cit., p.47.
75. Woodward, op.cit., p.7; refer also to Ormsby, op.cit., pp.173-175: "The magnitude and the impracticability of his plans for the townsites of the Gold Colony soon exasperated Douglas, who offended him (Moody) by the terse comment that 'people are not generally disposed to perch their houses on bleak mountains or inaccessible cliffs, simply because they happened to be good military positions.'"
his conceptual diagram. Topography and the erratic Fraser determined the choice of a smaller grid than was used elsewhere in North America. Historians differ upon the unit used, but it probably was no more than a three mile square with a further subdivision into a grid of nine one mile sections. While the grid's main advantage to a virgin landscape was the ease in orderly apportioning of the various human land uses, the serious problems that would have been encountered in attempting to resolve the grid with the actual terrain were formidable.

Moody was not so inflexible as to impose a cerebrally pure concept upon the valley beyond the limits of the main settlements. For the countryside, he modified the gridiron to flow with the topography. Early roads and farmsteads were built according to the lay of the land, not according to the dictates of a two dimensioned piece of paper. It was impossible to survey more than a few isolated square miles at a time, and it was fortunate if the Royal Engineers could reach the area ahead of pre-emptions to maintain any sort of order. Consequently, the difficulties were formidable in extending the grid of the Prairies through the mountains of British Columbia and so a more amorphic order developed.

From the haphazard road forms on the R.E. maps it is evident that pre-emptions were made which combined with the terrain to assure the continuing existence of the amorphic form of the cultural landscape. This was especially true in the Chilliwack floodplain. The diverse terrain necessitated the most irregular of the Lower Fraser Valley countryside patterns.

76. The Canadian grid began as 9 miles square and was reduced to 6 miles square for convenience in surveying by 1871, but for the Crown Colony of B.C. a modified system had to be used; refer to Bond, op.cit.
77. George G. Aitken, "The Progress of Survey and Settlement in British Columbia", p.406: "With few exceptions the farm lands have been laid out in areas of a mile square, a half, or a quarter and are called land lots...These surveys were not laid out in any regular pattern but simply followed the choice pieces of land as they were selected or pre-empted." On the other hand, Gibbard claims the unit used by the R.E. was three miles -- p.185.
78. Aitken, ibid., p.401.
Figure #36
Hope, circa 1860
(from Provincial Archives)

Figure #37
Plan of Hope, circa 1862
(from Provincial Map Archives)
Explicit influence of the R.E. upon the Chilliwack Valley dates from 1859 when farm lots were to be hurriedly surveyed and opened for settlement in response to Governor Douglas' request. This appears to have been postponed for lack of staff and funding, for on June 29 the Governor withheld funds for the project. It was finally decided to do selective patches of surveying in the Chilliwack-Harrison area after first establishing lines along the meridians. Somehow, by November of 1859 a preliminary map of the area had been prepared and forwarded to Whitehall to be used in authorizing pre-emptions.

In September of 1859 Douglas ordered a road to be built from Langley to Chilliwack to stimulate settlement. Moody and his men were overworked, so Moody sent a letter to his colleagues, the Boundary Commission (who were then in the valley), for assistance with the road. They appear to have improved the old H.B.C. trail between Fort Langley and Hope.

Captain Parsons reconnoitred the Sumas-Chilliwack area for a route to Yale and made a survey of farmland between June to September of 1860. He also examined the region for location of a townsite, choosing one on Fairfield Island. In the spring of the following year, an independent contractor was hired to continue the "road" from Chilliwack to Hope along the route recommended by Parsons. It was completed by 1862 when the real beginnings of permanent settlement of the valley began.

80. Douglas to Moody, June 29th, 1859.
81. Moody to Douglas, July 14, 1859.
82. reference in annual report of map of November 24, 1859, in B.C. Papers, Part IV.
83. Moody to Douglas, Sept. 23, 1859.
86. Moody to Douglas, May 17, 1860; Douglas gave instructions that town lots were to be laid out at the mouth of the Chilukweyuk River.
The long anticipated establishment of a town in the valley went one step closer to realization with the dispatch of Corporal Leech and three R.E. sappers in the winter of 1862, to lay out a reserve for a townsite on the south bank of the Fraser opposite Harrison Bay. This was to be the first auxiliary town between New Westminster and Hope after Fort Langley. It was the second application of cartesian geometry to the valley.

Leech cleared a survey path through the thick forest and marked the rectangular townsite of 640 acres (one square mile) on Fairfield Island. In his report, four justifications for the shape and location are given including: elongation to permit more water frontage, landing site possible on a deep but calm slough, site slightly higher than anywhere else in the area, and a clearing planted with potatoes by the Indians (within the rectangle) was mentioned as a sign of the fertile quality of the soil for gardens. Chilukweyuk was to be an agricultural market town.

In addition to the townsite, the R.E. prepared another map of the valley. A survey line was cleared through the forest to meet the Chilliwack River. It passed an existing trail and two routes to Hope. All the paths intersected on a slight knoll.

The town never materialized because the R.E. were under too much pressure elsewhere. In the following year the need for comprehensive planning gave way to the expedience of unimpaired development, so the Royal Engineers were recalled. The reason for the cleared path through the woods and the rectangle were forgotten; and with the felling of the forest around the paths later in the decade, all trace vanished save for a few survey pegs. But even if memory failed

88. A "sapper" was comparable to our present day private.
89. Corp. Leech to Col. Moody, Nov. 14, 1862: report and map; refer also to Col. Moody to Gov. Douglas, Nov. 18, 1862.
to recall the survey lines, they remained on the landscape to determine the valley's present infrastructure. The path through the woods became Young Street, and the knoll where the paths intersected became Five Corners.  

The implementation of a civilized landscape was not without pain. The personal hardships and bravery of the Royal Engineers have become legendary. However, it was on the paper used for preparing the plans that the strain of the enterprise crystallized. Historians have scrupulously reconstructed the personal conflict between Douglas and Moody, and their growing disagreement over administration. At the time, public support polarized behind the two leaders with the majority population on Vancouver Island siding with the Governor, and the few permanent residents clustered around New Westminster favouring the Commissioner. 

Ultimately most of the disagreements focussed upon money. Britain had intended the colony to be self-sufficient, with capital for improvements and the cost of government to be raised primarily from the sale of land. Home supplied the expertise and the settlers. However, the topographical difficulties encountered required financial underwriting by the colonial office. The latter could not understand the slow progress and expense of roads through the towering mountains, and they were constantly receiving letters from disgruntled speculators who had been foiled by Moody. Douglas was under pressure from all sides to progress rapidly so he too prodded the R.E. Moody, as the new architect of the landscape continually received reproachments for insufficient accounting procedures and slow progress. By 1863, with the gold fever ebbing, the Duke of Newcastle had had enough of the continual overdraughts and bickering so he recalled the administration. As a post-script, Douglas retired in that year knighted

90. Young Street was always thought to have been a later addition to connect Minto Landing with Five Corners, but not so. 
91. Cope, op.cit., chapter fourteen. 
KCB and Moody retired from Chatham three years later as Major-General.  

Queen Victoria was well served. The astonishing list of accomplishments of her Royal Engineers by the time of their recall included: the suppression of revolt (peace with Indians and miners), administration of legal restraints, military reserves (which would become the future public landscape of Vancouver -- U.B.C., Jericho Park, Stanley Park...), townsite reserves (including Granville and Hastings), the selection and construction of a capital and the establishment and construction of the first school, hospital, library, post office, mint, YMCA and recreation grounds in B.C. The Moody family also brought the sense of community to the Lower Mainland with their regular open house. Also accomplished was the construction of a road network (including Cariboo Road, Douglas Road, Dewdney Road, and Yale Road), the resolution of the Hudson's Bay land claims, and the laying out of several townsites (New Westminster, Derby, Chilliwack, Hope, Yale, Douglas, Richfield, Quesnel, Clinton, Lilloet, Lytton...), as well as opening up the land to settlement by pre-emption surveys. The landscape of civilization was now rooted here.  

6. The International Boundary Commission:

Under the terms of the 1846 Oregon treaty, an International Boundary Commission was established with representatives from the United States, Britain and a third party arbiter. When the geographical boundary was determined on paper, it fell to the Royal Engineers to implement the British Columbia and Vancouver Island side. Colonel John Summerfield Hawkins, R.E., was appointed Boundary Commissioner and was given a staff consisting of Captain Robert Wolseley

95. For a list of accomplishments and contributions of the Royal Engineers refer to F.M. Woodward, op.cit., pp.21-26; and for a list of men who remained in B.C. refer to pp.39-48.
Haig (astronomer), Lieut. Samuel Anderson (secretary to commission), and a support staff of 57 Royal Engineers. 97 To help with the location of the maritime boundary through the Gulf of Georgia and Straits of Juan de Fuca, Captain George Richards (later Admiral Sir Richards) of H.M.S. Plumper was appointed to the Commission (Note that Richards and Moody would later chart the Lower Fraser River together.)

Between 1857 and 1863 the Commission charted and demarcated the boundary from the coast to the eastern side of the Rockies along the 49th parallel. This detachment of the Royal Engineers had a separate appointment to that charged with the administration of the new colony. Col. Hawkins' responsibility was solely the creation of the boundary. To do this, supply depots, roads and cabins had to be constructed; this effected the landscape throughout the area adjoining the boundary.

The two contingents of Royal Engineers are often confused. It is true that Moody would request the help of Col. Hawkins on occasion and that several roads in the Lower Fraser Valley were the sole responsibility of Col. Hawkins, but generally the overlapping was minimal. The Boundary Commission Royal Engineers' contribution to the landscape of the Chilliwack Valley occurred throughout 1859 when a supply depot was built at the mouth of the Chilliwack River. 98 A log cabin and a grave still remain from this contact. 99

The boundary consisted of a clearing at least 20 feet wide on each side of the 49th parallel with stone cairns built at regular intervals. It was a

98. Ramsey, op.cit., pp.27-34; refer also to Murphy, op.cit., p.100: he states that Haig and in particular Wilson were in the Chilliwack Valley in October of 1858, making the preliminary survey of the boundary. Ray Aitken discovered the stone footings of the depot built in 1859 by Liet. Wilson -- it was under five feet of silt deposited by the river. A cairn was erected by the R.E. in 1972 to commemorate the spot.
Figure #38
Forest with Eye

Figure #39
Boundary Survey Commission and 49th Parallel Beyond Chilliwack Valley (from Provincial Archives)
bizarre mark upon the land. For hundreds and hundreds of miles this straight line geometry plodded across fens and meadows and forests and hills and mountains with the sharpest degree of precision allowed by the scientific instruments of the mid-19th century. Boundaries defined for millennium from intimate contact of man and land became irrelevant. Since the Indians at this time still lacked a written language, we may imagine the astonishment of the Chilliwac who first encountered this "avenue" in his forest.

While the official duty of the Commission was to scribe an unnatural line, some of the most knowledgeable Victorian naturalists were associated with the R.E. staff. Few writers have been able to surpass the book written by John Keast Lord during his assignment to the Commission. ¹ Both he and Lieut. Charles W. Wilson ² were in their twenties when they made base in Chilliwack (1859). Their descriptions of the primitive landscape in the valley of the Chilukwewuk and Sumass give a heroic quality to the wilderness.

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1. John Keast Lord, op.cit., p.315: "In May and June this prairie is completely covered with water. The Sumass River, from the rapid rise of the Fraser, reverses its course, and flows back into the Lake instead of out of it. The Lake fills, overflows, and completely floods the lower lands. On the subsidence of the waters, we pitched our tents on the ridge of a lovely stream. Wildfowl were in abundance; the streams were alive with fish; the mules and horses revelling in grass kneedeep -- we were in a second Eden."

Lord, ibid., pp.341-342: "The scenery is romantic and beautiful beyond description. Towering up into the very clouds, as a background, are the mighty hills of the Cascade range, their misty summits capped with perpetual snow..." continues with a description of the flora and fauna of the valley.

Lord, ibid., pp.347-348: "I had been for some time sitting on a log, admiring the sublime beauty of the scene, spread out before me like a gorgeous picture; the sun was fast receding behind the hilltops. The lengthening shadows were fading and growing dimly indistinct, the birds had settled down to sleep... a deathlike quiet steals over everything in the wilderness as night comes on, -- a stillness that is painful from its intensity."

2. Wilson, quoted in Ramsey, p. 28: "I think this is the most beautiful place I was ever in, the prairie though small in comparison to the ones on the other sides of the mountains, is most lovely, covered with flowers and strawberries and even at this early period of the year the grass is nearly up to the waist."
D. Settlement Established (1862-1886)

1. Chilliwack Pioneers:

Lord's assurance that he had found Eden led to his pre-emption of New Westminster District Lots 83 and 84 (Miller's Landing neighbourhood) in 1860. Of all the places in the world this scholar had encountered, this is where he chose to settle. Unfortunately for Chilliwack, the pressures of a career led in other directions, and so Lord had to sell the acreage to one of the steady stream of settlers who began arriving in 1862 to join the Kipp family in opening up the valley. Wells, Kitchen, Chadsey, Vedder, Hall and Miller were some of the pioneer stock that took hold in the new land.

Most were of British origin. They arrived at the coast after spending some time in rural Ontario; but there also was an ecumenical mixture of nationalities that gave dimension of a larger world of experience. All were united by the promise of a fresh start in a new land. There were few illusions for this was a tough breed that recognized the difficulties. The pioneers arrived after a long voyage of great hardship to a river bounded on each side by dense, tremendous forest and by awesome mountains. They had to sever friendship ties, sell possessions and endure tight ship's quarters for months at sea to come to this remote section of the empire. Here they were isolated from civilization and had to struggle with limited equipment to survive.

The methods, techniques, and aspirations that were applied to the land were rarely innovative. By the conditioning and expectations of their culture, the settlers had been taught to have a set of values regarding how to adapt land for their benefit and these values were the ones used to manipulate the valley. The accumulated knowledge of millennia of western civilization had acquired the

3. from a review of Lord's book inserted in the binding of the U.B.C. Special Collections copy of his book; it gives biographical information on both Dr. Lord, F.R.S., and Sir Wilson, F.R.S.

4. Remember the first pre-emptions were granted directly from London and carried the Royal Seal.
authority of success, and so when the pioneers looked for models for adapting the pristine landscape of the valley, they selected the best of the past and carried the concepts to this new landscape. They also brought a technology that had 5000 years of experience at optimising harvest yields from vanishing wildernesses. The pioneers had a naïve assurance that it was possible to log and dam and till the earth and that it was their moral obligation to do so.

To determine the specific attitudes of each settler requires the analysis of their backgrounds and their recorded preferences. Fortunately, with the records preserved by the Chilliwack Historical Society, this is not entirely impossible. For instance, one of the leading pioneers, A.C. Wells, was born and raised in Napanee, Ontario (near Kingston) in 1837. The description of his home town captured in *A History of The County of Lennox and Addington* shows a town with a plan remarkably similar to that of Chilliwack.⁵ It was a product of the United Empire Loyalist settlement of Upper Canada in the 18th century. The plan is both amorphic and geometric and reflected the part-planned, part-spontaneous aspect typical of rural Canadian market towns constructed adjacent to rivers.⁶ Wells arrived in Chilliwack in 1867 and by the end of the century had developed the finest of the valley's farms, Edenbank. Its gardens, house, fields, and pasture, were carefully attended in accordance with the precepts of the pastoral, and was a source of pride that extended beyond the Wells family. When advertising the advantages of the valley to prospective farmers, the Wells land was always used as the model.

Another leading citizen, William Hall, was a Royal Engineer corporal who retired to take up 150 acres of land in the Chilliwack Valley as a military

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5. Walter S. Harrington, *op.cit.*, p.242: "The town itself presents the appearance of a circle of houses with the town-hall as a centre. It is a British town, being a beautiful mixture of..."
6. ibid. chapter twelve.
grant for service during the five years with the government of British Columbia colony. The extensive activity of Hall in contributing to the development of the B.C. infrastructure is included under the Royal Engineers chapter. In addition to their pragmatic approach to making the country available for settlement, the Royal Engineers were infused with an appreciation of the sublime grandeur of the landscape they encountered. The numerous descriptions and paintings of the primitive landscape testify to this. They were possessed with a complex set of values — for while they could survey cartesian geometry for roads and lots, they could also appreciate the purely natural and they introduced park planning to the province.

The decision of Hall (and his four sons and three daughters) to settle in Chilliwack, given his knowledge of environmental conditions in the province, provided a model for the newcomers to follow. Hall laid out his land in a square block in the forest in lieu of indications from the surveyor general otherwise, and set about clearing the land for a farm.

Farms were located at first by the most favourable conditions for success and later by necessity. The preferred locations were ones close the the river landings (but not perpendicular to the flooding river as on the St. Lawrence), or failing that, on the "road" connecting Yale and Langley. A major criterion was also that of building close to an existing prairie and another was selecting dry land. Close to the ideal site was the property Hall chose, a timbered high point between Atchelitz Creek, a beaver pond, and a marsh, about one and one half miles west of Chilliwyook River. Approximately one half was prairie land.

7. William Hall to Hon. K.N. Birch, May 22, 1865: letter and map of location
8. Woodward, op.cit., p.7: at Sapperton: "as early as the summer of 1859, attractive walks had been laid out and flowers bloomed from newly planted beds."; and this was done by the same men who put in exceedingly long and tiring days in coping with the elemental landscape.
9. Note that a relative, W.M. Hall wrote one of the first theses on the R.E.: "The Royal Engineers in B.C., 1858-1863", B.C. (History), U.B.C., 1925.
10. William Hall to Hon. J.W. Trutch, October 12, 1868.
It lay on both sides of the Yale road. The Halls very soon had neighbours.

Hall was not the only former Royal Engineer to contribute to the transformation and "improvement" of the valley. Several of his colleagues settled near by. Also, many established private business in the colony and often journeyed to the Chilliwack area. For instance, Peter Leech returned in 1866 as a successful land surveyor to map out several farms in the valley. John Maclure, a retired R.E. surveyor held several posts that influenced the development of the valley. In 1865 as superintendent of the Collins Overland Telegraph, John Maclure put the first telegraph line through the valley; this path became known as Telegraph Trail and later was incorporated into the improved Yale road.

Although the preliminary surveys of the Royal Engineers had left some degree of definition of a grid, there was only slight conformity to it. Environmental conditions forced close attention to be paid to nature's irregularities. The haphazard order also was characteristic of the "road" system. Most were adapted Indian trails, slightly improved wherever soggy ground was met to be able to pass by horse and sled, and later by horse and cart, to Miller's, Sumas or Chilliwack Landings with the harvest. They also were developed to facilitate visiting.

Because of the difficulties with the overland transport boat landings became the most important link with the outside world. This first public transit system of the Province connected all the landings of the Lower Fraser River with New Westminster, and thence the world. Newspapers, books, settlers, imports, exports, all were transported on the sleek river steamers. The romance of

11. ibid., note the parental pride in the letter regarding his four sons and their potential contribution to improving the valley.
12. Peter Leach to Chief Commissioner, April 29, 1866.
Figure 38a
Chilliwack River Road circa 1880
(from Chilliwack Historical Society)

Figure #39a
Country lane, Chilliwack, Circa 1890
(from Chilliwack Historical Society).
these side and stern paddlewheelers gliding through the forest-surrounded river added a degree of calm excitement that something heroic was occurring. This was more than transportation.

The ethics of transforming the land to a new landscape were not by any means as simplistic as we have been led to believe. Here was a countryside with almost a primeval quality that was about to be adapted and humanized. By this time the three principles underlying mankind's relationship with nature, as put forth by Collingwood, had been formulated. Even though these were simple people, without theoretical cognition to be able to fully understand their key position in the continuum, they were conditioned in the expectations of civilization to be able to function with relative sophistication. Many were well travelled, well educated and well read, and were aware of the environmental discussions of the day. Although they may only have been aware of the surface aphorisms, a full analysis of the whole range of environmental values of any decade of the key 19th century colonists would take several dissertations.

They did not just go into the forest and start cutting trees wilfully, but they did cut trees. The extensive amount of land covered by forests made the slight amount taken by the pioneers for their clearings seem like the proverbial grain of sand on a beach. Here were men and women struggling with divine order to create a place for themselves and their children's children. This was a landscape that had only seen serious modifications by earthquake, flood, geosyncline trauma, and lightning induced fire. The frailty of the human condition in contrast with the power of these gods, in trying to humanize the natural, must be seen, not in terms of the technological prowess of the contemporary "superman", but in terms of the limitations of the pioneers. It was an absurd proposition that people should sail half way round the world to try their hand at taming such inhospitable wilderness. They might just as well have walked into a lion's mouth as sail up the Fraser's tongue.
All they had were two hands and a tool box. The latter had only the simplest of equipment such as rope, axe, cross-bow saw, chisel, hammer, wedge, and sledge, and the basis of Cartesian order — a measure and a level. This was an age when a man's hands had direct control of the tools used for the modification. There was a natural sense of scale and order and place to the alterations that were made to the clearings; these made the act of civilizing a landscape seem ennobling and ultimately correct.

The 20th century technological revolution intensified man's ability to modify — in place of human hands guiding the tools of land alteration, mechanized and even automated tools came to be used. This factor, together with the tremendous increase in the rate of alteration, changed significantly the ethics of land alteration. For instance, agribusiness' goal is to become so mechanized that the farmer's hands would not even require to be soiled. Such "improvers" of the natural landscape have recently been questioned by a revised set of ethics known as the ecological movement. Alteration came to be seen as a negative value, something the public seeks to constantly limit and control through legislation and human political punch. However, the 19th century colonists of the Chilliwack Valley must be seen in terms of their own ethics. That landscape was altered with arms, legs, brains and determination — and not much more.

There were right and wrong ways of proceeding to bring the land to bay. The proper procedure for clearing the forest was as follows: cut and stack in a large pile all the underbrush; fell each tree; trim the slash and saw the log into moveable sections and pile into large stacks for burning; and on a windless day the pile could be burned and reduced to ashes. The next stage involved draining, controlling streams, piling rocks, and plowing the fertile land to be able to sow the first crop. It is now a shock to learn that so much of the finest timber in the world was squandered; but here again, one must understand the realities of the situation. There were few mills to take the timber for
processing and the land had to be cleared if a family was to survive. It should be remembered that lightning took more per year than the forestry practices of 19th century colonists. 13a

However some of the timber was used. Boughs were cut for beds, logs were cut and split for firewood, and timber was fabricated into log houses and rail fences around the cleared property. It was not until the late 1880's that timber began to be sent as a cash crop to the various mills along the Fraser and False Creek. Stumps were pulled with teams of horses or oxen or burnt with individually placed fires around the roots; the ones that resisted were left in place for time to rot. A combination of insects, exposed grain to weathering and periodic blows by a frustrated farmer hastened the day when the stump would be reduced to a mound of coloured earth to be ploughed into oblivion. With a modest amount of effort after the initial clearing, a cedar stump could rot within a few years.

That was the sociable method of clearing the land. The unsociable method was to set fires and burn the standing timber, without the effort of cutting and piling to control the procedure. This method was extremely dangerous, for even if a firebreak was made, it could easily spread beyond one man's property; the prospect of destroying the hard won efforts of a neighbour's crops, barn, and cabin as well as threatening their lives made this method unacceptable for anyone who intended to settle permanently. The other disadvantage was that the fire scorched the land and incinerated the microorganisms in the soil to greatly reduce the fertility of the land. All factors considered, it was an unwise procedure. It was one, though, that had been used on other parts of the continent. "Horror" stories of rural 19th century Ontario describe the unfortunate effects of the frequent use of fire to clear. 14 Perhaps because of the surrounding

14. Guillet, op.cit., vol.1: this work has the best description of correct and incorrect rural practices in Canada, and easily applies to Chilliwack.
13a. For a history of Chilliwack forestry, refer to a tape in the possession of the Chilliwack Archives: Lyle Mackin, "History of Logging in the Valley", introduced by Judge A.M. Guinet, circa 1960.
mountain "walls", Chilliwack pioneers had a strong sense of community from the first, and very few used the unsociable technique in clearing their land.

The feeling of accomplishment after the exhausting work and lengthy time involved in removing a small stand of trees was that of security; each bit of land cleared meant more crops could be planted and an improved standard of living. Although the log cabins and rustic life experienced by the colonists had a romance that today's generation regard as desirable, the reality was that life was tenuous, cold, damp and difficult. The pioneers valued the comforts their hard work could bring. The books and furniture from the old country made the isolation and struggle worthwhile. Their aspiration was that their great grand-children would be able to enjoy all the material comforts and educational leisure that they could not have.

Astringency may also be said to have been one of the emotions connected with clearing, for more than the security engendered by the increasing ability to utilize one's land, there was an aesthetic pride in the order that was brought out of the wilderness. The forest was cleared, streams and ponds were channelled or drained, and each family's land came to reflect to some degree the magic of the pastoral countryside of the origins. In the adaptation, they were reliving to some extent the same pioneer spirit that had created the British countryside.15

The environmental values of the pioneers were a complicated phenomenon. One of the significant factors was that the settlement was made after Darwinian

15. Godwin, op.cit., pp.10-11: "At the end of twenty years, there were ten families gnawing the edge of the bush, the ring of axes sounded across the silent river, the stillness of the forest was broken by the thunder of falling timber. Small geometric gaps appeared at the fringe of the bush, shrill greens of little fields stood out from the setting of sombre evergreens, giant conifers. Log cabins, set in tiny gardens sent into the still air spirals of blue smoke; the sound of children's laughter and of children's crying broke the stillness of the bush."..."Since then, through the years, the timber, silent, inscrutable, mysterious, has accepted its fate; rededing like a tide from the river-bank, leaving in its wake patches of green or rich brown loam, cabins, barns, woodsheds, smoke-houses, forever emitting columns of white smoke."
theory had revolutionized the perception of the human continuum.\textsuperscript{16} These colonists were aware that the primeval landscape they were walking into was a larger part of the life chain than was ever before imagined. Many of the early settlers were amateur botanists and zoologists who delighted in exploring the valley for specimens. In the pre-television society, the inhabitants had to create their own diversion and conversation. Some of the surviving collections of these ornithologists and botanists are displayed in the Chilliwack Museum. Darwinian theory enabled the colonists to fully appreciate the fossils they found\textsuperscript{17} and the forest in which they found themselves.\textsuperscript{18}

Also complicating the understanding of the landscape was the influence of the aesthetics of land discussed under Chapter III.B, in all its aspects. For instance there was the love of plants and gardens with civilized qualities -- orchards, herbs, flowers and turf. All the old world favourites were transferred to the valley. The rainforest was removed and replaced with a "better" nature. But at the same time, the pioneers had a love for the wildness of their natural environment. They regarded the whole valley as a park and spent leisure hours

\textsuperscript{16} Glacken, op.cit., (1970), pp.178-180: "In Darwinian evolutionary theory, interrelationships in the world of inanimate and animate nature also existed long before the coming of man. It was thought that, barring world-wide catastrophies, this world of nature tends toward a balance or equilibrium... It provided a concept of nature which would serve as a rough guide for interpreting the extent and character of human modification of the natural world...In such a philosophy of interrelationships and interconnectedness in nature, human modifications of the environment are not discrete, single, unrelated events, but intrusions in a network of interrelationships. It is true that such interrelationships did not have to await the Darwinian concept... from the late 17th century to the publication of \textit{On the Origin of the Species}, there has been a sustained interest in these interrelationships -- in what we now call ecology."

\textsuperscript{17} The writer's experience as a child in Chilliwack's valley was that of hunting for fossils -- from those he learned of the universal continuum.

\textsuperscript{18} Godwin, op.cit., pp.78-79: "The forest is a vast cathedral of many aisles, whose pillars are those giant trees that soar straight up with interlocking branches. Yes, a Gothic cathedral, more splendid than any made by man, are these silent groves of splattered shadows; these groves that were God's first temples." Refer also to p.79: "The sun moves across the sky, blessing the land as it goes. The earth responds to the benediction: its incense rises from the humid forest whose floor is carpeted with flowers. That pungent smell of the bush! That first smell, which stirs in man the memory of lives lived a million years ago."
John Varley, "The Winding River" (Wales, 19th Century), Watercolour 8" x 15 1/4"
Permanent Collection, Vancouver Art Gallery.

Note similarity between Mount Snowden and Mount Baker.
enjoying the views, walks and streams. Word of the splendid recuperative qualities of the area spread and soon tourists from Europe came to share the natural beauty. The Romantics had a field day in describing the place, not only in words but also in paintings and watercolours.

The character of the altered landscape became humanized as well. First in discussing the mnemonics moulding the pastoral, was the fencing surrounding the fields. These served three purposes: to keep livestock grazing within, to define the property boundaries, and to proclaim to the subconscious of the pioneer that he indeed had arrived. They were not obtrusive to the eye, for they were built of split cedar in a light rail pattern, less than six feet high; one could see right through easily. There were as many designs for the fences as there were farmers to build them. The five major groupings included: post and rail, snake rail, log, russell, and stake and rider. Gates, cattle crossings, stiles, undulating checkerboard fences, hedgerows, and specimen trees retained, all helped to present the opening statements of the pastoral dream.

19. ibid., pp.215-216: "There were days when the bush was benevolent, filled with transparencies, and patterned with shafts of golden sunlight. Then he would sit on a rotten log and watch the life of the forest. Chipmunks racing with jerky movements up the rugged barks of trees, gripping the bark with sharp claws. The steady tap-tap of a solemn mottled woodpecker. The minute sounds that came from the ground if you put your ear to it. The sound of bracken moving, of bushes stirring, of bent twigs releasing themselves; and above, now and then, the slow sigh of the roof of the forest, stirred by the sluggish breeze."


21. Godwin, op.cit., pp.38-39: "They heard the wind stir through the bush, and saw the valley shudder into shadow, the trees dripped with water that had not fallen as rain, and the tangle undergrowth soaked the newcomer as he worked; the humid earth squelched under his heavy boots; the branches of the trees wiped wet fingers across his face. The forest trembled ecstatically at the rain's touch, glistened like a polished stone, and a million jewels winked from the gloom. From the ground, the humid swell of the aged earth, evocative, eerie, came to the worker's nostrils, the odour of death and decay, cleansed by aeons of time...So the sounds of the forest grew, and swelled to a passionate thrumming. He looked up and saw a stable canopy descend, slowly, like the drop curtain of a fabulous theatre. Night fell, and the forest fled into its inscrutable heart. It became a voice calling from the darkness that was the death and end of light, the gloom of uncreated worlds."

Figure #41
Split Cedar Rail Fence

Figure #42
Farm, Agassiz
Removal of the forest provided the substance for building the first shelters of the colonists: log cabins. Chilliwack men prided themselves on their ability to craft these shelters. These were not rough, crude dwellings for temporary quarters; rather the logs were hewn by broad axe and each corner was carefully interlocked with dovetail joints. The gaps were filled with moss and lichen inside, and caulked with clay mixture outside. The roof was fashioned from saplings for rafters and hand split cedar shakes positioned. The fireplace was made from creek rock with a large hearth to provide the only source of warmth, light and cooking. Windows were cut in the logs and covered with oilskins; when there was enough money, frames were built and glass panes from Britain were carefully positioned. The shelter was then left to the elements to gradually apply a silver patina to the cedar.23

Yet in spite of the great care that was taken to give the neatest lines to the cabins that could possibly be managed, the cabins were not loved. They were surrogates for the dream each family had on commencing the journey to British Columbia. Log cabins were temporary, were too coarse and lacked the amenities expected of a civilized people. Every effort was made to take away from the roughness of the cabins, such as finishing the interiors with boarding and wallpaper and covering the outside with milled siding, but the cabins were rejected as soon as there was enough time and money to build a frame house from milled lumber. It usually took several years, but eventually the dream house was built on a special part of each family's acreage. They were substantial houses, large enough to hold a brood of children with plenty of space to spare, but also of lean proportions that spoke of the hardships endured to be able to have the reward.

The interiors had exotic woods such as mahogany and teak, imported from around the world. British Columbians assessed the rest of the world as

culturally superior, giving imported wood higher status than the plentiful cedar and fir that surrounded them. Furniture was imported as well to make the house more comfortable. Many stories have been told of the colonists awaiting the arrival of a piano from the old country for it was the ultimate expression of success.

House design was of wood frame construction, usually of two stories, and box-like. The design was inspired by rural Ontario homes, which were reminiscent of Georgian countryhouses of New England and Britain. The box was embellished with verandas and fretwork and rooms were added onto the house. Gothic revival was also popular. Around the house were carefully tended gardens with lawn and fenced areas. Ornamental shade trees were planted to add flavour to the rural myth. The houses were usually painted off-white, as a sharp contrast to the landscape and as a sharp contrast with their earlier cabin. Emphasis was on freshness, clarity and refinement; these were not "country hicks", but ambitious people with one hand in the soil to ensure a bountiful harvest and the other in every civilizing force that could be transported to this forsaken part of the new world. Cultural continuity is a key to understanding the values of the pioneers.

Barns were amongst the first buildings to be constructed. They made as striking an impact on the early landscape in the 19th century as the remnants do today. Frequently the old cabins were converted to storage sheds or room for a hired hand. In spite of the steady effort to tame the valley's farming area, it remained a frontier landscape for two generations.

24. Sandilands; op.cit., p.63: "In their symmetrical front walls these houses seem less practically determined, as the interiors are not symmetrical, than they do by a particular synthetic and orderly image of the house in the frontier landscape that their builders have envisaged."

25. Sandilands, op.cit.: there are constant references to people building the exact replica of their childhood home and furnishing it with heirlooms.
The farms, the settlers nestled into the valley, were productive beyond belief. The first crops produced on the land had the benefit of the millennia stored fertility of one of the world's most fecund earth. There was no need for fertilizers, save the flops of the teams used in ploughing. By 1866, 4,600 acres had been pre-empted in the valley (about 30 farms of 160 acres). The few clearings that had been made in the forest yielded 12,000 bu. of grain, 800 tons of hay, 5,000 bu. of potatoes, 3,000 bu. turnips and supported 700 head of cattle which were used for meat and dairy products. The instant riches creamed off the gold rush trade by Reece and company for supplying essentials were gone, but there were still enough pioneer merchants, businessmen and miners in the colony and on Vancouver Island to make expansion of clearings profitable. The valley was the breadbasket of British Columbia.

Other than hard work, and earthquakes, and rain, the only disagreeable aspect of early life in the valley was the flooding. The early spring thaw on the local mountains swelled the tributaries and creeks causing the fields to be coated in water, but the real danger was the May-June freshet that saw the Fraser rise to overflow its banks. In a bad year, such as 1876, the flood plain would be five miles wide. The pioneers had a good rapport with the Stalo Indians and so were warned well in advance when the flooding would take place and how high to expect the water to rise. None of the farms were safe. If it was not to be a particularly fierce year, the settlers would gather together their furniture and belongings, store them on the second floor of the house and move the livestock and harvest to high ground. The Sandilands report on early architecture omits one of the more revealing

26. Winter, op.cit., (1968), p.106: "The lowlands in which they settled, about 40,000 acres in extent, were not timbered and were therefore easily developed." An example of the misunderstanding of the valley's ecology that should be corrected -- only a few hundred acres at most were natural prairies.
27. White, op.cit., chapters 3 & 4; refer also to Winter, op.cit., p.106.
28. There was a series of tremors along the whole West Coast, including the 1827 first recorded, 1872, and the San Francisco quake. Relatively little damage was caused because of the sparse settlement.
Figure #43
Flood at Chilliwack circa 1894

Figure #44
Winter, Chilliwack circa 1898

Figure #45
Chilliwack Landing circa 1890
rationale for many of the second storey doors that led to small balconies or just to roofs. In fact, these were included in the design not for enjoyment, but for the purpose of providing a landing to depart from when the water got too high. Such a local twist to the rather standard design of the house gave the pioneers a strong sense of environmental adaptation and identity. The sense of security of this second floor "dock" was apparently a source of amusement that made life between the floods much easier to bear. 29 When the year's work had been either carried away or buried in a layer of thick, oozing mud and the damage to the house and barn had to be repaired, the pioneers were in need of every bit of humour.

There were few words of complaint and there certainly was no social welfare, unemployment benefit, workmen's compensation, hospital insurance, or televised trivia. What they did have was an opportunity few will ever again have on this planet: to experience the transformation of a wilderness into a settlement. This capacity to humanize a landscape was regarded as one of the miracles that brought man closer to the universal force.

2. Township Established:

The most remarkable feature of the colonization of the valley was the desire of the settlers to pull together in utilizing the resources of the valley. They were a mixed lot, arriving at this place like a group of theatre goers on first night (except that they were the performers as well). A few were friends or relatives who arrived together, or were encouraged to join in the great adventure later; but most were strangers to one another.

Reading their accounts, a recurring theme is that of cooperation and friendship in most matters. Why this is so is not easily explained. In other frontiers settled about the same time, even where there was a similar degree of

29. Heather Roberts, recollections of her grandfather's home.
propinquity, there was little encouragement to cooperate. The western ethic south of the border was typically for each family to remain, more or less, isolated on their farmstead -- the epitomy of the individualist in action. Neither was there the desperate loneliness of families isolated as in other parts of frontier Canada caused by the vast distances. Instead in Chilliwack people came together with a remarkable frequency. They helped each other harvest, held "bees" to make quilts and preserves, and for barn-raisings and house-raisings, and soon cooperated in the marketing of their products. They helped each other in times of illness, accident or flood. They gathered to have socials and dances and picnics. They gathered as friends to discuss religion, politics, farming, or nature. They went on outings together to climb Mount Cheam, to fish in Chilliwack River, or to wander through the park-like setting of their valley. They had to gather at the Landings to take produce to New Westminster, but they did not have to be so downright sociable about the whole journey.

It was a family community with emphasis on prosperous countryside farms, the sort they left behind in Ontario or Britain. It was not the typical frontier western town (as per Hollywood) with cowboy studs and fast women running wild in the local syndicated "Longbranch". The miners had moved onto other gold strikes, and burly loggers did not come out of the woods for a one night stand. The farmers were a tough breed of teetotalers who would not permit even the slightest chance of lawlessness. The Hudson's Bay Company rules regarding liquor were retained: no sales and no bars. It was the only thing dry about the valley.

30. Carl O. Sauer, Man, Space and Environment, op.cit., p.23: of the American west - "dispersed living, the isolated family home, became most characteristic of the 'Northern' folk on the frontier. In Europe, nearly everyone had lived in a village, or a town; in this country, the rural village disappeared or never existed; our farmers lived in the 'country' and went to 'town' on business or pleasure.
31. Such poems as Robert Service's The Shooting of Dangerous Dan McCrue: "a bunch of the boys were whooping it up..."were not inspired by this part of B.C.
32. Gibbard, op.cit., p.224: "one result of this Methodist dominance was that until well into the present century no one was able to secure a license to sell intoxicants."
The strict moral code enforced by each resident made rowdy newcomers quickly move on; but there were few of those. Indigent or troublesome people had no incentive to drift into British Columbia — they were discouraged by the cold, wet and unpleasant climate. Chilliwack didn't have to hire a permanent police force until the turn of the century. 33

These people were just plain folk who took pride in their home, farm, friends and what they were creating. They were not perfect, it was just that prowling was glossed over with Victorian respectability; but they were as close to altruistic as will be seen again on this land. They stressed the need for a civilized society, and they did so even when there was only a handful of people. Why this was so may have been due in part to the environment; that is, to the enclosing presence of the mountains that gave a sense of confinement and instinctively brought people together to cooperate with making the best of the limitations of the place.

One of the first considerations in the use of the land was the allocation of common land. About 600 acres was reserved on Chilliwack Mountain. Common land was a typical feature of the British countryside. It was a complex system stemming from about 1400 years of continual use. This was the common law origins of the concept of the public domain in the use of land. In North America, common land was originally laid out for the same shared purposes of grazing, recreation, etc. as had grown from the medieval practice; however by the 19th century changing economic conditions made the land more practically used for supplying an income for public services and schools. The land was either leased to a farmer or woodsman or it was sold. With the introduction of taxation, the remaining common land became public parkland. The first reference to the common land on Chilliwack Mountain was on the 1868 map prepared by G. Turner during the first general survey of the Lower Fraser Valley for the Department of Lands

33. A.C. Wells was Justice of Peace.
and Works of the Crown Colony. By the turn of the century it had disappeared from the maps, so presumably it had been sold by the town fathers to assist with the school system.

Cooperation among the farmers was the first thing to be institutionalized, with the formation of the Farmers Association in 1870. In 1873 this became the Chilliwack Agricultural Association. The first annual fall fair was held in 1874 and gave an opportunity to gather together the best produce of the farmers for competition and comparison. It became a source of discussion of ways of improving quality and yield by various innovative techniques adapted for the local conditions. Each year Chilliwack entered the Fraser Valley fair held at New Westminster and regularly walked away with the largest share of the awards for excellence.

In 1871 the Chilliwack-Sumas School Board was formed to oversee the education of the young. A school was built at Sumas Landing and then two years later one was built at Chilliwack Landing. A school master and a school mistress were retained. Subjects taught at the one room school houses were designed to prepare youth to deal with the outside world and with the constantly arriving new settlers. Reading, writing and arithmetic were taught.

The pioneers were conscious of the probable success of their efforts and there was a naive joy in becoming the founders of the various organizations and institutions that the community would require. After British Columbia joined Confederation, there were changes in the municipal acts which permitted incorporation of townships. Langley and Chilliwack were the first to do so. Subjects discussed by the new council centred around road improvement. For years private citizens had written and cajoled the Department of Lands and Works to try to get the roads made at least passable to take crops to the various landings.

34. Hall to Hon. Trutch, Feb. 28, 1870; Trutch to Hall, Dec.23, 1870; and Hall to Trutch, Dec. 14, 1870: the Telegraph trail — "a sleigh cannot go on it, its a hard struggle to get a single horse through it, there is danger of breaking its legs and when it rains the horse will nearly mire with a rider on his back going over a part of the Chilliwack prairie, and then you have to..."
The council had more weight; they were able to obtain assistance from the Provincial treasury and the local residents supplemented it with their own levy and with obligatory road work. They were repeating the same task their Elizabethan ancestors had been faced with, and solved it in an almost identical fashion.  

The municipal boundaries chosen reflect the absurdity of Cartesian adherence to the geodetic grid survey system. Although the Fraser served as the northern boundary, and Sumas Lake provided the western boundary, the east and south boundaries were determined not by the mountainous terrain, but by the relationship with the meridian. It was the antithesis of the Stalo territorial system. Several alterations would be made in the boundaries over the years, but the basic outline held.

For the first decade of colonization the settlement proceeded without the nucleus that Moody had wanted to build. Several villages sprang up, chiefly on the river; Miller's Landing, Sumas Landing, and Chilliwack Landing, but a few also began appearing inland. The landings were the local centres. Services such as a post office, general store, blacksmith, hotel, and dock, as well as the schools, were clustered at the landings. The transitional condition of the settlement did not require a market town centre.

One of the most important influences on the civilized conduct of the valley was the church. The Methodists arrived first (their church board in 1866) and by 1869 had constructed their first church and provided an income for a resident minister. This church at Atchelitz was an important source of community involvement and of spiritual comfort to the people so far from their former society.

35. Gibbard, op.cit., pp.239-240: Provincial government grant of $2,000. obtained for improvement of roads and another $2,000. for a bridge over the Chilliwack River.
In 1873, the Anglicans decided to construct their own church, and accordingly a petition was sent to the Bishop. It was decided to relocate the small church at the now ghost town of Douglas at the northern end of Harrison Lake in the Chilliwack area. Bishop Hills visited the area and chose a site on the slightly high ground intersected by a survey path through the woods (Royal Engineers) and the road to Yale. A small trail led from the Chilliwack Landing to the Yale road, and so on the south-west side of this trail (Wellington Avenue) and the side defined by the road to Yale, one acre of land was donated for the church close. Six canoes, lashed together, brought the church down from Douglas and it was consecrated 'St. Thomas'.

The presence of this church served as a catalyst to build the nucleus settlement of the valley. The one acre green, together with the church, sparked recollections of all those villages and market towns back home. Within a year Five Corners had appeared with businesses, blacksmith and public buildings all clustered around the green. As the roads improved and traffic on the Yale road increased, more people clustered there; so many that the businesses and services at Chilliwack landing were forced to close their doors and move the mile to the centre.

Enthusiasm for the process of settlement led to every sort of enticement. Letters were written back home to encourage friends and relatives to join, books were written to give an allurement of incredibly fertile soil, and the various levels of government were persuaded to foster immigration. The

36. Rogers, et.al., p.4.
37. Ramsey, op.cit., refer also to Gibbard, op.cit., p.245, who got the date of the church's location confused at 1882.
38. J. Despard Pemberton, Facts and Figures Relating to Vancouver Island and British Columbia Showing What to Expect and How to Get There, p.51: "The soil where it is richest, in the river deltas, the valleys and the plains, usually consists of black vegetable mould, six inches to three feet in depth, overlaying a deep substratum of clay, gravel, or sand; it is generally covered with a luxuriant crop of fern, which is very difficult to kill and tedious to eradicate."
pioneers did not wish to be alone in this isolated splendor. They wanted the benefits of a civilized landscape that could only be had if there were more people. The idea of a continuous settlement from one end of the Lower Fraser Valley to the other was a dazzling possibility that the 19th century pioneers desired. All their problems of poor roads, inadequate cultural facilities and uncertain farm prices would be solved only if people could be convinced to come. Pamphlets were issued, local organizations were formed and real estate agents were pushed to find ever more people.

Their idea was to have a capital city and Pacific port at New Westminster, together with a hierarchial settlement pattern of market towns and villages scattered throughout the Lower Mainland. The basis for the settlement would be the farmland of a prosperous countryside in the mould of the British myth. The problem was that each generation's expectations altered slightly until the vision of settlement from one end of the Lower Fraser Valley to the other meant an urban megalopolis. The nightmares we now have over the prospect of such massive urbanization have their roots in the aspirations of these first pioneers. For over a century the message that had been transmitted of more, more, more, continued. The pioneer vision set goals with definite limits, but in the scramble for the post war "good life", those limits were forgotten. The pioneers would be shocked to see how their aspirations have been abused.

3. Decline of the Stalo:

The settlers could have arrived and assimilated the ways of the existing culture; they could have adopted Stalo customs and technology since it was more environmentally suitable, but they did not. Instead they remained connected to what they unquestioningly believed to be a superior life, both morally and

39. Gibbard, op.cit., p.216: "In the spring of 1863 the editor of the British Columbian had begun to hope that ere long the banks of the river would be one continous settlement from the Harrison to the Gulf, for already there were some 250 farms already under cultivation."
mATERially, and the intensity of the newcomer's conceptual landscape was powerful. The Stalo people, who had evolved for eight thousand years one of the most environmentally sensitive cultures in the world, collapsed under the gentle persuasion that a superior people had arrived.

Relations between the Stalo and the settlers were inordinately friendly. The tribes had been wisely granted equitable land settlements and did not feel as hostile towards the invasion as in other parts of the continent. Instead of the Washington State massacres, the Chilliwac offered environmental advice to help their new neighbours adapt to the landscape. Many pioneer Chilliwack families owe their start to the Indians' good will. For their part, the pioneers were careful to be fair and open with the Stalo. In keeping with this spirit is the following ballad written by a present day Chilliwack resident:

_Ceremony of the First Fish_

Before the time when White Men came
The *STAW-loh fish were free;
A gift that great *chee-ch-ihtsee-AHM
Had sent from *KWAT-kwah-sea.

From early Spring 'till late each Fall,
For centuries untold,
The salmon came for *STAW-loh tribes, -
More precious far than gold!

And in the Spring of ev'ry year,
Along the *STAW-loh strand
The FIRST of that year's run was speared
By every village band.

And then the great *chee-chit-see-AHM
Was thanked by everyone
For sending once again, for food,
The *STAW-loh salmon run.

© Casey Wells
Under the reserve system initiated by Governor Douglas, all land surrounding existing villages was set aside in perpetuity for the exclusive use of the Stalo. Adequate land was provided for each band member to have a farm. The terms were amongst the most reasonable that any aboriginal population had had. The effect of this reserve system on the future shape of the township would be considerable. When one considers that the valley had only been the home of the Upper Stalo since 1827, the reserves did not seem quite as confining as might otherwise have been the case.

The newcomers were helpful in providing for the assimilation and medical treatment of the Stalo, and so received tacit acceptance in the new ways. For all the friendliness and good will the combination of disease and cultural shock continued to overwhelm the Salish, and they began a decline that has only recently been reversed.

Why were the Stalo such pushovers? One factor might have been that their temporal sense of time and pitifully limited oral traditions inhibited the ability to understand the importance of small events in the flow of history. The lack of a written language tended to obliterate all but a very few occurrences.

40. Duff, The Impact of White Man, p.61: "All cause for discontent would be removed if he gave the Indians as much land as they requested" and he wanted to keep them as close to white civilization as possible for the benefits of contact. Also 10 acres was all they usually wanted.
41. H. Edmeston, ed., The Coqualeetza Story, 1886-1956. The Coqualeetza was established in 1886 by Rev. and Mrs. Charles Montgomery Tate in their own home.
42. Duff, op.cit., pp.37 & 44.
43. Wilson Duff, op.cit., pp.12-13: "In social and religious life, few links with the past remain. More than a century of intensive white contact, including the disruptive gold-rush of 1858, which was followed by early and persistent missionary endeavour, has left its mark. One result, for example, is that the Upper Stalo area is one of the few Coast Salish areas where spirit dancing has come to a virtual halt"; In the late 1960's spirit dancing was revived as a part of the resurgence of native interest in their heritage: refer to Wolfgang G. Jilek, Salish Indian Mental Health and Cultural Change. Some of the other signs that the culture is to be retained are the annual canoe races on the Fraser River and the races on Cultus Lake.
extending back a century or two. Legends are fine if people know what to do with them, but the West Coast Indians tended to use theirs as a justification for a continually atrophied society. They failed to recognize the impact the pioneers would have on their traditional life patterns. What would you expect from a people who talked to bears and cedar trees?

Another factor was the internal dissention that ripped the various tribes apart. The American Indian movement is only a recent phenomenon. Intertribal warfare along the coast was considered as normal as the rain. War parties were significant social tools to express territorality and dominance. Here was an instant way to prove manhood; slaves taken could be displayed as status objects; even cannibalism was practiced. Chilliwack was fair game. The Upper Stalo were under constant fear of being overpowered and butchered. Most of the West Coast and interior tribes didn't even know of each other's existence. The Haida and the Coastal Salish might as well have been separated by a continent. Even the Stalo tribes such as the Tait and the Musqueam rarely conversed, and if they did chances were fairly good they would squabble. For eight thousand years these people had inhabited the coast and for eight thousand years they had been warring. This, coupled with the fact of an impossible topography and a small population made the chances of a union remote. They were divided little clusters of uncommunicative people who only shared the same space and a roughly similar culture.

A third contributing factor to the decline of the Stalo was their isolationism. They were totally in the dark about the source of the foreign cultures that were being applied on top their conceptual landscape. They had never been

44. Refer to thesis Chapter 5, part B, section 3, footnotes #26 and 27.
to eastern Canada, let alone to Europe, and could not be expected to understand the implications of the new conceptual and areal landscape. The Hudson's Bay Co. had shared the same sort of naturalist values as the Indians, so they tended to generalize the attributes of the H.B.C. to all who came in peace. The arrival of a few settlers who had the stupidity of working day and night to clear the land of all its natural wealth to plant tiny seeds in geometric rows must have seemed unobtrusive and harmless enough. It probably was the source of uproarious laughter at potlatches.

Their experience suggested that the subjects of Victoria were valuable contributors to their society. The Hudson's Bay Company had brought peace, security and a storehouse full of useful goods. The technological advance engendered by the Hudson's Bay Co. had caused an explosion of cultural and economic wealth. Creativity was brought to a peak totally unimagined by previous generations. It is understandable that the Stalo believed more whites would add further stimulus to the cultural richness they had begun to enjoy.

It was not until they were outnumbered that the Indians recognized their fate, and the culture collapsed. What armies and navies could do only with an extraordinary commitment of resources (which Britain did not have), a benevolent policy of immigration succeeded with ease. The rage the Indians should have felt was turned inward, and each individual started to mutilate his cultural identity. Suicide was commonplace. Nothing is so effective a weapon as to convince an aboriginal population that they are inferior. To their credit, the pioneers helped (relative to other places in the world) to soften the devastating impact of the cultural shock.

45. Duff, op.cit. (1964), p.75: "Since a culture is an integrated whole, a change in one aspect produces indirect changes in others. And resistance can be overcome by strong enough pressures. In the situation which followed the onrush of white settlement, drastic cultural change was inevitable. The Indians, by choice, adopted many new forms, starting chain reactions of change within their own cultures. Added to that, forces in the dominant culture were applying strong pressures to destroy the old patterns and impose new ones."
A fifth contributing factor to the Stalo decline was the intrinsic limitation of the "primitive" culture. They were trapped. The cultural infrastructure had been pushed to its limits by the initial beneficial contact with whites. However, to take it to a level where they could respond as equals would require a total overhaul of the culture. There were five thousand years of civilization to catch up with -- it influenced the technology, the attitudes, the economic order, the legal and governmental system. The old culture had to curl up and die if the next generation was to have a chance to bridge the five thousand years. And that is what happened. 46

At the time the other great rivers of the world such as the Nile, Tigres-Euphrates, Yangtse, and Ganges, were generating higher order civilizations, the Fraser River people were locked into the stone age. Why? Many scholars have postulated the reasons for the successful growth of the great civilizations, but few have examined societies like the Stalo for cultural progression inhibitors. 47

Four factors may have been responsible. Each of the civilized rivers were nuclei of large regions, that served to draw people from out of the mountain highlands into the immensely wide fertile valleys. In contrast, the Stalo were isolated from the rest of the world and from each other by impenetrable mountains and by the ocean. The second factor was the limited amount of alluvial land for agriculture. Until about 1000 BC most of the alluvial soil in the Lower Fraser Valley had not yet been deposited. In terms of the area for farming available

46. Drucker, op.cit., chapter 11. Refer also to Duff, op.cit. (1964), p.75: "This particular period in history happened to find the British intolerant of cultural differences, prudish of morals, much impressed by their obvious superiority over the primitive races of the world, and bound with superhuman zeal to convert the heathen. The Indians, confused and sick, were no match for the men of massive courage and faith, massive theologies and massive churches who brought them Christianity. Humanitarianism is a British virtue, but it came to the Indians cloaked in the guise of unduly severe suppression of established customs."

47. Arnold Toynbee, A Study of History, chapters 11, 12, 14, 15 & 19 for discussion of the various factors necessary for the Promethean spark of civilized "progress"; refer also to Julian H. Steward, The Theory of Cultural Change, pp.30-42 for an anthropologist's viewpoint.
to the cultures emerging along the Nile, Tigres-Euphrates, Yangtse and Ganges, the Stalo offered almost negligible agricultural potentiality. The third factor may have been the lack of inter-area communication along the Fraser. One of the factors contributing to the rise of aboriginal Yale settlement was that there were impassable rapids above the canyon. This environmental fact led to the development of two separate cultures: the Coastal Salish and the Interior Salish. And fourthly, nature provided an abundant storehouse of resources that did not have to be cultivated. The people had only to harvest wisely. All of the great river civilizations faced a troublesome environment that required the application of ingenuity if the good life was to be enjoyed. If the land programmes were abandoned, the placed would revert to swamp or desert. Thus Chilliwack's nature provided little incentive to develop and refine survival technology in a place where all the requirements for human existence already existed.

The impression should not be given that the Pacific Northwest Coast Indians were a backward or culturally "primitive" lot. Rather, they had one of the most environmentally sensitive and from the 18th century AD, one of the most aesthetically rich societies the world has ever seen. As a model to influence future developments in the Canadian cultural mosaic, the Pacific Northwest Coast Indians must serve as a valuable beacon. Unfortunately, they must also serve as a constant warning to the Canadian future. For all their cultural richness, the indigenous people were incapable of withstanding the external influence, even when that external influence came practically unarmed and offering only a different set of cultural rules. The absence of a strong cultural identity capable of holding its own ground in the face of external pressures can and has had devastating results.

48. For instance, Creighton, op. cit., p.14: "The transition from the relatively sophisticated culture of the Pacific Coast to the primitive simplicity of the western prairies was like a prolonged retreat through thousands of years of prehistoric time."; the aesthetic community is even more appreciative of the significance of West Coast creativity in the history of mankind.
Figure #46
Chief William Sepass and Family
(from Provincial Archives)

Figure #47
Bridal Veil Falls
E. Post Confederation Speculation (1886-1918)

1. Urban Hierarchies in the Lower Mainland:

The arrival of the C.P.R. in 1886 gave the pioneers' morale a boost, for at last they were connected with the outside world on a regular basis. Every day trains would come to link British Columbia with the rest of Canada and with Britain. Isolation of the valley was ended. The effect of the increased communication with the outside world was a tremendous increase in the amount of external influence exercised on the valley's landscape.

The immediate effect was confined to the north side of the Fraser River. A station stop was built at Agassiz to service the whole area (including a ferry from Minto Landing to Harrison Mills), but the major impact had to wait a few years. All attention was focussed upon the railway's terminus, the new town of Vancouver. By the end of 1891 the town had mushroomed from a handful of characters in the villages of Hastings, Granville and "Gastown" to a city of 13,685 people. The growth rate in the next decade saw about a 1000% increase, and despite the 1913 depression, the overall growth rate continued to climb at the rapid rate. The net effect of this metro activity was to create an atmosphere of confidence in the Chilliwack Valley that here would be a market for their produce and a source of additional residents. Real estate promoters and the local Board of Trade increased their campaign to attract settlers up the Fraser from the metro area.

The effect of the C.P.R. boom town was to create a system of "urban" hierarchies throughout the Lower Mainland as more migrants came to be dispersed throughout the region. There were six centre orders roughly equated to hamlets, villages, towns, market towns, regional centres, and the metro nucleus. Chilliwack

49. Morley, op.cit.
Figure #48
Fraser Canyon with C.P. Rail Route

Figure #49
C.P.R. Tunnel near Yale
Figure #50
Waterfront, New Westminster, circa 1897
(from Provincial Archives)

Figure #51
New Westminster, After 1898 Fire
(from Provincial Archives)
flourished in the years following 1886 and quickly gained prominence as the main third order centre in the eastern end of the Lower Fraser Valley. It is a position which Chilliwack has always retained. 51

2. Chilliwack as a Countryside:

Farming as an enterprise and a proud way of life continued to be the dominant ethic applied to humanize the valley's landscape throughout this period. The problems with clearing land and with controlling flood conditions also continued to be the main obstacle to harvesting, but by 1910 most of the valley's flood plain was removed from the primeval state. That was the year of the arrival of the British Columbia Electric Railway and systematic logging.

Settlement moved from the relatively dry western half of the valley onto the marshes and woods of East Chilliwack. Much of the clearing was done by individual farmers in the manner of the pioneers, but they were given assistance in the problem of drainage by collectively engaging, in 1900, the dredging and dyking firm of McLean Brothers to channel and drain all but the annual freshet. This former Ontario firm was responsible for most of the projects of land reclamation in the Lower Fraser Valley prior to the government scheme of 1948. The presence of dry land gave a great stimulus to settle this part of the valley.

In general, the campaign to attract settlers to the valley continued with phenomenal success. Pamphlets were issued, agents were instructed to corral prospective settlers and put them on the river steamer for the valley, and every settlement promotion for the Province included glowing words about the valley's natural resources. 52 Obtaining the B.C.E.R. was the final action that ensured the farms would all be filled. The farm community of Chilliwack thereafter had access to the stable or growing market of the metro region, and

52. The Settler's Association of B.C., Farmlands in British Columbia, most every word was true.
Figure #52
McCutcheon Farm, circa 1890
(from Chilliwack Historical Society)

Figure #52a
Farmhouse, barn, orchard, forest, and lawn, Chilliwack circa 1890.
(Chilliwack Historical Society archives).
Figure #53
Sheep, Chilliwack, circa 1910
(from Provincial Archives)

Figure #54
Apiary in Orchard, Chilliwack, circa 1910
(from Provincial Archives)
had an efficient and rapid means of getting goods to Vancouver tables. The new
demand for fluid milk alone accounted for a significant increase in the pasturage
of the valley. 53

The principal source of farm values, of course, were the traditional images,
technologies, and tools brought with the settler from the mother country, but
innovations that would help adapt the old with the new landscape were given input
by several mechanisms. The first and most important was the establishment of
the Dominion Agricultural Research Station at Agassiz in 1888. Visits by
Chilliwack farmers to the station, and lectures by the staff to the Farmer's
Institute 54 became the main source of maintenance of a high level of efficiency
and a quality produce. From 1890 the assistance was supplemented by the Provincial
agricultural department staff and by financial grants for countryside improve­
ment by the Province. With the formation of the University of British Columbia,
professors made themselves available to assist in the establishment of a
flourishing farm community throughout the Lower Fraser Valley. Dr. Leonard
Klinck, Dean of Agriculture and later the first President of U.B.C. was a
frequent guest at agriculture related events. 55

The architecture of the farmhouses continued to be characteristic of the
European or Ontario home remembered from each settlers' past. A few adapta­
tions to the local conditions continued to be made, but in the main, the buildings
were fairly accurate reproductions of what had been or was being built else­
where. The construction of a substantial and spacious house was the sign of a
successful life and was within the reach of all who worked diligently. The
character of the land began to take on the quality of the myth of the perfect
landscape. 56 Some of the more successful of the agricultural community were

54. The Farmer's Institute was formed March 18, 1896.
56. Sandilands, op.cit., p.77: "form and detailing are simplified and where
decoration is applied it is reminiscent of classical or colonial forms. The
intended effect is for substance and dignity...There is a growing consciousness
of the placement of the house within a landscape which has been formed by man.
Fences and lawns become an important part of the homes' appearance within
a new landscape image derived from older eastern Canadian, or even European
examples."
able to build custom designed houses. One example was the architect Thomas Hooper's "countryhouse" for the Wells family at Edenbank. The pride in the growing number of these countryhouses that combined the architecture of house and garden with a carefully planned useful farm gave assurance to the Chilliwack pioneers that their work had not been for nothing and that their vision was being realized.  

The architecture of the valley was not, however, without its eccentric element. A Mr. Freeman, the first resident of Abbotsford, and a Mr. Ault, of East Chilliwack, took great pride in their ability to get "back to nature", by hollowing out cedar tree stumps as houses. These charming houses served as local conversation topics. They even attracted the attention of travellers up from Vancouver, and became elements within destination parks that served as subjects for sketches or photographs.

There was a keen interest in the natural beauty of the valley. Fishing, hiking, and picnicking expeditions were a constant source of recreation for the residents. The knowledge of the attractiveness of the valley's landscape

57. Chilliwack Board of Trade, op.cit., (1914) of the Hewer family's house: "many five and ten acre blocks in the valley are now taking on this home and parklike aspect."
58. Gibbard, op.cit., p.259: "He saved himself the trouble of building a house by roofing a hollow cedar stump, living in the base of it and climbing pegs set in the sides to his sleeping loft above."
60. The Chilliwack Board of Trade, op.cit., (1914), p.3: "Upon this picturesque and sunshine-showered valley of the Fraser, Nature has spilled her bounties with a wanton hand. Exhilerating air packed with the scents of earth, a climate pleasing and mild, a soil of marvellous fertility, winding streams in whose crystal waters dart the trout, tangled woods in whose depths lurk large and small game, and across the broad acres extending mile upon mile, meadows and fields redolent with the perfume of waving grasses and maturing grain, orchards in which the fruit is already turning to purple and gold, and among which nestle the farmsteads, each surrounded with a wealth of flowers and inhabited by a progressive and ambitious people."
61. Albert Durrant Watson, the layman head of the Canadian Methodist Church, during his visit to the Chadsey family in 1906, wrote: "Vale of beauty in the West; Mountain-girded, fair and blest; Here by lofty peaks walled in/From the mad world's roar and din; Safe thou sittest in the West/In thy cosy mountain nest."
for its contemplative and recuperative aspects began to draw numerous vacationists and tourists from Vancouver. The potential economic advantage of this tourist trade was not lost on the merchants. A campaign was begun as early as 1891 to attract a larger share of these people to Chilliwack. The valley was billed as a recreational centre and summer resort in the Vancouver papers. Discussion soon focussed upon the desirability of providing a park at Cultus Lake as the logical destination for the travellers.

This campaign used as a model the 1000 acre Stanley Park discussed in 1886 at the first Vancouver City council meeting, and subsequently dedicated by Lord Stanley in 1889, as a gift from the Dominion to the citizens of Vancouver. The provision was in keeping with the continent wide movement to provide large urban central parks. The particular design of Stanley Park was guided by the rules of the natural landscape in its picturesque wilderness form. The C.P.R. Land Commissioner, Hamilton, pressed for the designation and then put the first human element into the park in the form of the peripheral driveway. A park ranger, Henry Avison, was hired who created and implemented the design elements of the park prior to the turn of the century. Avison built the first gardens, the first trails, built the rustic bridges, and his wife started the first zoo.

In the first part of the 20th century, the international landscape architect, Dr. Thomas Mawson, was hired to prepare the first conceptual plan of the park and oversee implementation of parts of his design. The experience of this park became one of the unifiers of the new city, and also served to remind the citizens of the beauty of the natural environment when slightly altered. Its success led innumerable settlements around British Columbia to follow by preserving large parcels of land for future generations as parks.

62. The Chilliwack Progress, May 7, 1891; August 4, 1897, August 14, 1901; October 19, 1904; and August 21, 1907.
So it was with Chilliwack. Although Cultus Lake had been used unofficially as a park for generations, it was not until 1913 that the township and city managed to convince the Dominion government, who held title to the land, to lease them a small part for the benefit of residents and tourists. It would take a decade more until a grant to the Cultus Lake Parks Board could be arranged, and much longer before the present surrounding Provincial park and Forest Reserve would occur.

The other aspect of the landscape, that of the pastoral, was continuing at the same time. The role of plant material in humanizing the character of the landscape was significant. Indigenous plant material surrounding the settlement was gradually pushed to a safe distance from house and farm and a "civilized" landscape was planted in its place. The crops and pasture associated with the farm is understandable, but there also was great emphasis upon plant material for its evocative or beautiful aspects as well. At first seeds were carefully transported from the old country to be planted in the new to give the pleasure of familiarity and continuity. Such plants as holly, primrose, violets, poplars, oaks, etc. were imported to the valley in this manner.

The idea of buying seeds for gardens for farms and town caught on at the turn of the century when the variety of garden plant material available and demand increased enormously. Advertisements for seeds became commonplace in the local newspaper at planting season and seed catalogues were included in almost everyone's mailbox. One of the great pleasures of this era was sitting down at the end of winter and ordering an abundance of vegetables, fruits, flowers, herbs and trees that would contribute to the coming year's personal garden.

The pride in gardening as part of the myth of the perfect countryside was one of the main topics of discussion among neighbours. Lectures were given to

66. The Chilliwack Progress, April 4, 1913.
Figure #55
Farmland, Ryder Lake

Figure #56
House and Garden, Chilliwack
the Farmer's Institute and church groups by professors and Dominion agriculturists on the value of gardens associated with farms. The farming community would join their counterpart garden enthusiasts in town whenever architects or landscape architects would pass through town on the lecture circuit to discuss aspects of designing gardens and parks.

3. The Urbanization of the Valley:

The enthusiasm of Chilliwack for population growth was one of the early ideas guiding the vision of the valley. Settlers were determined from the beginning to attract more people to tame the valley's resources, and they were given every encouragement by the British and Canadian governments in the direction of colonists. Local facilities such as roads and schools and the increased property values were stimuli enough to promote an active campaign. The 1886 arrival of the C.P.R. made the prospect of a prosperous community in the valley a certainty. By 1891, there were enough people settled or potentially to settle to foster the establishment of a weekly newspaper, The Chilliwack Progress.

This newspaper added one more mechanism in the propaganda campaign to attract settlers. Its editorials would constantly repeat the message of a booming economy to which enterprising families could become a part. The idea was for the newspapers to be included in letters back home to encourage friends and family to take the plunge and travel to the west coast.

Just what sort of settlement was envisioned was not altogether clear: "what the future of Chilliwack will be, no one will venture to prophesy. But we are safe in coming to the conclusion that it will be a town of much greater dimensions than at present." The first actual figure to be put forth for the

68. The Chilliwack Progress, March 12, 1902.
69. ibid., July 9, 1913; landscape architect, H.E. Weed, delivered a lecture on the consciousness of inside-outside connection and of the value of landscape.
70. The Chilliwack Progress, editorials, for instance: April 16, 1891, June 3, 1896, Nov. 27, 1907, Feb. 5, 1908, Nov. 2, 1910.
71. ibid., Oct. 19, 1904.
Figure #57
Chilliwack, Wellington Street, circa 1890
(from Provincial Archives)

Figure #58
Chilliwack, Wellington Street, 1912
(from Provincial Archives)
Figure #57a
Ashwell House, Chilliwack, circa 1891.
This was one of Samuel Maclure's first commissions as well as being the first architect designed home in the valley. (from Chilliwack Historical Society).

Figure #58a
Chilliwack City Hall, circa 1910, by Thomas Hooper. He was also the architect of U.B.C.'s "Hycroft". (from Chilliwack Historical Society).
eventual size of the whole valley's rural and town population was 10,000.\textsuperscript{72} Although \textit{The Progress} served as the principal means of community news for both the farming and town people, it was from the first clearly on the side of the townspeople.\textsuperscript{73} There was a not altogether subtle degree of conflict between town and country that saw \textit{The Progress} take every opportunity to put forth increases in the town's population. The effect was seen within one year, the village of Five Corners in 1888 had 20 houses and five businesses, by 1892, there were 52 businesses and hundreds of houses. The newspaper proclaimed Chilliwack to be an important and flourishing rural town.\textsuperscript{74} The growth rate of the urban sector of the valley has never stopped since.

In fact, an attempt to slow down the rate of growth was attacked by the citizens and the local press. When the valley began receiving a large share of the 1913 Vancouver depression "refugees", and Vancouver newspapers ran articles stating Chilliwack was full and did not want more people, both township and city councils in Chilliwack were enraged.\textsuperscript{75} However, their terse reply added that only those with sufficient capital to buy accommodation ($12,000. minimum) should bother to come. Hostility toward anyone suggesting a slower rate of growth would continue to be a part of the pro-growth mentality of the valley's population.

The architecture of the city began to take on a more substantial character by the turn of the century with the construction of stone, brick or concrete buildings. The frontier town with wooden frame two storey buildings and boardwalks was regarded as temporary and hazardous. Building by building the town nucleus was refashioned. The architectural highpoint of the construction was the City Hall by Thomas Hooper (1910-1911), built of reinforced concrete in a

\textsuperscript{72} ibid., May 16, 1906.
\textsuperscript{73} This had to be done with caution: for instance in a Nov. 13, 1895 editorial calling for the location of industry in the valley, the editor took care to qualify that wish with the assertion that agriculture would always be the "backbone" of the district.
\textsuperscript{74} ibid., Nov. 3, 1892.
\textsuperscript{75} ibid., June 25, 1913: "This is a clear case of libel."
Palladian design. The portico's creative treatment stemmed from the curved stair detail studied by Hooper on several countryhouses designed by baroque British architects in emulation of the architecture of the continent. This delightful building was originally intended to sit as a pavilion in a park. The rendering shows lawn, specimen trees, shrubs and flowers surrounding the whole, with a small oval reflecting pool in the lawn before the portico. There was no suggestion of the disgraceful strip development that would come to surround this jewelbox in later years.

Housing in town generally resembled that of the country, with large verandas and overhangs, large windows and plenty of space. The lots were as large as could be made. Some of the houses had extensive gardens, and tennis courts, but most settled for gardens that a family could tend by themselves. The first sub-division with "suburban" houses in the styles then current in Vancouver was made in 1907 and had 66 feet by 132 feet lots complete with lanes, concrete sidewalks, house, water, sewage and the new conveniences of electricity and telephone. These houses sold for relatively high prices compared to the frame house and several of the prominent architects of the Lower Mainland and Vancouver Island worked in Chilliwack. One of the earliest of Maclure's houses, the Ashwell house, still exists in the city. It was designed using his brother's Clayburn brick but lacks the custom brick-work that characterized the finishing of Maclure's later work. Still for a hometown New Westminster architect, "learning the ropes," it is fairly competent.

76. C.W. Parker, Who's Who in Western Canada: Hooper was born in Hatherleigh, Devonshire, and practiced in Ontario and Manitoba before arriving in Vancouver in 1886; refer also to Harold Kalman, Exploring Vancouver, pp.25,56,88 & 97.
77. The Chilliwack Board of Trade; op.cit., p.6.
78. ibid., p.5: "most of the private residences stand in their own grounds, which not only gives the city a picturesque appearance but eliminates the disadvantages of overcrowding."
80. ibid., p.87: "as Chilliwack subsequently became more and more tied to Metropolitan Vancouver, housing was increasingly of a normal suburban type."
81. ibid., p.85: Mountain View Subdivision.
82. ibid., pp.72-73; refer also to The Work of Samuel Maclure by firm of Sharp and Maclure.
The demand of citizens for space was the predominant criterion of livability on the West Coast. These settlers had travelled half the world to be able to have the privilege of plenty of space and were not willing to accept anything resembling dense urban conditions. For instance, one of the first by-laws in the municipality dealt with health conditions; it stated that to avoid overcrowding, plenty of open space was required for any development beyond the commercial core.

A city of gardens was the only urban vision that was acceptable to these people. Implementation of the "garden city" began with the 1892 article on the benefits of trees in cities. By 1899, a by-law (#68) was passed to permit shade trees and ornamental shrubs to be placed on street property by owners of adjacent property. At the turn of the century, taxpayers' money was first spent on planting trees on public land, to the warm enthusiasm of all the community.

The connection between health and the benefits derived from a garden city was outlined in an editorial in 1901. The notion of the town as a place of beauty made attractive with the use of plant material was a common subject of editorials in The Chilliwack Progress. The concern for health together with that of a clean and orderly townscape became the motivation for an annual campaign by the community to clean up and improve their environment. Beginning in 1911, a prize of $15. was offered for the best lawn and garden in the city.

The campaign was repeated the following spring, but had become expanded to in-

83. The Chilliwack Progress, July 29, 1903.
84. ibid., March 24, 1892, article on metro forests: "The planting of trees has undoubtably exercised on the whole a favourable effect upon the health and upon the aesthetic sense of the people of our cities."
85. ibid., July 5, 1899.
86. ibid., July 4, 1900: regarding the planting of shade trees on the fairgrounds site it was said, "This will greatly improve the appearance of the grounds, be a great convenience to our residents and visitors, and greatly enhance the value of the property."
87. ibid., July 10, 1901.
88. ibid., for instance, April 11, 1906.
89. ibid., Feb. 15, 1911; April 12, 1911: "The movement for beautifying the surroundings of one's premises and the clearing away of all unsightly objects has become almost continental."
The effect of the actual garden city movement was confined to the physical planning derived from the images conjured by the phrase, "garden city", itself. This is especially true of the reception accorded Mawson's plan for Calgary in the Chilliwack press. The Calgary campaign to create a city of gardens came to be well publicized throughout the west and served as a model for improvements to the structure of cities on the coast. Several novel procedures were used by the Calgarians in promoting gardens throughout the city. The first effect in Chilliwack was to establish an annual rose and garden flower show to serve as a focus of community participation in gardening.

Consequently, when the next year's clean up day was formulated in Chilliwack, the public put extra effort into improving their environment with gardens and street trees. Many of the boulevard trees that still survive along the city and township roads date from the 1914 extra effort. The Progress editor wrote: "The trees so planted will be everlasting and living monuments of a movement set going in the right direction." One can only imagine the dismay the planters would have if they saw how few have been permitted to survive and how those still remaining on the public domain have been butchered by pollarding amputation.

The gardens and trees served more than as a means of making the town more attractive. The record shows that gardening in all its forms served as the major recreation, the major topic of conversation and the major social activity that held the community together throughout these early years. In fact, once a year a public holiday was declared to tend your garden. Gardening was the subject of lectures, of garden parties, and pride in gardening stimulated the annual competition for various aspects of garden produce.

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90. ibid., April 24, 1912.
91. ibid., March 12, 1913.
92. ibid., July 23, 1913, separate from the one held by the fall fair
93. ibid., March 12, 1914; April 16, 1914.
94. ibid., July 2, 1914; May 27, 1915.
Figure #59
Courthouse, Chilliwack
(from Provincial Archives)

Figure #60
Methodist Church, Chilliwack
(from Provincial Archives)
gardening and agricultural instruction a part of even the city's schools.
Once a year Dean Klinck (U.B.C.) would come to award the prize for the school
garden exhibit and give a lecture on the value of the British Columbia land-

scape. 95

4. **Town-Country Conflicts:**

   Although the settlers agreed from the start in the need for a viable nucleus,
   the differing objectives of the farmers and the townspeople soon became evident.
   Perhaps the first indication of the conflict was the July 23, 1897 editorial
   chastising the farm community for patronizing New Westminster shops instead of
   the local town shops. 96 The antagonism became accentuated in the first decade
   of the 20th century. The council continually appropriated money for improvements
   to farm roads and bridges, and permitted town roads to remain rutted. The
   farmers could not understand the need for more heavy duty finishes on the more
   heavily used town streets.

   The antagonism came to a boil in 1906 with the issue of a fire brigade. The
   warning from the Chicago fire, the San Francisco earthquake, the New Westminster
   fire and the Vancouver fire, not to mention the serious fire in downtown Chilliwack,
   made the need for new fire regulations a necessity. Construction in the core
   was to be of relatively non-combustible materials, and a fire brigade was to be
   organized to combat any threat of fire. The rural sector of the valley was not
   willing to share in the expense of this precaution, and in the discussion that
   followed, the townsfolk decided to go their separate ways. The result was the
   incorporation of Chilliwack City in 1908. 97

   The fire brigade issue was just the tip of the ice-berg in the conflict be-
   tween the values of the town and country sectors of the valley. The citizens

95. ibid., Sept. 27, 1917; it became so popular that by 1918 the Vancouver public
   school system introduced it to their curriculum.
96. ibid., "How to Ruin a Town", July 23, 1897.
97. Ramsey, op.cit., pp.75-76.
Figure #61
St. Thomas' Anglican Moved from Five Corners, 1909
(from Provincial Archives)

Figure #62
Ice Storm (St. Thomas' Close) 1935)
(from Provincial Archives)
were ambitious for continual growth in the agricultural sector of the valley, but only if that meant a corresponding growth in the town's service function. The citizens continually pushed for expansion in the urban sector demanding urban improvements to roads, sewers, street lighting, etc. and trying to attract food processing industries and businesses of all sort. One must credit them for audacity for with only a population of 500, the "City" incorporated amid plans for a rapidly expanded regional centre.  

This left the farm community and the outlying villages without a focus for their interests. Chilliwack municipality had by far the largest share of the land and resources of the valley, but they lacked cohesion. The split between the "City" and the country did not end the difficulties in objectives. The first issue of conflict between the new city council and the municipality's farmers occurred a few months later in 1908. The Agricultural Society, which had held an annual fall fair since 1874 announced the termination of the fair due to the lack of support by the city council. The importance of the fall fair as both a major social focus for the farming community and as a significant means of distribution of innovations must not be overlooked. The Agricultural Society's growth, and the more diverse programme, necessitated expansion into a larger permanent fairground; the existing fairgrounds were on city land, and any improvement would have required the assistance and full support of the city. Unfortunately, the Society found disinterest on the part of the townspeople. The matter was eventually resolved, and the present fairgrounds were purchased and opened under the joint control of both city and town. 

This happy state of cooperation was followed in 1910 with an application by both city and country to the University of B.C. site selection committee. The

98. The Chilliwack Progress, February 20, 1908.
99. White, op.cit., p.78: "It would be difficult to overestimate the importance of the fall fairs in raising and maintaining the standard of excellence now expected of Fraser Valley products."
1. The Chilliwack Progress, July 1, 1908 and June 8, 1910.
aspect of similarity between the small town of Oxford and the surrounding agricultural and pastoral landscape made a sizable impact upon the committee, and for a time it was thought to be the favoured site. However, the grant by the Dominion government of the reserve set aside by Colonel Moody at Point Grey proved too attractive.  

A new threat to town-country relations arose with the 1911 introduction of "suburbs" to the municipality. The previous year's arrival of the B.C.E.R. gave the "city" real estate sharpies the credulity to call any subsequent additions to the valley's villages "suburban lots". The 1911 appearance of the first ad for suburban homes in Sardis was quickly followed by the next month's editorial on the continual expansion of the urban portion of the Valley. The exuberant optimism that a city with a mere 800 people could have suburbs was not to be laughed at for long. It proved a self fulfilling prophesy. Indeed, two years later an article on suburbanization demonstrated that it had become commonplace.

The American contribution to the cultural landscape of the Chilliwack Valley began about 1915. Henry Ford's mass assembly of automobiles led to a wide distribution over the continent. By 1917, Chilliwack had its first Ford dealer. Driving began as an innocent pleasure and has ended in subsuming much of the valley under concrete; it has served as the single most disruptive element in the functioning of the town-country relations. With the car came more people who spread throughout the municipality. The urban component of what was envisioned by the pioneers as a productive and mythically beautiful countryside began to spread without limits. A time would come 50 years later, when people

2. ibid., June 15, 1910; refer also to the submissions to the U.B.C. selection committee in 1910.
3. ibid., May 31, 1911; for ad; and June 28, 1911 for editorial.
4. ibid., Sept. 3, 1913.
5. the first ad appeared in The Chilliwack Progress on March 18, 1915; distributorship in Jan. 4, 1917; the most seductive of the Ford ads appear in each issue between 1917-1918, one wonders how he could keep the factory producing in the middle of a World War?
would begin to realize the value of the countryside the pioneers struggled so hard to secure.

The original promise of the car was to give access to the countryside to an urban population. Ford had correctly identified the appeal of the natural landscape in his advertisement and exploited it. It was not until later, when the car became the primary means of transportation throughout a continuum of sprawl, that the present form of settlement devoid of human presence took shape. The appearance of a small shop along Yale road in 1917 could not have given signs to many Chilliwackians of this future. By the end of this period, 1918, most people were still getting around the valley by horse or horse and buggy.

But during this period, 1886-1918, the town-country conflict was relatively minor. As the *Chilliwack Progress* stated in 1904: "in a community like the Valley of Chilliwack, the relation between the country and the village is very close." It was a time when the farmers still brought their produce to town twice a week (across from present bus terminal). For all the brave assertions of their urbanity, the "city" was not that of the medieval ages. People valued space and gardens and felt a garden city was the right place to live on earth. There was not such a dichotomy between town and country values. After all, when a city council can discuss and approve the cutting of grass along the city boulevards for use as hay, and later can insist that citizens should really keep their horses and cows on their own lots behind fences, the conflict in values between town-country is not insurmountable.

If the town and country of Chilliwack were united on any issue, it was the love of their peaceful valley. The theme of a "Garden of Eden", first noted by Lord in the 1850's, reoccurred as a theme of identity as a theme of a land ethic that would last until the Second World War. Chilliwack was seen as

6. ibid., Nov. 23, 1904.
7. ibid., April 16, 1914.
8. ibid., May 14, 1914.
a garden. The harvest editorial of 1894 was entitled "The Great Agricultural Garden of this Western Coast". The fall 1895 editorial was entitled "The Garden of the Province". By 1902 the term "Chilliwack, the Garden of British Columbia", had come into use and was used for years afterward. The first publication on the valley used the phrase as its title.  

Throughout this period the landscape of the valley played an important part in the lives of the people. The valley had begun to be transformed from a primeval state to a pastoral state. The settlers continued to apply a set of ethics that respected the land. However, the value system also carried with it the seeds of future conflict.

9. ibid., Oct. 17, 1894; Oct. 2, 1895; July 16, 1902; May 3, 1905; Jan. 5, 1910; and the Chilliwack Board of Trade 1914 publication.
F. Productive Expansion (1919-1946)

1. Inter-urban Systems:

The year 1920 was the first year in the Western World that suburban expansion came to lead all other forms of human settlement patterns in the rate of growth. This resulted from migration from farms, birth increases, and from immigration. The possibilities of a shorter work week and greater opportunities for mobility in cities had its effect on Vancouver. It began a hearty growth rate in which development spread along the transit fingers to Point Grey, Kerrisdale, Marpole, New Westminster and by ferry to the North Shore. The effect of population expansion on the Lower Fraser Valley was equally dramatic. Chilliwack, which had been connected by rail to New Westminster and Vancouver in the previous decade, gradually gained stronger ties to the centre as bus, trucking and private automobile transit increased.

This period saw the emergence of two separate systems: a metropolitan nucleus which acted as the centre for the Province, and a valley community which served as a thriving farming industry. Chilliwack found its place in the established patterns as the lone third order center for the Valley.

One of the most interesting government policies to be introduced to the Valley was the Soldiers' Land Settlement Act, which was proposed by the Federal Government's Conservation Commision, as a credible means of repatriation of the World War I veterans. The proposal was to provide farmland to all returning soldiers as federal and provincial grants in co-operative communities. Pragmatically, it was a measure designed to gain political support in the most

10. For instance, G.R. Taylor, Satellite Cities

11. Adams, op.cit., (1917), p.208: "...acquire lands to carry out a scheme of co-operative land settlement of at least 60 allotments within easy reach of transportation and markets, and reserving sufficient acreage for a demonstration farm, recreation grounds, etc. All farms are to have easy access to the central organization plant and good roads are to be constructed. Stores, public halls, schools, etc., are to be established in a central village."
terrible days of the First World War; Canadians had to be convinced that there would be a better world when peace came.  

Before the Federal legislation was passed, British Columbia's Minister of Agriculture, T.A. Crerar, guided a bill for Soldier's Land Settlement through the Victoria legislature. The effect was to induce over 800 soldiers to settle in the Lower Fraser Valley (many in the Chilliwack region). It was probably the first instance of national and provincial co-operation for social legislation which influenced the shape of the valley. It reflected the new sense of autonomy in which Britain passed responsibility to Canadians for their future; fortunately Canada had a tradition of stable government to rely upon.

Another innovation to reach the valley during this period was that of human flight. Several home-town boys had gone off to war as pilots, and when they returned they were enthusiastic about continued flying. Like the beginning of most airports throughout the world, the pilots rented a farmer's field on the outskirts of the city, found and/or built planes and began to fly. The local hero was Earl Brett. Brett's garage became one of the Lower Mainland's "headquarters" for "would-be" pilots; he taught many bush pilots (some are now flying 747's across Canada). In gratitude, his friends mounted the airplane "trophy" now seen on the garage roof. It is probably the most colourful of Chilliwack's landmarks.

Another Chilliwackian, Earl MacLeod, became the leading aviator (public service) in Western Canada. Returning after the war, MacLeod established Jericho seaplane base and became involved with numerous duties for the government. One task was to conduct the air surveys of British Columbia. While doing this, MacLeod and his photographer, Clarence Duncan, became the first to land in Chilliwack region lakes. They also surveyed the progress of the Sumas Lake

12. ibid., chapter eight.
13. The Chilliwack Progress, Feb. 21, 1918 and April 25, 1918.
draining and the patterns of flooding of the Fraser estuary. The presence of
a lone seaplane flying into the wilderness of Chilliwack Lake evokes images
unique to the Canadian experience.

2. Countryside:

Sumas Lake drainage project was the largest reclamation scheme ever attempted
in British Columbia. It required the dyking of the Fraser (a procedure begun by
Sumas Stade glaciers), as well as the channelling of the Chilliwack River into
the Vedder Canal. This ended the use of the area as a wildlife sanctuary, but
enabled its beginning as a productive agricultural area. The checkerboard land-
scape resulting has been compared to Otmoor, Oxfordshire, which was enclosed and
drained about the time of the founding of Fort Langley a century earlier.

The economic effect of this reclamation was to stimulate prosperity throughout
the region during the 1920's. The growth was strong enough to be able to sustain
Chilliwack's economy as moderately active through the Great Depression. This land
did not suffer the same fate as the Prairies' "dust-bowl". Instead, Chilliwackians
were always sure that the essentials could be provided for if the harvest was
tended.

Agriculture in the valley continued to receive technological and managerial
improvements from the Dominion Agricultural Research Station and from the Provin-
cial Department of Agriculture. There was increasing involvement by the faculty
of the University of British Columbia (such as President Klinck) in assisting
Chilliwack farmers to increase their incomes. In spite of attempts to continue
the diversity of products grown in the valley, the tendency was towards regional
specialization. For instance, the Cherry Festival, initiated in 1920, ran for
only a few years until the Okanagan was recognized as better adapted to fruit
production. The texture of the valley as a "Garden of Eden" suffered with the
loss of fruit and grain production by the end of the period.
Forestry in the valley reflected the change in attitude which had been engendered by the Conservation Commission. Where the first logging companies had clear cut and left the site for natural regeneration, logging companies in the 1920's began to replant areas within forest zones. During the 1930's, work crews were established for the unemployed to replant much of the higher elevations with seedlings. The harvest principle was established.

The change in values between 1930 and 1970 can be clearly demonstrated in the battle to preserve "Green Timbers", the last of the Lower Mainland's primeval forest. Since 1911 and all through the 1920's, a citizen's group (at one time headed by R.E. Buck) attempted to find some way to preserve the area. The stand included Douglas fir, spruce, cedar, hemlock, grand fir and maple that had been growing for 200-300 years. In spite of the fact that some of the most prestigious Vancouverites committed time and money, it was still not enough to convince the Federal or Provincial government to preserve the area as a wilderness park. By 1935 the stand had been removed. 15

Recreation in the valley became more organized with the 1923-1925 establishment of the Cultus Lake Parks Board. It obtained the use of several hundred acres of land at the north end of Cultus Lake from the crown (Railway Belt grant). It was to be developed to encourage more tourists to enjoy the amenities of the Chilliwack region. It was modelled after Stanley Park in its concept. The Board asked F.E. Buck in 1938 to prepare a plan for the recreational facilities. 16 Harrison Lake was also re-developed as a tourist facility about the same time (as a reconstruction of 19th century St. Alice's Hotel). Traditional recreational activities such as fishing, hiking and camping remained the most usual activities.

15. F.E. Buck and H.R. Christie, "The Green Timbers, the Ninth Memorandum" (1926): "The park would form a natural monument, an example of one of Nature's grandest creations of living things; a relic of a spectacle now fast vanishing, and which once destroyed could not be replaced for centuries."
Several improvements were made to the road network in the valley, including the realignment of the Sumas section of the Trans-Canada highway. Frank Buck was asked to help with roadside planting plans for the highway from Sumas to Rosedale, by the Junior Chamber of Commerce. Although simplistic, this appears to be one of the first studies showing environmental consciousness of the effect of highways in the Province. Previous roads had been designed exclusively considering engineering criteria. However, it would be some time before Professor Buck could convince the public sphere of the advantages of roads as parkways.

Country houses continued to be built in the valley, but there was a gradual tendency to slur site relationships and to choose finishes which were brutal in comparison to the previous generation of country houses. This reflected the growing disinterest in country values as important indicators of Canadian identity. However, there was one notable exception. One of the most significant architectural statements of the valley's history was constructed in 1939 on Chilliwack Lake: the MacLeod cabin. The design was accomplished neither by an architect nor by one mind, rather it was the product of Earl MacLeod, his wife, and their "builders", Ed Marshall and Ed Butler. Materials not found in the forest were brought to the Lake on horseback up the hazardous trail. Construction took two months, and the MacLeod's have taken a lifetime to perfect its fit with the land. Not far from the cabin is a beaver dam. The cabin epitomizes the Canadian land experience.

3. Urban Chilliwack:

Tracing the impact of garden city ideas on Chilliwack during this period is difficult, for the influence was indirect and somewhat blurred. The only aspect which reached Chilliwack was that of "a city of gardens". This was the result of

17. F.E. Buck files, July 1941. It appears the war interfered with implementation.
both the continuation of the gardening tradition, and of the simple fact that the valley had a modest population.

Urban concepts which filtered to the valley usually did so via Vancouver. Therefore, an analysis of the structuring of attitudes there would be helpful; fortunately, Gibson has already analysed these attitudes. Culmination of interest in the garden city may have been the 1937 (circa) visit of Sir Raymond Unwin. In his Vancouver speech, Unwin focussed on some of the issues he felt would be of concern to future generations of British Columbians: the provision of low cost housing, the containment of suburban sprawl, air pollution control measures, and the most important — the need to protect the limited amount of farmland in the Province from urban encroachment.

One of the most active in the promotion of the concept of a spacious city was Frank Buck. His concern with public betterment resulted in his involvement in almost every community issue influencing design on the western landscape. Some of his responsibilities included: president of the Point Grey Horticultural Society, president of the Greater Vancouver Horticulture Society, president of the Town Planning Institute of Canada, chairman of the Point Grey Town Planning Commission, member of the Vancouver Town Planning Commission, professor of horticulture at U.B.C., U.B.C. campus landscape architect, associate professor of the School of Architecture, and member of the council of the A.I.B.C. Wherever a speech had to be made in defense of a city of gardens, parks and farms, Buck made it. When Canada required planning legislation to control speculators, Buck was the first to introduce it. When Vancouver faced a housing crisis in the 1930's and 1940's, Buck headed committee after committee to halt slums and provide decent low cost, self-help, subsidized and/or public housing schemes.

18. Gibson, op.cit., chapter III.
20. Buck, "Housing as a World Problem - Its Impact on the City of Vancouver", "Housing, the Great Challenge", "Town Planning and Housing Conditions in Vancouver".
Buck's connections in Chilliwack were active, for he was a frequent speaker at various public groups. Buck believed that Canada was an immense nation, and that Canadians required the perception of large amounts of open space. When a city reached the carrying capacity of the one region, growth in another section of the country should be fostered.

The belief that architecture should be surrounded by generous amounts of space (i.e. a pavilion in a park), was continued in Chilliwack with the construction of the major public addition of the 1930's, the library. The functional building has a comfortable human scale, both inside and outside. The lawn and trees add a mellowness to the harshness of the rest of Wellington Street that is reminiscent of the once central common of St. Thomas' Church (at Five Corners).

21. One of his stock talks in Chilliwack was "The Care and Planting of Home Grounds", refer to Buck files in Special Collections, U.B.C.
22. Ronald Ley, "A Brief History of the Fraser Valley Regional Library and an Outline of the Library System: 1934-1968"; the rural library service was begun with headquarters at Chilliwack in 1930, and was moved to the more central location at Abbotsford in 1934; the Chilliwack library is now a branch.
Figure #63
Yale Road Strip Development

Figure #64
Five Corners, 1976
Figure #65
Chilliwack Landscape

Figure #66
Sprawl on Prime Farmland
1. The Problem:

This period reflects the technological explosion which saw the valley's ecology transformed from an order based on human proportions, to one of mechanical disproportion. The scale applied to the new landscape was not that of the philosophic "Golden Section", but proportions determined by the American automotive industry. 23

Chilliwackians mortgaged their future and acquired a new "garment": the personal car. Everyone over the age of 16 "had to have" "wheels", to be able "to exist" in the "new society". The car became the principal means of communication and of role identification - it exhibited status, expressed individuality, provided a focus for masculine ritual, and epitomized the surface freedom and mobility of the age. One ate, displayed, shopped, worked, conversed, relaxed, escaped, banked, entertained, and "scored" in an automobile. Adolescence mesmerized the focus of concern of North American society throughout this era, and the Chilliwack "auto cult" proved this valley to be no exception.

The effect on the valley's landscape was of disastrous proportions. Clichés like "sprawling suburbs" and "strip development" conjure correct images of just how disreputable the "new order" was. Thousands of acres of some of the best farmland in the world were paved over for parking lots, roadways, and auxiliary service facilities. Residential patterns ceased to exhibit concern for pedestrian scale neighbourhoods and a central market town, and instead assumed the dimensions and texture permitted by the 30 mph combustible engine.

23. Edward Higbee, The Squeeze, Cities Without Space, also Christopher Tunnard and Boris Pushkarev, Man Made America: Chaos or Control?, also William Whyte, The Last Landscape, and Ian Nairne, "Outrage".
In the first phase of the automobile, from 1912-1946, the usefulness of the transportation was a genuine improvement to the quality of living. It permitted a wider range of territory to be covered within a time period, and could be relied upon for functional operations. The cost factor in purchase and operation ensured its prudent use. However, in the second phase, from about 1947-1971, the useful component was forgotten as people grew more and more dependent on the automobile for every conceivable purpose. The landscape began to take on the texture of a nightmare as huge billboards were erected along the highways obscuring the farmland, while the part of the landscape remaining in view was littered with abandoned cars, "drive-in" stands, roadside developments and colossal neon "signs".

In the third phase of the automobile, from 1971, the public seemed to begin to reject the shocking effect uncontrolled use of the automobile "life-style" had produced. At first, the issues were focused upon cosmetics - the banning of the billboards and the cleaning-up of the rusted hulks. However, conversation began to take on a more serious tone: the topics of pollution control, agricultural preservation, sensible development, and energy conservation began to have a wider acceptance. The realities of a new world order which would emerge after the oil embargoes of 1973 together with the implications of world population increase, still had not driven home the urgency of altering the value patterns which had arisen in the past twenty years. Few people in Chilliwack understood they would have to revise their expectations to be more conservative.

2. The Disappearance of Rural Ideology:

One of the most pernicious effects of the consumer society, was the loss of rural beliefs as the central inspiration for Canadian existence. Madison Avenue packaging acquired more attention in the public media than did the real issues which were transforming the texture of the nation.
Pollsters revealed Canadians could name more brands of toothpaste than Prime Ministers. Buy, consume, and enjoy became the dogma of the new "lifestyle". To acquire the same materialism as the urban sector had come to expect, the farming sector was persuaded to undergo yet another technological revolution. In the process, the ideology associated with agriculture became evaluated as ineffectual and obsolete.\textsuperscript{24}

It is difficult to articulate the dimensions and effect of the misplaced concern with the pastoral landscape. One means of description is provided by the demographics: the rate of farm abandonments to urban centres was astounding. The prediction of 2% of the total population involved in agriculture by 1980 was forecasted and actively supported. However, the vague effect of the adoption of urban "culture" in the countryside is more difficult. One must read the writings of Canadian rural sociologists for an insight into the aspirations which had come to influence the judgements of the farming community, and of the inevitable effect the values would have upon the landscape of places such as Chilliwack.\textsuperscript{25}

Farming was determined to become a competitive sector of the economy with increased productivity and compatible returns for labour and investment. Refined technology and management techniques transformed isolate, poor farms into profitable agribusinesses. In the process, the ideology of rural fundamentalism, the closeness of the farmer with his land, was attacked as counterproductive to the new innovations. Without going into detail, toward the end of the period there seemed to be a growing opinion in the rural sector that the displacement of the rural ideology was perhaps overly hasty - that to state that there are no distinctions between urban and farming life patterns, and that rural is a term which only refers to geographic densities, is ridiculous.\textsuperscript{26}
The problem faced by the farming community is to accept the advantages offered by the new technology and the substantial incomes, and yet revise the rural ideology. Canadian farmers live an envied pattern, and must regain the appreciation and pride in their occupation and in their land.27

The physical effect of the "urbanization" of rural Canada is possible to measure. The tradition of rural architecture sensitively "fitted" into the landscape and detailed with care in fenestration, materials, ornament, proportions, environmental controls, and "park-like" grounds, was abandoned for carbon copies of cheap suburban stucco "boxes" disagreeably positioned. Chilliwack had become full of such wretched housing.

By the end of the period, the increasing sophistication of the farming sector together with their substantial financial prowess began to be felt in the demand for an aesthetic sensitivity for their land. (This is the traditional pattern). Architectural schools would be well advised to shrewdly assess the changing composition of per capita agricultural budgets and recognize a renewed area of involvement in the countryside should emerge shortly. The benefits of a landscape with a sympathetic architecture would accrue not only to the farmers, but also to the recreational public who are attracted to the "park" experience of Chilliwack.

24. Donald R. Whyte, "Rural Canada in Transition", pp.42-43: "The fact that rural people direct much of the added income deriving from the application of scientific innovation in agriculture to the acquisition and enjoyment of conveniences associated with urban life implies a change in attitude...". Refer also to Helen C. Abell, "The Social Consequences of the Modernization of Agriculture", pp.186-196: "On the national level, it is only within the past few years that it is being realized by some people (eg. A.R.D.A.) that not all rural people share the general aspirations of a scientifically orientated upwardly mobile society which expects and demands constant change, rational thought and views on rural life as a complex of economic and social problems capable of solution". Refer also to James & Robert Simmons, Urban Canada, p.6, p.53, p.59 and p.164.
Another area of increasing involvement by architects is that of the exurbanite demand for "country houses". In many parts of the world, the "hobby farm" is a welcome appearance in the exurban environment. It brings a family with a stable income together with a degree of enthusiasm for rural values that reflects positive attributes, not the actual hardships. Such exurbanites provide a healthy input into a farming community. However, in places such as the Lower Fraser Valley, where land resources are so limited, this demand for acreage does have a disturbing effect on the quality of the landscape. Subdivision of large holdings into 2-5 acre "hobby farms", in the floodplain, resulted in thousands of acres being removed from production. Not only does this process inhibit the capabilities of genuine farmers in their effort to survive, but the visual quality of the land for the recreational public is enormously decreased. In place of a wide open countryside with the fertile pastoralism of a park, the landscape of the valley began to take on the "chopped-up" texture of a parcelled land filled with obtrusive urban architectonic elements. The future exurbanite "dream" for British Columbians has to be remoulded away from soils of high agricultural suitability, and instead directed to upland areas and other places of marginal utility. Such a campaign would not have to be difficult, for the aesthetic potential of many of these sites makes them highly attractive.

25. D.R. Whyte, ibid., p.98 for a list of changes in rural Fundamentalism; Abell, op.cit., p.208: rural fundamentalism as an anachronism; And also Jean Marie Martin, "Rural Canada in Transition". Refer also to N.H. Lithwick, Urban Canada: Problems and Prospects, p.48 for the acceptance of urban patterns as superior.

26. Richard Laskin, "Non-agricultural, Semi-agricultural, and Agricultural Service Centres", p.170.; Refer also to Geraldo Fortin, "The Challenges of a New Rural World", p.376: "Whatever the reasons may be, sociologists have to face the ever increasing difficult task of establishing a dividing line between the rural and the urban society. The standards of our society are more and more those of an urbanized society".

27. R. Haig-Brown, op.cit., p.89: "A sound and prosperous farm population is just as important for its human yield of valuable citizens as it is for its more commonly recognized yield of milk or potatoes or grain"; Refer also Crerar, op.cit., for the most comprehensive outline of the problems facing the farm community in the Lower Mainland.
3. The Urban Sector:

Urban Chilliwack of 1971 presented a conflict between two value systems. The City prepared to extend its function as the market town for the eastern end of the Lower Fraser Valley. The 1966 Planning Report envisioned a nucleus based upon traditional European prototypes. It was to be a central place with a tight form, fostering redevelopment of the core area to provide a greater diversity of businesses and social opportunities. The basic problem of the automobile was to be resolved with civic garages on the periphery of the core area. For a few blocks radiating from the business district, there was to be a reconstruction of low density sites to moderate densities. The remaining civic boundaries were to be infilled with construction of empty residential lots. It was hoped the increasing land values would also resolve the problems created by the 1950-1970 strip development.

In the implementation of the recommendations, there were enormous problems. Traffic could not be resolved without commitment to public transit and civic garages, both measures requiring substantial public investments. As a result, the City relied upon the trivial cosmetics of street beautification to try to attract more of a share of the valley's development. The lack of positive leadership to resolve the infrastructural problems facing growth in the City resulted in opportunities being acquiesced to the Municipality. Chilliwack City began a decline which saw the once pleasant town converted into a distasteful parking lot.

The Municipality of 1971 presented the opposite vision of urban Chilliwack. Their planning report of 1968 reinforced the attitude that Southern California sprawl was advantageous to the valley's future. The Lower Fraser Valley was to become another San Fernando or Santa Clara Valley.

28. Lower Mainland Planning Board, "Chilliwack City Study: A Comprehensive Development Plan For Chilliwack City."
29. Willis-Cunliffe, "A Draft Development Plan For The Township of Chilliwack, B.C."
The politicians of the Municipality promoted growth over a wide area on the floodplain, and even threatened to swallow the City with proposals of several shopping neighbourhoods scattered throughout the suburban fringe. Thousands of acres of farmland were to be removed from agricultural production for use as "hobby farms", industry, roads, shopping centres and suburban residences.

If one image is required to summarize the dominant urban components of the valley during this period, it would be the Nethanderthal "Bedrock City" built as an amusement at the base of Bridal Veil Falls. Fred Flintstone (Californian) is represented as a four to five story high icon. Is this what the pioneers had in mind?

Containment of the urban envelope to protect the limited amount of available agricultural land had become, by 1971, a problem of critical dimensions: This should not be confused with an anti-development stance, for the problem is not one of growth as much as inappropriate development. Tighter forms for existing urban areas plus the use of upland areas could, with care, accommodate double the present population. Preservation of farmland began to be recognized as one of the principal challenges of the '70's. A traditionally conservative platform, countryside preservation seemed to be ignored by the British Columbian political right wing. Instead, the province seemed destined to have the bizarre spectacle of the left wing advocating and implementing the first legislation to control farm conversion rates. Somehow this essential legislation will have to become apolitical, with all sides coming to agreement that the protection of a sound agricultural heritage for future generations is a common objective.
G. Summary of Chapter IV

This chapter has provided a forum for understanding some of the beliefs which have influenced the human landscape of the valley. Thousands of years of relative cohesiveness with the ecosystem appears to have been abandoned by the present generation's acceptance of an incredible pace of innovation. Where the play ends in 1971, the tensions that this new consumer society has produced gives cues that it is headed for a dramatic conclusion. The unthinkable, the decline and termination of 5,000 years of civilization's continuum began to assume the reality of a countdown.
CHAPTER V - THE FUTURE

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CHAPTER V - THE FUTURE

A. Scope

This last phase of the hypothesis attempts to draw some conclusions on the values that have been applied to the Canadian landscape. The complexity and enormity of the problem is outlined, and the impossibility of offering a vision is stated.

There are four parts. The first discusses the effect of the British Columbia Land Commission on the use of remaining land. The second outlines the specific problems and opportunities facing the particular landscape discussed, Chilliwack. The statements of the third part are subjective. And the fourth part closes with some general observations on why there is a need to discuss the Canadian land continuum.
B. The British Columbia Land Commission

1. Introduction:

The key to understanding the forces at work in creating the Canadian conceptual landscape must be found in terms of the wilderness, pastoralism and urbanity open space theory outlined in Chapter I.

British Columbia is fortunate that there are still vast amounts of wilderness areas to be enjoyed. For instance, the foresight of a few citizens (led by Dr. Krajina) has resulted in the creation since 1973 of ecological reserves which are prototypal samples of the ecological zones in the Province or are of special landscape value. The ecological reserves, together with the systems of national, provincial and regional parks throughout the Province, offer an immense diversity for wilderness study and recreation. The essence of the British Columbian landscape is to be found there.

However the main area for understanding the humanized British Columbia landscape appears to be the conflict between pastoral and urban spaces. When the conflict began about 20 years ago, there was no question in anyone's mind that urban was the preferred. Indeed, there was a time when the pastoral was thought unnecessary. In recent years there has been a surprising reversal of interest in the urban/pastoral debate. It now appears that the pastoral must be protected at almost any cost as a legacy to future generations. To understand how one arrives at such a conclusion, the nature of the British Columbian landscape must be thoroughly examined.

2. Provincial Agricultural Resources:

The image of Canada perceived by the world, as a harsh and uncompromising wilderness, is true. Of the 2,272,000,000 acres of land surface, over two-thirds is too cold to support life, and much of the remainder is unsuitable.
Only four percent of the total area of Canada is arable. British Columbia's agricultural land resources are even more limited than the other provinces. Mountainous terrain covers most of the 230,000,000 acres of British Columbia.¹

Less than four percent of the surface area of the Province is potentially arable. This occurs in the three largest river basins: the Columbia, the Peace, and the Fraser,² and in a few other areas such as Vancouver Island and the Okanagan Valley. The other valleys in the Province are either too cold or have too poor a quality of soil to permit profitable farming.³ Lower Mainland residents live in the choicest part of the Province, and seem unaware that the hinterland is so hostile.

Although much of the limited arable land has been cleared and farmed for several generations, there still remains a fair amount of land that could be put into production. About 1.2% of the surface area of the Province remains to be used. This land has not been utilized due to lack of interest in farming. The greatest draw of the population since the Second World War has been to the cities. Low returns for investment and labour has made farming unattractive. British Columbians are fortunate that the options are still open. However, for the farming community to become viable requires a re-education of the values of Canadian society. Farming must be made profitable.

Most of the remaining land occurs in areas that require more than just "good ol'pioneer spirit" to put it into production. Large amounts of capital are required for clearing, draining, dyking, irrigation, etc. Government expenditure for roads and drainage programs have to be implemented before

¹ A. Leahey, "Appraisal of Canada's Land Base for Agriculture", pp.119-125.
² For an analysis of the topography of the Province, refer to the best summary available: H.O. Slaymaker, "Physiography and Hydrology of Six River Basins"; refer also to Fritz Dalichow, Agricultural Geography of British Columbia, chapter one, for a somewhat inaccurate presentation of the facts.
³ To gain an understanding of the limitations of the other river valleys in the Province, refer to N.H. Richardson, "The Kitimat Region", p.84.
individuals will be willing to commit their future to the costly technological innovations and back-breaking energy required to convert the wilderness into farm land.

There should be no misunderstanding -- the remaining land is of marginal capabilities. It is also in remote areas of the Province which lack roads, communication networks, social and community facilities, and marketing centres. Expectation of increased living standards discourage families from repeating the pioneer spirit of the previous generations. Our city populations require ever more food, yet there are few who will abandon the comforts and relative security of urban living for a farming existence.

Perhaps the most depressing fact of our limited agricultural potential is that much of the best land has been permanently removed from production. Imprudent development policies have permitted thousands of acres to be lost under hydro-electric storage dams. Logging operations, by damaging the ground cover, have caused soil erosion resulting in land literally washing out to the ocean. Overgrazing of rangeland has also led to soil loss through erosion. However, the most insidious danger to agriculture is uncontrolled urban expansion onto farm land.

The rate of conversion of farm land to urban use in British Columbia was 15,000 acres per year prior to the appointment of the B.C. Land Commission, and this was on the most productive land available in the province. This figure does not include the thousands of acres of land underutilized or lying fallow for speculative purposes on the periphery of the expanding urban areas. Incentives to remain in production collapse as taxation increases and land values soar. This, coupled with the federal government encouragement of food imports, has made agriculture in the province extremely tenuous.

4. Roderick Haig-Brown, The Living Land: An Account of the Natural Resources of British Columbia, chapters nine and ten; for an update, refer to The B.C. Land Commission: Keeping the Options Open.
The limited extent of our potential agricultural landscape can best be seen by comparison to the old world prototype of the British Columbian landscape, Britain. The comparison reveals the shocking reality of this seemingly huge land mass:

<table>
<thead>
<tr>
<th>Form of Agriculture</th>
<th>Britain $^5$</th>
<th>British Columbia $^6$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crops, grass and rough grazing</td>
<td>47,973,303</td>
<td>24,800,000</td>
</tr>
<tr>
<td>Crops and grass</td>
<td>30,436,647</td>
<td>8,900,000</td>
</tr>
<tr>
<td>Arable land</td>
<td>18,241,264</td>
<td>6,500,000</td>
</tr>
<tr>
<td>Permanent grass (open grassland)</td>
<td>12,195,383</td>
<td>2,400,000</td>
</tr>
<tr>
<td>Rough grazing (forest range)</td>
<td>17,536,656</td>
<td>15,900,000</td>
</tr>
<tr>
<td>Sole rights</td>
<td>14,752,686</td>
<td>nil</td>
</tr>
<tr>
<td>Common (in production)</td>
<td>2,783,970</td>
<td>nil</td>
</tr>
</tbody>
</table>

Britain's statistics reflect millennia of farming practices which have resulted in all of the marginal lands being utilized. The cataloguing of that nation's farm land is to eighth digit accuracy; there is no more available. In contrast, the British Columbia statistics are an estimate of the most optimistic potential and have only third digit accuracy. It remains to be seen if much of the British Columbian land listed as productive actually is. Farm land in Britain covers 81% of the island's land mass, while British Columbia's farm land potential accounts for only 4% of the whole Provincial land mass, hardly more than Vancouver Island in area. Britain's agricultural capability has about three times the land resource of British Columbia.

The absolute need to husband the small amount of B.C. farm land available can be emphasized if one contemplates our vulnerability in case of war. Although few wars have been fought on this continent in this century, it seems to be a

part of the enduring human condition to disagree violently. It is inevitable that this Province will be subject to siege in one form or other. In such a case, food produced locally will be essential.

During the Second World War, the British utilized every possible square foot of land that could produce food, including parks in central London and every patch of back yard for victory gardens. Only one half of the food requirements of the rationed population could be met. In a limited resource world, British Columbia will be in a similar position, and will have to rely upon local farms for agricultural produce. Not only that, but British Columbia will be required to become an exporter to enable people in such strained landscape as Britain to exist.

The limited extent of British Columbia's agricultural land has two serious implications for policy planning. First, the Province is rapidly approaching the maximum population which the land can support; second, agriculture must become a more vital sector of the economy.

Although agriculture has been relatively overlooked in the Provincial economy since the Second World War, it has remained a significant force. One out of every eight dollars, and one in six jobs depends upon some form of agriculture. The range of operations includes: agribusiness, food processing, farming, transportation, retailing, consumption, etc. For simplification, G.R. Winter has divided the industry into three components for analysis of economic dependence within the whole economy. These are: primary agriculture, agribusiness trade, and tertiary agriculture. Considering the effect of only the first two of these, the value relative to the economy as a whole comes to 5.9% of the gross Provincial product ($501 million). The labour force accounts for 9.6% of the Provincial labour market (68,090 people). When the impact multipliers

7. L.D. Stamp, op.cit., chapter 17.
8. The implications of the politics of "agri-power" are just beginning to be understood; C.B.C. Country Canada, July 4, 1976.
are considered, the effective rates about double the extent of influence.\(^9\) To gain an understanding of agriculture's interdependence with the rest of the economy, a study by Denike and Leigh should be consulted.\(^10\)

With the food shortages anticipated around the world, and with the rising return of investment to Canadian farmers for their labours, the British Columbian agricultural community appears headed for a greater voice in determining the Provincial outlook. The astounding shift in population from farms to cities that has dominated discussion of the use of land for the past 20 years may be reversed. Refer to the following figures for Canada's historical population distribution.

**TOTAL POPULATION AND URBAN-RURAL POPULATION DISTRIBUTION IN CANADA**

<table>
<thead>
<tr>
<th>Total Population</th>
<th>Rural Population</th>
<th>Rural farm Population</th>
<th>Urban Population</th>
<th>Population and Over</th>
<th>Number of cities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1871 3,689,000</td>
<td>81.7%</td>
<td>--</td>
<td>18.3%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1881 4,325,000</td>
<td>76.7%</td>
<td>--</td>
<td>23.3%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1891 4,833,000</td>
<td>70.2%</td>
<td>--</td>
<td>29.8%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1901 5,371,000</td>
<td>65.1%</td>
<td>--</td>
<td>34.9%</td>
<td>8.9%</td>
<td>2</td>
</tr>
<tr>
<td>1911 7,207,000</td>
<td>58.2%</td>
<td>--</td>
<td>41.8%</td>
<td>15.0%</td>
<td>4</td>
</tr>
<tr>
<td>1921 8,788,000</td>
<td>52.6%</td>
<td>--</td>
<td>47.4%</td>
<td>18.9%</td>
<td>6</td>
</tr>
<tr>
<td>1931 10,377,000</td>
<td>47.5%</td>
<td>32.0%</td>
<td>52.5%</td>
<td>22.5%</td>
<td>7</td>
</tr>
<tr>
<td>1941 11,507,000</td>
<td>44.3%</td>
<td>26.2%</td>
<td>55.7%</td>
<td>23.0%</td>
<td>8</td>
</tr>
<tr>
<td>1951 14,009,000</td>
<td>37.6%</td>
<td>19.7%</td>
<td>62.4%</td>
<td>23.3%</td>
<td>10</td>
</tr>
<tr>
<td>1961 18,238,000</td>
<td>30.3%</td>
<td>11.8%</td>
<td>69.7%</td>
<td>22.8%</td>
<td>12</td>
</tr>
<tr>
<td>1971 21,568,000</td>
<td>23.9%</td>
<td>6.6%</td>
<td>76.1%</td>
<td>26.8%</td>
<td>19</td>
</tr>
</tbody>
</table>

From 1971 Census of Canada. Note: the projected percentage of urban dwellers in Canada in 1976 is 82% while the rural population has dropped to just under 6%. Question: is the projected population realistic?

It is inevitable that the remaining 2.7 million acres of marginal arable land remaining to be developed in the Province will come under production in the immediate future. This anticipated push out of the metropolitan regions coupled with the increasing fortunes of agriculture will result in a larger number of the population involved in and concerned with, food. Refer to the following figures for the historical trend in British Columbia's population distribution.

### PERCENTAGE OF BRITISH COLUMBIA POPULATION IN AGRICULTURE

<table>
<thead>
<tr>
<th>Year</th>
<th>Total B.C. Population</th>
<th>Farm Population</th>
<th>% of Population Living on Farms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1931</td>
<td>694,263</td>
<td>102,367</td>
<td>14.7</td>
</tr>
<tr>
<td>1941</td>
<td>817,861</td>
<td>102,446</td>
<td>12.5</td>
</tr>
<tr>
<td>1951</td>
<td>1,165,210</td>
<td>120,292</td>
<td>10.3</td>
</tr>
<tr>
<td>1956</td>
<td>1,398,464</td>
<td>112,668</td>
<td>8.1</td>
</tr>
<tr>
<td>1961</td>
<td>1,629,082</td>
<td>84,655</td>
<td>5.2</td>
</tr>
<tr>
<td>1966</td>
<td>1,873,674</td>
<td>91,443</td>
<td>4.9</td>
</tr>
<tr>
<td>1971</td>
<td>2,184,621</td>
<td>79,353</td>
<td>3.6</td>
</tr>
</tbody>
</table>


The shift in the composition of the Provincial economy that is anticipated with a resurgence in agriculture, should rebound throughout the Provincial fabric. If etymology and economics are as interconnected as linguists suggest, the words associated with agriculture are likely to become more heavily used in the British Columbian political vocabulary. The implication for the architectural vocabulary are obvious.

The unrealistic weakness of the agricultural vocabulary at present\textsuperscript{11} is

\textsuperscript{11} Robinson & Hardwick, op.cit. (1974), p.62: "The heritage and influence of large numbers of farmers, who have been part of Eastern Canada's population, have never been significant in B.C. The 'rural life' which older people in Ontario cities remember in inaccurate detail is not part of the culture of native-born British Columbians. With only one large local urban market, with a limited amount of level land, and having the counter-attraction of other resources with external markets, agriculture never became of widespread importance. The provincial population has been, and is, urban..."
exemplified by the difficulties encountered by farmers in the Lower Fraser Valley prior to the introduction of the Land Commission. The intensive farming practices, the soil's fertility and the mild climate of the Lower Fraser Valley resulted in nearly 50% of the total B.C. domestic farm production coming from this area; and yet it has also been the most seriously threatened by land conversion. At the time of the land freeze in 1972, the amount of farm land in the Valley had been reduced by 70,000 acres from the peak 1941 production to a mere 260,000 acres. At the same time, over a half million people had been added to the burden of the remaining land's food production capabilities.

Canadians have lost touch with their farming vocabulary that placed farming at the pinnacle of defining the good life. Along with the loss of the vocabulary has gone the vision that saw the pastoral as capable of transmitting the message of beauty and of fundamentally sound human values.

Metro residents continue to believe their Fraser Valley of tomorrow will be the landscape of the books they read to their children. They still believe it is possible to drive out in the country and show their children "life". If the current pressures on that farmland continue, the "life" displayed down on the farm will be far more grizzly than the most brutal motion picture. The butchering techniques, the next generation of milking machines, fertilizer over-flow into the Fraser River, factory-barns, etc. will have come within the scope of the Provincial censor's responsibility.

But an even more ominous warning can be stated. If the population of the

12. R. Haig-Brown, op.cit., p.83: "In sum, it is probably the most intensive and highly productive agricultural area in Canada, and it is this land that is slowly being buried under urban and industrial growth."
13. Mary Rawson, speech to C.S.L.A. Congress, August 1976: the aesthetic qualities of an agricultural landscape have to again enter the B.C. consciousness if the farming landscape is to have the coherence necessary for the survival of a strong farming community.
14. The Westwater Research Centre, Toward a More Certain Future for the Lower Fraser, the rates of agricultural fertilizer runoff are cause for concern.
metro area is increased by the projected two and a half million people by the end of the century (and what about beyond?) the Fraser Valley will not be able to supply more than a small fraction of the daily staples. Keep in mind most of the metro food supply is presently imported. If imported food should become the only means of supply, and if agri-power becomes the political football that is projected, it may well be that Metro Vancouver of the 21st century will witness starvation.

3. Historical Precedent for Land Commission Legislation:

Clearly there was an urgent need to curb the expansion of urban growth onto the limited farmland in the valleys of the Province. Examination of the attitudes of the farming community and a few planners, politicians and academics in the years prior to the establishment of the B.C. Land Commission shows an understanding of the issues and of the means of solving the problem. What was lacking was legislated constraint. Each year of procrastination increased the problem, until even the most passive residents of the Lower Fraser Valley began to discuss the issue.

Something was very seriously wrong. Prior to the industrial revolution cities relied upon natural limitations to hold the city within tight boundaries. The technology of the 19th and 20th centuries had lifted the constraints and created the sprawling metropolis and even megalopolis. In British Columbia sprawl meant expansion of the settlements established in frontier times in the valleys of the province. Since this was also the only farmland available, a collision of town with country had to occur, and power lay with the town. Something had to be done to change the British Columbia town-country formula; something that would recognize the finiteness of the Provincial landscape.

Historical examples of a controlled productive countryside surrounding an urban nucleus include both natural controls and legislated controls. Several
examples will be described, from Egypt, Israel, Greece and lastly, Britain.

Before synoecism, Egyptians and Sumerians clustered in isolated villages gaining a stable society based upon controlled harvests. The isolated surroundings became modified with the creation of expanded political units about 5,000 years ago. The city was a late comer as the administrative centre to the geo-political hierarchy. The increased agricultural surplus that appeared concurrent to the emergence of the larger settlement concentration, or city, permitted an expanded urban population within an increasingly complex society. However, the city was held in check by the same sort of natural forces that acted upon the earlier villages, to keep a functioning relationship between city and countryside. Food and water requirements humbled even the most ambitious Pharaoh's plans.

For millennia the few cities on planet earth were little more than small towns with 2,000 to 30,000 inhabitants. For instance, Uruk, heralded as the source of civilization, had at its zenith a mere 30,000 people living within and outside the walls. Surrounding the city were lush fields and orchards to bountifully supply citizens with life's essentials. The distinction between the city and the country even in Uruk was not as sharp as the urbanists believed. Archeologists have determined that about half of the space inside the city walls was retained as open space for orchards and fields, perhaps as insurance in case of siege. Evidence further suggests from the surviving cuniform tablets that many of the citizens worked the fields outside the city wall each day.

Several natural limits operated on the size of an ancient city to preclude over-extension, such as: the need for political and ceremonial groupings of the citizenry, the reality of defensible boundaries, the pedestrian measure of time through space, crude technology for handling large concentrations of people, and -- the most significant of the natural limits -- the ability of the surrounding fields and hinterland tributaries to sustain a concentrated population.
As a result, settlements prior to universal states were compact and depended heavily upon the surrounding countryside for community definition and sustenance. The limitations to urban growth were built-in.  

Biblical references to the functioning of town/country constraints occur in the Old Testament from as early as 1300 BC. Israel was dominated by pastoral traditions, so when God through Moses commanded the creation of the Levitical cities, a greenbelt was included. The surrounding pasture was given the almost geomancy assured proportions of 15 times the urban area. The pastoral element was to ensure a food supply but also was included for the rationale that it would be essential to keep the citizens pure. This was the first explicit connection between the ethics of the city and country, and became a recurring theme in western civilization. Basically, the city has been viewed as the source of evil and corruption, while the country has been the source of good and re-creation.

The Classical period has left a rich record of early Hellenic civilization's vernacular life. From 1200 BC to 600 AD, the Hellenic city state underwent six internal changes, each of which reflected the fundamental dependency of the city on its countryside. The earliest pattern was that of a nucleated city surrounded by a countryside composed of about six villages interconnected within one day's journey. Most of the population made their living from agriculture, travelling to the fields each day from the city in the manner of the traditional city. When the population increase filled the available area, the crowding produced a reaction from the citizens that saw the young assembled and sent by ships into the Mediterranean to found a new colony. Anatolia and Sicily were

15. Mumford, op.cit., (1961), pp.62-63: "So at the beginning of differentiated urban association, the city still retained the intimacies and solidarities of the primary community."
18. ibid., p.24: remember the mountainous topography of Peloponnnesia was a natural deterrent to large aggregations.
favourite locations. Expansion over the horizon was a simple solution to the problems of over density.

Eventually population growth had to be reckoned with by other mechanisms, for by the 6th century BC, the Mediterranean coastline had become too competitive to permit periodic colonization. This beginning of the world's overpopulation problem forced a shift in urban economic strategy to permit the survival of the city-states. The more ambitious of the city-states initiated a policy of differentiation from subsistence farming to a simple industrial system to produce enough trade goods to permit the importation of a food supply. The first stages of this innovative economy produced a dazzling cultural advance known as the golden Periclean age. However, the increasing dependence on imported essentials led to an unstable economy, and inevitably to ruin.  

As late as 400 BC, the old pattern of immediate landscape dependency prevailed in Athens. Three quarters of the citizenry still owned farm land in Attica. The pattern of living was for the family's country farm to supply the family's city household with produce. The farms also served as retreats for the townsfolk to help with the sowing, harvesting and for meditation. Some of the most refined Athenians would pattern their modest estates after Epicurus, raising the values of the countryside to a new place in the humanist philosophy.

At the height of awareness of the joy and importance of the city's dependence upon its agrarian belt, the new economic order was implemented. The increased food supply from distant tributaries enabled the city populace to remain and expand beyond the traditional confines of the city. This resulted in an increased need for importation of staples, and an increased need for industries to produce goods to pay for the staples. Soon the city as a collective grouping of equal citizens sharing in their government became inoperative. The city was too large.

19. ibid., section 23.
for all the citizens to gather together in one place to make their views known. The industrialization also created a new problem in the form of a class system. The concentration of wealth resulted in the family farm system in Attica being replaced by a few large landowners. The society of equals collapsed.

At the same time, the city-states had to become imperialistic in order to assure the growing metropolis of a food supply. With the military aggression came slaves and dependencies to fuel the competitive economy. Athenians soon found themselves faced with the incredible option of starving or working as serfs. The net result, of course, was the collapse of the family farm and the appearance of about eight non-citizens (slaves, helots, etc.) to each citizen. The lack of confidence of even the majority of citizens in the inequities of the Hellenistic city-state created internal tensions that petrified the society. The city-states' leaders misread the affluence of life at the top and began bickering between themselves. The Peloponnesian War between the city-states made the cities so weak they were easy prey to the outside world. Rome found little difficulty marching in and placing the city-states in subservience to its own supreme authority. From there one can read on in history to see the rise of metropolitan Rome, its dependence upon a remote and increasingly indefensible empire, and the growth of an immense and indigent population that placed an increasing burden upon the landscapes of the classical world until they too were swept away.

The relationship between any settlement and its surrounding countryside has profound implications beyond the simple comfort of the inhabitants. The rejection by a city of the limitations of its use of the surrounding countryside sets in motion the mechanism for the destruction of that city. It is a principle of history that has been overlooked by the contemporary burst of enthusiasm with cosmopolitan expansion.

The threads of the vocabulary for understanding town-country interdependency, reappeared in renaissance Britain. Sir Thomas More called the greenbelt a "country belt". Surrounding each delimited city in Utopia was to be a country belt of about 20 square miles. Ties between town and country folk were to be strong, with interchanges regularly made. Agricultural pursuits were seen by More to have a purifying effect on the governed and governors of the ideal society.

The first legislated attempt to create a country belt was made in England during the reign of Elizabeth I. The rapid expansion of London was worrisome to officials who were afraid the city could not absorb the increase and still maintain a modicum of public health. Londoners were also anxious to stop the expropriation of the Moorfields Common that had become the main source of land for the sprawl. Elizabeth's decree was a welcome attempt to control the size of the city and retain recreation land, but growth was too powerful to be contained for long, and the decree was not long heeded. 21

Early 19th century idealists reiterated the country belt in their proposals. For instance, Robert Owen's plans included allotments and farms for industrial workers to be able to maintain a balance between the pastoral and the new mechanized order. Edward Gibbon Wakefield also contributed to the discussion of the town-country interconnection with the proposal that park-belts should be set aside around new towns in the colonies. In response to this, J.S. Buckingham proposed a model city of 25,000 people surrounded by an agricultural estate.

Until the industrial revolution of the 19th century, agriculture was the primary means of livelihood for planet earthlings, so the greenbelt proposal was a practical reality. The dependency of the town upon its surrounding farm land provided a natural control on growth. The industrial revolution changed

21 D.R. Mandelker, Greenbelts and Urban Growth, p.28.
the economic order and the set of relationships between town and country were again in flux. Urban expansion onto the surrounding farmland was permitted with unrestrained haste, but as the towns became foul and disagreeable, a movement was set into motion to reform the process and re-establish some sense of order.

Howard was the first author to enunciate a clear and workable proposal for permanent agricultural belts around a finite town. He was convinced that mankind should consciously impose the order previously maintained by natural systems. This concept hit a responsive note in the British anti-urban sentiment, and soon a large movement gathered behind the proposals. The first garden city, Letchworth, included a controlled greenbelt. The agricultural belt here unfortunately was not the 5,000 acre country zone envisioned by Howard. Instead limited capital forced a modest purchase of about 4,500 acres inclusive of the area required for the town. Similarly, the total acreage of the next garden city fell below the optimum; it was only 3,400 acres including the town. However, later zoning at least made the surrounding agricultural land permanent.

It should be noted that in Howard's book, the agricultural belt and the greenbelt were two distinctive terms. The agricultural belt was a zone of leasehold farms owned by the civic government and used to provide a buffer, profits, produce and recreation. The greenbelt by Howard's definition was a ring park functioning as the break between the inner city and the residential suburbs. The greenbelt was meant as a source of recreation, public building sites and as the miasma purifier (fresh air park).

In the intervening years since the publication of Garden Cities of Tomorrow, several governments have been convinced to experiment with the greenbelt principle. The leading professional architect of his day, Sir Unwin, became the main advocate of the greenbelt principle. Unwin, incidentally, was the first to use the word "greenbelt" as a synonym for the country zone around a city. In lectures

and in regional London committee reports between 1927-1933, Unwin proposed the regulation of all land surrounding urban areas as a temporary land freeze. London's rate of expansion had gone beyond all imagining and was creating enormous physical and social difficulties. Unwin's greenbelt land freeze was well received as a means of controlling the boundaries of London and permitting the proper infill of the inner areas before suburban "leapfrogging". As land was needed in future generations, it was to be released from the agricultural zone. Unwin had taken the idea of Howard and extended it to include large regions.23

The next development of the greenbelt idea came with Professor Abercrombie's 1944 Greater London Regional Plan. A belt of agricultural land would be set aside as a permanent greenbelt for the London metropolis. Some development of existing settlements would be permitted to infill existing envelopes, but most urban expansion was intended to occur in a series of new towns in the countryside beyond the greenbelt. This proposal had its roots in the 1938 Greenbelt Act and the 1940 Barlow Report. Between 1945 and 1947, the greenbelt around London was legislated. It was the first attempt in the world to confine and control the quality and quantity of metropolitan development.

Elsewhere in Britain, greenbelts were implemented to emphasize the limits to growth. The Scottish legislation differed from the South-East Planning Strategy of dispersal beyond the greenbelt in that only land which had positive agricultural, recreational or amenity value would be preserved from urban encroachment.24 The effect of the greenbelts around the major metropolitan centres on the island was not entirely beneficial. Densities in existing urban areas rose considerably and the new towns began to disperse large numbers of people into the countryside for recreation etc., causing unprecedented pressures on the landscape. Some critics now believe that the whole of the British Isles has reached a stage

24. Mandelker, op.cit., pp.152-153: there were immutable narrow belts around metro areas, but all the rest of the countryside had to be justified by land capability studies.
where all the remaining land should be protected as a greenbelt by permitting the infill of the existing London greenbelt.  

Although Britain has implemented some daring schemes to protect its limited landscape, the basic problem of population increase is not being solved. The return to Britain of colonists, the free-access to commonwealth and common market nationals, and a very modest population increase have added to produce the incredible picture of a landscape that was overused and overpopulated by the end of the last century taking an even greater share of the world's population problem.

The approaching bankruptcy of the nation that once "ruled the waves" may provide historians of the future with further lessons in how to avoid national disaster. The prime lesson must be: at some time growth becomes destructive, and that time is determined by the ability of the landscape to absorb the demands of the increased population. The British do not seem to have learned their own disastrous mistake; but then, they are trapped. What can one expect from people who talk to flowers and to rabbits?

4. Land Commission Legislation:

When British Columbians became aware of the limited amount of habitable land available in the Province, they had a long history of natural and legislated constraints on urban growth in other parts of the world to examine as models.

Clearly, the laissez-faire approach to let whatever would happen, happen was having a negative effect on the quality of life, and more importantly, on the amount of land available for the basics of life. The few areas in the Province with comfortable climates, such as Vancouver, Victoria and Kelowna, were attracting

26. For instance, Lewis Carroll, Alice in Wonderland; incidentally, Otmoor discussed in chapterIII A of this thesis was the inspiration for this classic.
27. For instance, Richard Adams, Watership Down, which describes life on the uplands of the Midlands.
a disproportionate amount of the settlement. Since these areas also occurred around and in the best farmland in the Province, the yearly urban conversion was detrimental to continued agricultural production.

It was in the 1950's that British Columbians entered into land resource planning. The process of controlling landscape activity in the Chilliwack Valley epitomized the difficulties experienced in the rest of the Province. Chilliwack saw legislation introduced in 1954 in response to a developer's request for protection of his large holdings from peripheral growth. The attempt at legislating zoning restrictions to direct growth met with stiff opposition from the farming community who still regarded the Chilliwack Valley as the turf of their pioneer forefathers and resented any attempt to tell them what to do with their land. Later in the 1950's and 1960's the composition of the Chilliwack Valley altered significantly as the error of the free-for-all sprawl became apparent. Not only was farming threatened by the continual advance of the urban sector, but the old farming gentry had sold themselves out of control of the valley's future. Democracy is governed by the wishes of the majority, not by right or wrong, nor by sound use of land. The population had shifted from one of a primarily agricultural composition to one of a primarily suburban composition; consequently the values regarding the use of the landscape changed radically.

Farmers ceased to have a controlling voice in the functioning of the community. The suburban majority on Chilliwack Council co-operated with the next attempt at comprehensive planning, the Lower Mainland Regional Planning Board's Master Plan of 1966 for the whole Lower Mainland, and found the conclusions that the population of the valley would be more than tripled by the end of the century to be a joyful prospect. Investment in housing, industry, and business was seen to be well on the way to prosperity, as the Chilliwack Valley became altered from an agricultural market town to a satellite town of cosmopolitan Vancouver.
Willis and Cunliffe's 1968 planning report to Chilliwack Council proposed a land use in keeping with the new vision of the Chilliwack Valley as a satellite town of Vancouver. Agriculture was to continue to find a place in the valley for it was a source of employment in processing plants for large numbers of the suburban population, but it was to have a diminished role. In theory it was to be only reduced by 50% by the end of the century, but in fact the effective reduction was far more extensive. A very large proportion of the rural land in the valley was to be subdivided into two to five "hobby" or "part-time" farms. Experience with such ex-urban "farms" has shown the land to be almost totally neglected as a source of agricultural production. The families in possession of these small amounts of acreage tend to grow only enough for themselves or at most a limited amount for sale at road-side stands. Clearly, the 1968 plan's implicit effect was to treat agriculture as a temporary inconvenience.

Council in 1970 accepted the Willis-Cunliffe report, with a few modifications, and the new urban future of the Chilliwack Valley seemed assured. Although Council had made the first acceptance of agricultural zoning and declared its commitment to retain the farms around the urban core, many saw the proposal as one designed to promote orderly growth within the urban envelope before proceeding with the next phase of urban progress.

The farming community was not entirely united in its opposition to the plan. Some agreed with the values espoused by their suburban neighbours and saw the easy profits to be gained by retirement and moving aside for urban expansion. However, the majority of the farmers were deeply disturbed at the threat to their continued existence in the valley. The certain increased taxes and the certain increased pressures for even more urban expansion, made the demise of farming in the whole Lower Fraser Valley a very real possibility.
The concern of the rest of the agricultural community, coupled with the distress of growing numbers of the public at the rapid rate of growth fostered by their leaders, resulted in a growing awareness of the limited Provincial agricultural land. An apolitical issue developed in the attempt to find solutions to the increased pressures on the land — this came to focus in the introduction of the B.C. Land Commission in 1973.

The idea of controlling growth to permit the retention of a strong agricultural community in Canada was first proposed by the Commission of Conservation of Canada. In 1917 Thomas Adams of the Commission wrote of the need to understand the conflicts and controls necessary to relate the use of Canada's resources to the inherent limitations of the resources, i.e. to husband the land. Adams realized that Canada was no longer a frontier society with seemingly endless resources; a shift to stewardship attitudes of land conservation had to be made.

Adams also directed attention to the problems associated with the growing trend towards urban migration across the nation. The Commission recommended that arable land surrounding settlements should be set aside for permanent cultivation instead of permitting the land to lie fallow as speculators manoeuvred to promote urban sprawl. A rather daring proposal was made that land use be connected with the capability of the land as determined by the scientific analysis of the land.

However the appeal of urban living, the pressures of external capital, the logistics such as tax assessments and land capitalization, and the resistance to recognize the need for conservation controls in a society that prided itself on independent action, resulted in the conclusions of the Conservation Commission...
being politely received, shelved and discarded. It was far too precocious, but did set in motion several modest schemes for making Canadians more aware of the capabilities and incapabilities of the land under foot that would aid, generations later, in the recognition of the need for controls.

As late as 1961 Roderick Haig-Brown assessed the environmental attitudes of the majority of the population of British Columbia to be heavily committed to urban expansion and optimum resource utilization at any cost. British Columbians were enamoured with the development of the Province's resource wealth, but the limited profits of agriculture did not attract many of the migrants. Most headed for the urban centres. In the generation between 1951 and 1971, the population of B.C. doubled, yet there was an alarming decline in the agricultural community.

Thousands of acres of land classified as prime agricultural quality was converted to urban uses. This was especially prevalent in the Lower Fraser Valley. By 1966, land conversion had reached an all-time record, causing a team reporting on the continued future of agriculture in the Lower Fraser Valley to remark that farming would inevitably be terminated in the Valley. The report urged the government to take all steps required immediately to protect farming from extinction. Zoning and innovative subsidy programmes to permit the farmers to be competitive with the growing amount of imported foodstuffs, would be required. The report went further to suggest, however, that there would be no significant government control of land use until a critical point was reached in 1985.

30. Roderick Haig-Brown, op.cit., p.95: "There is for instance, no degree of popular feeling that would permit government subsidies to protect farmlands from real estate encroachment, and only the beginnings of conviction that some areas should be reserved by the establishment of greenbelts or other zoning regulations.

31. Carne, Cruickshank, et.al., op.cit., p.34: "It has been claimed that agriculture in the Lower Mainland is doomed, and should not be retained because products can be imported into the area at lower prices."
Professor Winter in the same year analyzed the data of the trends and predicted the certain end to farming\textsuperscript{32} as the Lower Mainland became a part of the Pacific Northwest Megalopolis envisioned by Professor Gottman. The question of the landscape's ability to absorb this vast concentration of people and the "minor" problem of where their food would come from once all the agricultural land was urbanized, did not seem to phase urban advocates. More than one study was undertaken to show how roof-top greenhouse gardens and basement pig-pens could solve any food supply problem. Even some of the agricultural community was convinced that food and synthetic substitutes would have to be produced in urban conditions, and so research was directed towards that direction.

The search for solutions to the concentration problem influenced the director of the Lower Mainland Regional Planning Board to insist that the agricultural zoning designated in the Master Plan was to be permanent. Parker argued that the Board was cognitive of the threat to agriculture and stressed that about one half of the Valley was to remain in perpetuity in farming. If this were true, it was the first time a coordinated attempt to save agriculture in the Lower Fraser Valley had been put forth by a government agency; most of the municipalities agreed.

It was an important step -- yet there were flaws in the plan. Instead of directing growth to the relatively infertile uplands, the Master Plan permitted too large an extension of the existing urban development. Farming requires large investments of capital over long periods of time and requires assurance of stable land use policies. The suspicion that the plan was subject to revision according to the pressures on local municipalities was implicit in Parker's

\textsuperscript{32} G.V. Winter, op.cit., (1966), p.114: "An apparently insurmountable foe of agriculture, which may eventually reduce farming in the valley to an insignificant level, has gradually loomed on the horizon...if this is not done (control of urban expansion) it is possible to anticipate a future for the Fraser Valley akin to the great cities of the eastern United States where one city merges into the next in an almost unending procession, to the virtual exclusion of agriculture."
essay on justifying the plan to all the citizens. Thus few legitimate farmers were prepared to give the commitment of additional resource investment of the sort that would promote conservation and a lasting agricultural countryside.

Between 1966 and 1972, public opinion regarding the value of open space for various uses in the Fraser Valley underwent a sharp shift. Suburbanization of ex-urban land had reached a magnitude which many felt threatened the "livability" of the Lower Mainland. More people meant a substantial decrease in the environmental quality of living. Numerous environmental groups and the Greater Vancouver Regional District held meetings and published reports outlining the problem. They indicated that the solution lay in tighter public control over land use and a reconsidered growth policy. At the same time farmers, through the B.C. Federation of Agriculture, began a lobby to ensure their survival. The Willis and Cunliffe report on Chilliwack made reference to the equitable farm taxation part of the lobby.

As a barometer of social history, events at the University of British Columbia often serve as a useful reflection of attitudes held or soon to be held throughout the Province. The vast majority of academic, student and administrative opinion on the University's Endowment Lands shifted from the 1968 majority support of almost total development of the forest in a continuation of Point Grey executive homes and an industrial research "park", to the 1972 survey where the prevailing attitude was the wish that it all remain as a regional

33. V.J. Parker, op.cit., (1968), p.171: "It has been claimed that agriculture in the Fraser Valley can raise the spectre of a small group of central planners laying down anticeptic greenbelts and deciding where people ought to live and work whether or not they like the idea."
34. Norman Pearson, Operation Open Space.
35. Willis and Cunliffe, op.cit., p.56: "So far as the inequitable distribution of taxes on the basis of assessed value of land is concerned, the B.C. Federation of Agriculture and various other Organizations are making concerted efforts to ensure equitable taxation of farmland. It is expected that some practical solutions will be found in the near future."
natural park. The landscape of the Province began to be a frequent topic of conversation, not as something beyond the horizon to be manipulated, but as a heritage to be carefully conserved.

Faculty from the university in 1972 became involved in the lecture circuit of various key organizations to gain support for increased government intervention in resource preservation and planning throughout the Province. The foresters, botanists and zoologists concentrated upon ecological wilderness reserves throughout the Province, and the agricultural disciplines concentrated on a more enlightened farm policy. For instance, Dr. Neill spoke on the effectiveness of greenbelt programmes in stabilizing agricultural production against urban encroachment. Drs. Lavkulich, Graham, de Vries and Franson, of U.B.C., together with Norman Pearson of the Greater Vancouver Regional District, held a seminar at Douglas College to discuss the farm-city dilemma. Their consensus was that land use had to be considered in terms of physical components, not arbitrary survey systems. Alluvial deposits throughout the valleys of the Province's landscape were rich sources, and the only sources, of future generations food; they are therefore subject to a different set of parameters regarding land use than is infertile land. The panel insisted that a redefinition of the goals in the land use of the Province had to be formulated to take farm land out of the hands of speculators and into the hands of the farmers. Continued urbanization was seen as threatening to the basic essentials required for future generations and also as threatening to the non-economic goals of the society.

In April 1973, the Legislature established the British Columbia Land

36. U.B.C. Special Collections, reports to President's Committee on the use of the Endowment Lands; in the following years an A.M.S. plebiscite was held in which 96% of the university supported parkland proposals.

37. John Neill, Greenbelts, the Lungs of the City, p.8: "Landscape Architects have taken the lead in asking for research in environmetrics -- an attempt to place resource analysis techniques on an economic basis, to devise a quantitative system of environmental evaluation."; also p.9: "We must draw close once more to the healing order of nature, modified by human design."

38. Lavkulich, et. al., Land Use in the Fraser Valley - Whose Concern?
Commission granting to it extensive powers to control the provident use of the limited land resources of the Province. The Act permitted the Commission to set aside agricultural land reserves for permanent farming. It also had three other duties: the preservation of greenbelt land, the preservation of land bank land for future communities, and the preservation of parkland by purchases and gifts. The original power included a land freeze on development of all land outside existing urban envelopes. This attempt to finally control for the future the limited land of the Province resulted in open hostility between the government and the urban development interests. For instance, Chilliwackian suburbanites were enraged. The government backed down on the land freeze and modified legislation to include only the first four duties outlined above.

Definitions used in the legislation have their roots in history. Greenbelt was used in terms of the original Howard definition of an open space system of recreational land in and about urban settlements. Its immediate precursor in British Columbian's vocabulary had been the use given greenbelt by the Lower Mainland Regional Planning Board in 1961. Agricultural belt corresponded to Howard's country belt; the only difference was that the Land Commission retained only that land which was determined to be suited to agriculture by the Canada Land Inventory.

The Land Commission is composed of a board appointed by the cabinet, and a small staff. The board's policy is to coordinate the operation of the various interdepartmental levels of government to have them promote the "land ethic". The Commission works closely with these departments and with the Province's regional districts and municipalities to define recreational priorities and

39. The B.C. Land Commission: a greenbelt is "an area of permanent open space within or surrounding a town or city. Its main purpose is to provide undisturbed natural landscape for the interest and enjoyment of the urban population."
agricultural zoning. In an interview in April of 1975, one of the five commissioners, Dr. Brink, insisted that their function was not to create a huge bureaucracy, but to facilitate the wisest use (i.e. to protect the landscape from irretrievable damage from urban overuse) of the land's capabilities by the citizens of the Province. There are regular meetings with regional districts, public and private groups, and individuals. The work of the greenbelt and parkland preservation sections of the Commission has unanimous support. Community projects the Commission has aided include those in Vernon, Pouche Coupe, Boundary Bay, Pitt River, Port Moody, as well as the Campbell-Brown ecological reserve, and the list continues to grow.

However, the agricultural zoning section of the Commission's mandate has been contentious. In theory, all future development of prime agricultural land was to be ended throughout the Province. Still, the Commission accepts the need to hold consultation with local governments to determine modifications to the existing envelope. If the municipality can justify land conversion, the Commission will, and has, removed the land from restrictive zoning. The protective mechanism for the land is that the initiative must be taken at the local level; the Commission is the arbitrator only after the local government supports the proposal. One catch that could hamper the effectiveness of the Commission is that the Provincial Cabinet has the right to review all decisions. At present the Commission has been given the full support of the government, and the extensive urbanization of the fertile lowlands projected in 1973 has been held in check.

In the 1975 Provincial election, the issue of the Land Commission became a political topic. The Social Credit party felt the checks on private enterprise represented by the Commission were an unwarranted intrusion into personal freedom and promised to abolish the Commission upon forming the government. Public opposition to this suggestion forced a quick revision in their platform to
retain the Commission but place greater emphasis upon the cooperation with regional districts in defining agricultural belts. It appears that too has been tempered. One of the key mirrors of public opinion, The Vancouver Province, published an editorial before the election which gave unqualified support for the good work of the Commission. It continued with the comment that local governments were too involved in the pressures of development to assess accurately the need for farmland and hoped for the continued central authority of irreproachable commissioners dedicated to the land ethic. 41

At the national level, public support for land use legislation to promote farm land preservation seems to be growing, even at a time when the majority of the public contradictorily wish to see less government interference. Agricultural and greenbelt preservation was the topic of a recent national radio broadcast. The guest, Dr. Norman Pearson of the University of Guelph, outlined the problem and suggested solutions paralleling the British Columbia example. In the discussion, there was near concensus from the respondents across the nation favouring stringent controls on farm conversion. 42

With the constraints and limitations that nature imposes upon the Canadian landscape, the few choice sections of land that have the option of multi-use must be carefully controlled to permit the syncretic use of the land according to its inherent capabilities. The dangers of an urban society overpopulating a given region beyond the abilities of the landscape to absorb and provide for that population will be increasingly a topic of discussion between Canadians.

5. Effect on Urban Form:

Behind the aphorisms such as "design with nature" is a frightening lack of substantive knowledge to back up judgments on the relationship between the

41. The Vancouver Province, editorial, November 22, 1975.
man-altered and the natural environments. The Canadian scientific community has to spend its energy in discovering how human interference in ecological systems can be profitably controlled to minimize long term problems. In this they are joined by the aesthetic community's reawakened concern for the various aspects in the man/nature dialogue.

The full implications of the limitation of the British Columbian landscape have not yet been felt in architectural theories. Is the city to be treated as a caged beast, or is it to thrive as a source of civilized values? If one accepts the need to preserve agricultural land, British Columbian cities are left with three options. The first is to direct growth to the uplands and mountains which dominate most sites in the Province. The second is to plan for higher densities within existing and future settlements. And the third option is to decentralize the future growth of the Province beyond the Lower Mainland into the rich hinterland.

The first option, mountain cities, holds intriguing possibilities. The leading proponent, architect David Spearing, has put forth a persuasive argument that British Columbia is a mountainous place, and in order to save the bottomlands for farming, British Columbians must be willing to leave behind their "flat-thinking" and live on the mountains in planned communities. Instead of being limited to the five per cent lowland and upland presently considered to be habitable, almost the whole Province would be opened for settlement by the doubling world population.

However, mountain cities present substantial problems. Threat of earthquake, steep inclines surrounding the residence, the lack of employment possibilities, expensive construction techniques and materials, and the high degree of intrusiveness into the public's landscape make the mountains unsuited to substantial settlement. A few cabins on a mountain hidden by trees can do no harm, and

43. David Spearing, Living on Mountain Slopes.
a temple on a sacred knoll is beauty; but hundreds of thousands of people living in a blatantly urban environment perched on the side of a mountain is unacceptable. Urbanists have a strange belief that people like to look at their creations. Most do not.

The second option has two parts. The first is the acceptance of higher densities within existing cities. Experience in the Greater Vancouver Region has shown this option must be approached with caution. While the central business district and some regional town centres welcome growth, the existing residential areas that compose the major land area organize to stop any intrusion of densities higher than eight units per acre (i.e., single family housing). The process of infill of existing areas also has its disadvantages. The open spaces often function as unofficial neighbourhood "parks" that buffer residential areas from incompatible uses of land. The removal of such buffers can have a number of unpleasant consequences for the surrounding neighbourhood. Infill does offer some potential for solving the problem of urban expansion. While there can be no denying the argument that the overall capacity of the Lower Mainland is rapidly being approached, infill of hinterland settlements is sound.

The other part of the second option, using higher densities within future settlements, may also offer possibilities. Yet the higher density settlement proposed by visionaries such as Paolo Soleri, is only now being understood for the implications that tight forms have upon human organization. To entice people into beehives in the sky, however gorgeous a piece of pottery they might be, would require a completely different society than what now exists.

Another version of the tighter city model has been put forth in Compact Cities. All the inefficiencies and energy waste would be solved by a sort

44. For instance, Bill Lane, speech to C.S.L.A. Congress, Aug. 1976: conservancy has become the principal objective of the public living within the Greater Vancouver Regional District; there is a growing resistance to urban growth.
45. Paolo Soleri, Archigram.
46. George B. Dantzig and Thomas L. Saaty, Compact City, A Plan for a Liveable Urban Environment, no single book summerizes the terrors of the compact city as well as this.
of "burrow" settlement, where one half of the inhabitants would be allocated houses on the inside of the city and would have a totally artificial environment, and the other half would be able to have courtyards to let in light and grow a few plants. The statistics cited to prove the efficiency of such settlements overlook the necessity of providing the energy for the massive amount of residents living in artificial conditions, but make interesting reading nevertheless. When compared with model suburban communities of four units per acre that have been designed as "energy parks" overflowing with plant material of every sort of use and beauty, the compact cities demonstrate a shocking waste of energy. Easy, natural solutions to settlements are not only more efficient, but are more humane.

The argument that British Columbians have to learn to live without parks and gardens is fallacious. A fundamental part of the way Canadians are resolved to living in urban settlements is the tempering effect of green and spacious areas. A house in a garden is likely to remain enshrined as the preferred human habitation, and gardening in all its forms is likely to remain a welcome relief from the stresses of urban life. Urban theories which do not accept this as a right for all persons who wish it, or which attack this for any imaginable reason, must be regarded with wonder, rather than remain unchallenged as the current central belief of architecture.

Instead of questioning the validity of a family's right to have a garden, architects should be participating in the re-awakened enthusiasm for gardening in all its forms. One cannot read of the way Canadians previously lived in settlements and took pride in growing their own food and their own flowers in rich soil and spacious surroundings and not be envious. How can something so right be wrong? If it takes a reorganization of the values of society to be

47. The Ark on Prince Edward Island has been carried into model communities in some research projects of American universities.
able to maintain gardens, farms and parks as a vital part of Canadian settlements, then so be it.

At the same time, not everyone wants or is able to maintain his own garden. Many would be content to live in moderate density and have easy access to parkland or farm land across the street. Also, the commercial areas of a settlement require a hard edged open space system where plants are in many cases not required. Some of the rural market towns and villages of Europe offer great potential for understanding the complex requirements of the central spaces of British Columbian settlements. Instead of dreaming up visionary schemes as solutions to our towns, which are invariably unworkable and inhuman, the European prototypes should be studied.

The third option implicit for controlling growth is that of diverting additional population away from established areas by recognizing that the established areas have reached near capacity. This is an old argument. Putting town and country planning, or the decentralists' message, into British Columbian terms reads as follows: areas in the hinterland that are to be developed for their resource potential should have permanent communities established in close proximity. The difficulties involved in preparing environmental analysis and in receiving the support of the existing regional population are considerable, but should be far less complex than adding more people to existing overpopulated urban fabrics. This third option should be the subject of intensive research since it appears to offer the most practical solution.
C. A Vision of Chilliwack's Future:

To predict the future of the Chilliwack Valley is a risky business. But if one treats the whole narrative of the continuum as a play and the valley as the amphitheatre or stage for the human drama to unfold, then perhaps it is justifiable to speculate on a possible ending.

One ending written in an Orwellian style might be a continuation of the present urbanist vision that rejoices in the appearance and concentration of an increasing number of people on the West Coast. To accommodate the estimated double population of the Lower Mainland by the end of the century, the Chilliwack Valley would be required to house and employ two to three times the present population. Vancouver would become one of the world's great cities and Chilliwack would be pulled along into this august status with it. The requirements of the newcomers would mean a different landscape in the Lower Fraser Valley than is presently encountered. Plans would be drawn up to convert farm land into factories, housing, etc. The hill areas such as Ryder Lake, would be subdivided and built upon. Mountain tops would receive funicular villages such as the one now under construction on Sumas Mountain. The town centre would begin a battle with the suburban shopping centres to attract a larger proportion of the trade dollar. The central core density would be massively increased with high rise office complexes and apartments.

Over the next 20 years the urban vision guiding the settlement drama would result in a boom for Chilliwack. The wealth generated by incredible profits from conversion of pasture to housing, together with the business boom associated with the dramatic rise in population would mean a future full of joy. But what would the next generation do for an encore after the land is all urbanized? Faced with supplying the educational, community and social services of a standard expected by the citizens, the satellite community may be required to follow the direction of all other rapidly expanded towns and either raise taxes enormously,
or create another round of building. If there is any land left for agriculture, parks, or gardens in the next century, it might not escape the attention of a new breed of urbanists. The new round of building would also concentrate on refashioning the single family homes into higher densities to accommodate the continuing flood of people to the valley.

Difficulties encountered in draining food and other resources from the rest of the world to support the frenzied pleasures of the cosmopolitan Lower Fraser Valley, coupled with the internal divisions and external inequities between have and have not citizens and nations may well result in Chilliwack coming under siege. The prospect of Chilliwack joining the realities of the rest of the world with urban terrorists or a military invasion by land and air is not too difficult to imagine. For the first time since the founding of the Hudson's Bay Company fort, human hostility might again become a part of life in the valley. And finally the whole mess would be obliterated by one of our former allies' refashioned Candu reactor bombs. As the curtain draws on the play, Chilliwackians would have found a new sense of unity as their cosmic dust mushrooms toward the City of God.

Who could possibly believe such a script? Yet who could possibly believe the awesome power of creation that was required to mould the geomorphology of the valley over two billion years? And who could believe the miraculous appearance of organic and biological life and its ever expanding complex synecology? And most of all, who could believe the arrival of humans, creatures with intellect and will, who would refashion the landscape of the valley to any conceivable purpose?

We are increasingly aware of the fundamental interconnection of all activity on planet earth. The disregard of an enlightened society for the rules of nature in designing the human use of the land must be ended. The Chilliwack Valley
has inherent natural limitations to the absorption of human activity.\textsuperscript{49} The maximum use of the landscape has not yet been reached, but the signs are beginning to show that the capacity, given the continuation of the present patterns of living, may be reached in the foreseeable future.\textsuperscript{50}

No one has the right to tell Chilliwack residents how to plan their future, other than to protect the food supply and the recreational land metro residents subsidize. One must be confident that Chilliwackians will be able to resolve the planning limitations and create the kind of community that has attracted the interest of so many people. Chilliwack has the potential for setting the standard for the rest of the rural towns of Canada to follow.

On the other hand, Chilliwack could follow the advice of outsiders, such as the recent proposal by David Spearing. With missionary zeal, Spearing proposed solving the population pressures of Asia by constructing cities of over 400,000 people on the mountains of Chilliwack.\textsuperscript{51} Which mountain? Cheam Peak?

One would hope that the future of the valley will be one where syncretic principles are applied to nestle the requirements of the inhabitants into the landscape. The concept of stewardship of a given part of land by one generation so future generations will be able to enjoy the same or better benefits is a traditional value that has been lost sight of in the incredible scramble for progress in the 20th century. Somehow a schism developed between town and country in Canadian settlement theory that placed discussion of the needs and benefits of a town dependent upon its countryside in the position of advocating yet another rural threnody. The wisdom of parks and farms and gardens within

\textsuperscript{49} Ramsey, p.2: "As it was in the beginning of settlement in this valley, whether by the Indian people or by the white man, the forces of nature are the ones which, in the final analysis, are those that shape and control the patterns of life of this valley."

\textsuperscript{50} Irving K. Fox, The Lower Fraser River in Our Future, p.3: "The issue that must be addressed is whether, in the process of growth, the quality of the environment will be drastically impaired such that the quality of life experienced by the people in the valley will in fact decline."

\textsuperscript{51} David Spearing, community meeting, July 23, 1976.
and about our settlements to temper or filter the effects of 20th century innovations with the skin of planet earth now seems less nostalgic and more essential if mankind is to progress to a higher level of civilization.

The next round of population increases in the valley will be an extremely complex problem, but it can be done. What is required is a recognition of the unique situation this place offers. Chilliwack will never suffer from the inattention of metro population pressures. The valley does not have to be stuffed and finished overnight. Chilliwack's leaders should open their eyes to the incredible natural advantages this place possesses, and then settle back to demand the best. Chilliwack suffers from small town thinking without the recognition that is its most marketable quality.

The dominant image of Chilliwack should be that of a container of people and of nature. The original perception of Lord in the 1850's, that of "a garden of Eden", need not and should not be lost. The valley should be cared for as a park.
D. The Emerging Canadian Land Ethic (A Personal Assessment):

The role of external forces in shaping the human expectations of the Chilliwack Valley landscape must be recognized as paramount in determining the use of that landscape. The model in Chapter III (E) offered sufficient evidence to support the hypothesis. A combination of social, economic, political and aesthetic judgments in other parts of the globe have always had, and probably will continue to have, a predominating effect on judgment in this part of the globe. To merely state that the earth beneath us is interconnected is not quite adequate though. Presently, when distant voices speak, the Canadian landscape becomes manipulated.

In the past there has been sufficient time lapse between external decision and internal action to permit the decision to be tempered by considerations of the land capabilities of British Columbia and the advantages to be gained by the Provincial population. However, an unprecedented rate of exploitation appears to be in the immediate future of the Province as the resource-imprudent world runs dry. The most urgent requirement for British Columbians (and all Canadians) is to develop a consciousness to counter the tremendous power of the external forces. This landscape must be seen as a finite resource to be cautiously utilized. A conservation program that stresses the maximum benefit to British Columbians and that recognizes the value of the land as a legacy to future generations must be implemented. This is the context of the emerging aesthetic appreciation of the Canadian landscape. The love of the beauty of the Canadian landscape has wide reaching implications. The stakes are extremely high; if caution is not exercised Canadians will both lose the resources and probably the free and just society that we take so much for granted.

To understand the functioning of the external forces, one must understand the myths that constitute the Canadian mosaic. For several thousands of years, the Canadian landscape was the "turf" of the aboriginal population. Harmony
with land was stressed — this was less as a cosmological option than a constraint imposed by a limited technology. It was not a society that harmonized with nature in the sense of a civilization moving closer to nature in its outlook by conscious effort, but a society where the harmony was imposed on the human spirit by nature's authority. Aboriginal man was just another creature in the synecological fabric.

The human equation of the fabric became considerably more complex in the 15th century when John Cabot and Jacques Cartier opened the continent to a different form of man-nature dialogue. The accumulated knowledge and expectations of civilization as seen through the British and French filters, were transferred to Canada. The standard of cultural excellence was firmly set in Europe, and the pioneer-colonists adopted as much of the culture as could be transported. The dream of a fabulous city, Paris, and of a perfect land, the British countryside, came to hold an irresistible attraction in the Canadian consciousness. The distance and the fact of primary contact with a wilderness of harsher proportions than Europe, led to many alterations in the fabric, but basically the dream held.

The most influential of the myths sailed to the new world was that of the British countryside. This gave the pioneer a vocabulary for recognizing and utilizing the land resources. Until this century, land was the most salient fact in the Canadian identity. When we began to urbanize, the farmers that were attracted to the cities and the immigrants escaping from the urban slums of Europe relied upon the garden city theories to demand an urban infrastructure with plenty of space for gardens and parks. There was an essential distrust of urbanity.

A profound alteration to the myths of the Canadian identity occurred in the 1960's. From about 1962 to 1969 there was a shift in the direction of the nation that we are only now beginning to understand. Most of the population
became attracted to the southern border region, around the metropolitan centres. The result is the phenomenon of the Canadian urban corridor, a sprawling megalopolis 5000 miles long, centred in Montreal, Toronto and Vancouver. Instead of a distrust for the urban, the nation seemed to find a new identity in the city centre. Symbols of urbanity entered the architectural vocabulary with unquestioned success. Canadians were drawn together in central places and were said to have a chance at dialogue with each other. The land was something pushed beyond the horizon; it was something that merely could be used so we could have the leisure to cluster and entertain one another. For the first time in the Canadian experience, joy became the most often used word to describe life.

These were the Pearson years. This distinguished Prime Minister and respected international statesman offered the Canadian public a new set of rules in the definition of the Canadian identity. Instead of the traditional myths of Britain and France, Canadians would look to all the world for their national sustenance. Canadians were sent on peacekeeping missions around the world; Canadians were sent on trade delegations around the world; Canadians were educated around the world; and Canadians vacationed every place but Canada. We were loved by all. In addition to the natural attraction of the United States upon the Canadian consciousness, the Americans came to fill all but the cultural vacuum left by the desertion of our British and French roots. As the Canadian public came to be entranced by the international dialogue both at home in our cosmopolitan centres and abroad in every part of the globe, our horizon came to be owned by everyone but Canadians.

It's been fun, but the party's over. Canadians must reassess the wisdom of discarding our heritage for a brave new world. From a total dependence upon British and French culture, we have become totally dependent upon everyone but the British and French and yet we still appear to be no further along in
the definition of the Canadian identity. In fact, the Canadian identity may have reached a new low.

The shift of myths that underlay the national consciousness was not accomplished by any one group of people. Nor was it an insidious plot to destroy the nation as some now suggest. Rather, it was a part of the temperament of the times. The world seemed to have unlimited resources, the trend was to get together in huge cities, and the optimism for a world finally on the edge of peace and prosperity seemed the correct vision. 15 years later, it is just as logical that the vision should be revised. The world does not have unlimited resources, the world cannot afford the energy and densities required for all to live in great cities, and the world must come to a friendly agreement to accept differences if there is to be any peace at all. The present Canadian vision is unrealistic with respect to the rest of the world.

Architecture has always been a reliable thermometer of national identity. When Professor Gowans returned from his triumphant description of the United States' architecture, and proclaimed that almost all that had been created in Canada prior to the 1960's was the product of a colonial obsequity, and was therefore beneath contempt, he was believed. It was the same conclusion that most of our cultural leaders had arrived at in their own work. History was abandoned as a source of explanation of Canadianism.

The incredible wealth generated by the building boom in the metro areas stimulated the search for myths beyond Britain and France. Canadians learned how to stop worrying and love the city. Discussion focussed on ways to make the cities less like the New York and Hong Kong models they were actually implementing, and more like the traditional urban solution, the courtyard. Architects became enchanted with the legend of the courtyard. The old notion of a pavilion in a park, or a home in a garden, was thrown out with all the
other ridiculous colonial residue. The ultimate home for all Canadians would be the courtyard house, as proclaimed by Professor Schoenauer. It no longer appears this is the total answer.

Another factor to complicate the definition of the Canadian landscape was the notion that everywhere in the world was better than Canada. The concentration of the nation in the very small band of tolerable climate, the acceptance of high levels of heating and lighting, and the ability for almost everyone to be able to travel to warmer climates for business, vacations and retirement all added up to a bizarre increase in the cultural "climate" of the nation. Canadians identified with the soft breezes, the exotic vegetation and the downright warmth of the Caribbean, Southern California, Mexico, etc. The expectations of the landscape back home went beyond all reason. Window ledges, greenhouses, summer gardens, and even inner city public building conservatories overflowed with exotics. The energy required to maintain these plants seemed limitless. The average Canadian's perception of the mean temperature of the nation's landscape must have gone up by at least 60 degrees Fahrenheit. The traditional image of the nation as a land of snow and igloos was replaced by the notion of early retirement to one of the joyful Canadian "colonies" in the sun and returning for the milder months to an inner city apartment to visit with the folks and tend to the retirement benefits before jetting back to the equator. The folks back home have been and are transfixed by the enticing vision.

Canadians have been jolted out of their lotus-eater trance in the last few years. Some "ran off in a huff" to the Kootenays or the Gulf Islands to "do their own thing" with the "eco-trip" but most stayed behind to pay the bills. The bills have been getting incredible to pay for our callous mistreatment of this landscape. The urban concentrations are resulting in extraordinary expenses for social services, public transit, foreign controlled media, pollution control systems, etc. Land costs make even the compact
house of the urbanists prohibitive. Travel and retirement income drifting out of the country, as well as increased expectations for our urban life-style, are tending to an absurd balance of payments deficit. Much of our food is now imported, and this in a world where many are starving. If all Canadians continue to chose to live in the urban corridor, the standard of living is certain to deteriorate seriously. Who is to feed them?

Experiences of the past summer (1976) appear to have finally sharpened and crystallized the awareness of the Canadian public of their own landscape. It is significant that this awakening should have occurred at the Habitat United Nations conference on Human Settlements and at the summer Olympics. Simply stated, we have what two billion of the rest of the world's population want.

There appears to be a discernible shift in public attitudes which suggests the great push to create metropolitan administrative centres for an emerging nation is about to be reversed. The concept that most Canadians will inevitably be living in a few urban centres may prove to be as inaccurate as the preceding generation's belief that Canada was inevitably destined to be a rural nation.

If this is a correct reading of the political climate of the nation, then it is inevitable that smaller settlements such as Chilliwack will increasingly become of interest to Canadians. Instead of huddling in exotic urban micro-climates, Canadians will want to feel a part of the land of the horizon. The 21st century vision most likely to appeal to Canadians is that of a nation closely identified with the last frontier: the landscape of Canada -- all 2.465 billion acres of it. This real landscape of Canada is either bitterly cold and desolate, and/or is mountainous and forbidding. IT SNOWS! But it has a beauty worth pursuing.
Architecture appears to be in a process of making a reassessment of its commitment to only one aspect of the space of Canada -- urbanity. There is a need to consider a balance between the whole range of spatial systems: urban, pastoral, and wilderness. Instead of considering only the inner walls of the city, architects must again look outward to the land beyond, and perhaps bring some of that land beyond within.

In the process, there is a need to re-establish ties with the rich landscape vocabulary of the past that has been so mystifyingly shelved for the last 20 years. The land and people beyond the metro centre are essentially distrustful of centrally evolved architectural theories imposed on the land. There is, by contrast, a profound trust in the landscape of Canada. One means of re-establishing the vocabulary is to study the continuum of the land. In the true history of Canada, reread, may come at last a Canadian unity and strength.
E. Concluding Remarks

The sequence of events that have moulded the landscape of the Chilliwack Valley have been touched; nature (through the morphogensis of the park), the Stalo peoples, the explorers, the Hudsons' Bay adventurers, the Royal Engineers, the colonists and the Canadians have all played roles. Somewhere within the script is the answer to the quest.

The indigenous peoples were intimate with the answer; their new partners had an affinity for it. In such a complex subject, it is understandable that the phrasing of this ethic would have to be cautiously put forth. However, for the present generation inhabiting the land north of the 49th parallel, it is next to impossible to find the ethic. Somewhere between 1946 and the present, the beliefs which blanketed the land close around human life were misplaced.

To explain the present indifference as the result of cerebral dominance, is a grievous error. For the main thrust of Canadian academia seems to be evolving to a recognition of constraints incumbent upon land use to ensure a syncretic heritage. The cerebral-intuitive dilemma stands combined. To find the actual villain is not difficult -- some cliches spring to mind: the plastic society, the seduction of media technology, the introspective metropolis, the multi-national corporations, the consumer society, etc.

In comparison to past generations, the present is characterized by a conceptual and applied insensitivity to the land. That may be the devastating conclusion to the search for the land ethic. Why is there a sense that Canadians live in an invisible country?
Figure #67
Cultus Lake

Figure #68
Silver Lake

Figure #69
Harrison Lake
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BIBLIOGRAPHY

A. Bibliographic Note

In the sparsely cultivated field of Western Canadiana, a few books continually appear on my desk. In particular, Ormsby's History of British Columbia, Duff's The Upper Stalo Indians, Akriggs' British Columbia: A Chronicle and Crieghton's Canada: The Heroic Beginnings provided continuing inspiration to the understanding of the significance of attitudes which mould our landscape.

Specific information required to assemble the continuum was gathered from the resources of several libraries on the University of British Columbia campus (Main, Special Collections, Architecture, MacMillan, Microfilm, Geography, and Sedgewick). The Vancouver Public Library, the Vancouver Archives, the Vancouver Museum, the Vancouver Art Gallery, the Museum of Anthropology (UBC), the Chilliwack Museum and Archives, the Fraser Valley Regional Library (Chilliwack Branch), the Royal Canadian Engineers' Museum and Archives (Chilliwack Base), Fort Langley National Historic Monument, the Provincial Museum (Victoria), the Calgary Public Library, the Glenbow Alberta Foundation (Calgary), and the University of Washington Library (Seattle), -- all provided useful sources of information.

In addition, the Provincial Archives were utilized. That institution is a gold mine. However, one word of caution: a researcher must have a definite hypothesis and methodology before attempting to tap the massive amount of material there. Otherwise, a lifetime would not be adequate to absorb a fraction of this storehouse.

For the European primary research, numerous libraries, museums and art galleries on the continent and the British Isles were consulted. In particular, the Bodleian Library (Oxon), Oxford City Library, King's College Reading Room (Cambridge), Dartington Hall Library (Devon) provided depth to the continuum.
Photographs for the text were gathered from Special Collections (U.B.C.), the Vancouver Art Gallery, the B.C. Provincial Archives, the Notman Photographic Archives (McGill University), the Chilliwack Museum and Archives, Parks Canada (Ottawa) and Integrated Satellite Information Services (Prince Albert, Sask.), as well as from several individuals (named per photo credit). Maps were obtained from several sources, which are the subject of a separate section in the appendices.

Most of the architectural, landscape architectural and related background references which I feel are essential to have had contact with to fully appreciate the continuum, as well as design experience to be able to understand creative processes, are not included. (I can recommend a nine year university course to anyone who is interested.)

The last source of information is the most important: the land. The continuum can only be understood by examining the physical presence of the landscape of two continents and in particular: Chilliwack.

Many of the items used in the thesis, such as C. Wells' ballad, have been obtained from authors under condition that their work will only be used for academic purposes. None of the subject matter of this thesis may be reproduced or quoted without the written permission of this candidate, unless it is for coursework at the University of British Columbia; and in no circumstances should quoted material found within this thesis be used anywhere without separate permission from the concerned author.
B. Bibliographic References

The list is subdivided into the following eight categories:

1. Methodology and Theory
   2. General
   3. Chilliwack and Lower Fraser Valley
   4. British Columbia
   5. Canadia
   6. The Garden City Movement
   7. Village Patterns
   8. The Aesthetic Landscape

1. Methodology and Theory:


2. General:


3. Chilliwack and Lower Fraser Valley:


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6. The Garden City Movement


7. Village Patterns


8. The Aesthetic Landscape


APPENDICES

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INSIDE A SNOW CRYSTAL REFLECTION
(the Chilliwack River Basin)

Beard, the Edenbank shopkeeper told the traveller of the past of the Mëét et Chandon goddess suspended between silver and crystalline glass - just an ad, a festival ad, a nouveau arts portraiture, silked at the heartland surrounded by export-inter-import-nation web-dusted, primeval grained Chilliwack fir; this tree returned, humanized, after a long absence, to this place. Haggling ten percent for possession; package bound; gently fisted to the trunk's gift trove; onward.

Past the harsh suburban trailer camps crawling, the rusting Chevy seized, before the microclimate trance of glistening frost-paint timbers - like cathedral tracery winter suspended within soft powder snow: morning's first delight; before the mason's grand grand child with golden stone tissue, rib space encased holy. This scene, nowhere but this turn of the treaded snow valley trail; white spaced strides paused nose-nipped, as the enchantment purest faded into evergreen. Snow's peace rebounded sound still: heart's breath quilted his inner ear. Onward?

Trestle bridge view, high above the meeting pitch roar of tributaries tributary to the estuary mud salt; thus the power flow forever enjoined the moon's tides. Dressed lumber handrail precisely drafted, cut and sanded, at the touch reminded: could the turbid snowmelt froth ice-green gravity sliding raw-might pouring through eyes' nerve endings, be dared by lesser? Birds flew past Icarus' sun.

The sun, rarely through the tree bottomed valley beamed; but mountain tops were instance kind in bowing along the widening path: first sun through trees hit warmth then shadow, conscious warmth then shadow, hypnotic, to the clearing where snow crust crystals diamond blazing radiant released cloud descended Olympia to dance with silken heat above, through, and with - that melting iceflow dream - but its Canada Cold; sun out.
Empty forest wilderwomb covered the sky,
Consolation from larch branch
moss weeping for the loss of dream's spark;
overhead, snow-leaf liquid fell
within the aqueous echoing depths of his archetype eye.
Reflection clearing found forest roof
lightning replaced, so thicket's new growth
surrounded the path: lean branches straining
against verdant branches
years' fight for succession begun.

River song filtered through thicket's needles
giving constant form to the valley.
Twig snap broke this lonely ear message
as earth's thick drum
was slowly played by approaching feet;
cedar-woven maiden with night's hair
and fire ember face that glance-traded
snow's blanket for spring's rejoice
appeared through cedar boughs;
in time, growing branches entwined the vision
but she reappeared along path's thrice turning:
startled, the traveller broke from
a following pace to sweat run,
pursuing spirit transfigured deer swift —
was this not smoke taught Stalo myth
of river trail villagers, forest century reclaimed?
Forest spirit paused path centre
and globe turning faced:
the traveller's academic chaired rump, bumped;
wheeze air notes finally grasped to embrace
cedar fragrant air.

Darkness surrounded the solitary figure
thickly replacing lung's last air;
alone, within the enclosing wilderness
alone, without Carr's trust.
Nihilist, but raw blackest terrors overwhelmed
even Kandinsky spectrum spaceless images:
thus the lion ate the smilodon who ate
the frozen flesh of tyrannosaurus rex
who carnaged Eden's best.
Dodgson's analogue tunnel also spun
not to fear-forest or to tundra vastness
but to specious hope
and out, order perfect, the traveller found
joy's sun.
Entering the broad valley confluent of the Post artery with the Chilliwack tributary, the traveller's face inclined to greet the sky and beamed and beamed contentment at the good life-sustaining blue atmosphere dome, nestling snug-tight over the mountain peaked upward horizon, as though this place were the only place. But an intruding aeroplane reformed the illusion: a sticky paw was guided by full fingers against the smooth vacuum sealed stratosphere triple glazing, as they god-traced the valley's outline. Those fingers touched the traveller's memory. The winged people flew between the peaks into the quieting blue toward some village.

Upward along the serpentine mountain pass, he came to a roughest escarpment; the sort the enlightenment and friends dreaded. But differing sensibilities now thought companionable those crags and cliffs and canyons with mist penetrating Landscape! Grave shaped boulders ripped from the sides shattering reflecting peace and ended their first gravity staged journey to the centre, a foot ahead and beside the traveller. Dust clearing, he fearfully glanced above for Salvador's banditti but saw but two mirthful racoons.

At the summit the trail divided, one went forward; but further into the woods he followed the promising one. North of the cleated trail, deer tracks led inward to a snow refreshed meadow; the delicate doe-pads printed texture fine curving across the clearing's midst toward a parting of the sky. The traveller gingerly stepped from tree to tree to tree around the circle to the sky. Beyond the solitary pine stretched the day's journey: so that is why and there it is, how great the muliebritous valley is; youthful ridges softened to easeful curves and through the whole came the enigmatic riversong overflowing space without end.
It became too sublime.
The traveller moved with leaden stealth
back to the plateau path;
wandering through the pine scented woods,
his body quickened as if pulled
toward the inclined earth's liquid hearth.
Past fecund fir cones in white half-buried,
past winter furled maple leaves,
running free through perfect forest
the traveller glimpsed a shimmering pool
like precious liquid in paradise's font;
opening fuller, the panelled view
with richly furrowed fretwork,
a fir trunk framed triptych, nature carved.
Horizon blurred through trefoil branches
till caryatide totems vanished
and stretched beyond: s'HAW-Chuk'1, the source.

The lake's mnemonical glass level-smooth
surface steep-edged joined the tom
thompson treed mountain's containment.
The traveller ledge rested and met ptarmigan,
whose coo feather breath waved
before fragile tersus inclined to flight,
 grace soaring past eye's continuum.
Descending the boulder stepped final trail
the traveller emerged from the rainforest,
to the snow-free peach mineral and cream quartz
fine granuled beach necklaced with
dove feathers and trembling aspen leaves,
and knelt by water's edge.

On a beached raft half submerged,
around water's ripples shoreline drifting
like ocean's tide, but with a subtle litany
that feline lapped on thalamus,
he ventured into the lake;
another alluring song drifted past
proclaiming distant alluvial river's spring;
was this the force that keeps
earth in its place and drives desire?
Glancing across the reflecting glacial lake's
gentle breeze-ripped surface, he touched
the abstract colours of vibrant hue blue sky
with brilliant snow sun-refracted peaks and
sunlit green fir-forest, zone marked from
shadow green blue forest, to water's ultramarine
dark depths, sense blended - wave after wave after wave,
and the traveller slipped past the
mirroring surface into a fresh infinitude.

Nov. 1975 - March 1976
revised July-August 1976;
T.C. Arnett
APPENDIX B

Cartography: A List of Maps of the Chilliwack Valley Arranged Chronologically

In order to piece together the cultural landscape of the valley, over 200 maps were studied, covering the period of prehistory up to the projected land use plans for the rest of this century. The more useful of the maps have been listed below: they appear under the headings outlined in Chapter I and form the basis for the discussion of the cultural landscape in Chapter II.

For the convenience of those who would like to consult the original sources, the location of the maps is given using the following code:

UBC ............ Main Library, Stacks, University of B.C., Vancouver
UBC-MD ........ Map Division, University of B.C.
UBC-SC ........ Special Collections, University of B.C.
PA-MD ........... Map Division, Provincial Archives, Victoria
PA-RL ........... Reference Library, Provincial Archives, Victoria
CERS .......... Canada Centre for Remote Sensing, Ottawa
FCRD .......... Fraser-Cheam Regional District, Chilliwack
NWD .......... New Westminster District Lands Office, New Westminster
CMR .......... Chilliwack Municipality Records, Chilliwack
CCR .......... Chilliwack City Records, Chilliwack
CHSM .......... Chilliwack Museum and Historical Archives

Prehistoric Period ( -1808)


UBC ............ Map of Stalo and Adjacent Tribes, Fraser Valley, B.C.; Wilson Duff: The Upper Stalo Indians of the Fraser Valley, B.C., Map #1, p.20.
UBC .......... Chilliwack, Pilalt, and Adjacent Areas: Villages and Archaeological Sites, Map #3, p.36; Duff, ibid.

UBC .......... Map of the Nooksack and Chilliwack Tribes, map #1, Marion W. Smith, "The Nooksack, the Chilliwack and the Middle Fraser".

Exploration (1808-1862)

PA-MD .......... David Thompson's map of the north-west territory of the Province of Canada, compiled by him from the journal of Simon Fraser and other explorations between 1792-1812.

UBC-SC .......... Map of the Fraser River and Burrard Inlet prepared by Emilius Simpson in the HBC Scooner Cadboro in 1827; published by the British Admiralty Hydrographic Office, 1858.

PA-MD .......... Original Sketch of exploration between 1846 and 1849 by Alexander C. Anderson.

PA-MD .......... A correct map of the northern coal and gold regions comprehending Fraser River carefully compiled from the latest data and personal observation by A. Waddington, 1858.

CHSM .......... Indian Territory, 1858, compiled by Oliver Wells (1966).


PA-MD .......... Unnamed tracing of Fraser River from Chilliwack to Fort Langley, n.d., circa 1859, manuscript hand tinted.

PA-MD .......... Sketch of part of B.C. by Lieut. R.C. Mayne, R.N. of H.M.S. Plumper (upper Harrison to the Cariboo), 1859.

PA-MD .......... Fraser River and Burrard Inlet, surveyed by Capt. G.H. Richards, R.N. and officers of H.M.S. Plumper; the Admiralty, 1859-1860.


PA-RL .......... Tracing of townsite (Chilukweyuk) located on the left bank of the Fraser below the mouth of the Harrison River, by Corp. Leech, R.E., manuscript hand tinted, 1862.

Settlement Established (1862-1886)

PA-RL .......... Tracing of William Hall, R.E. retirement pre-emption along the new road from New Westminster to Yale; three hand sketched maps in correspondence, 1865.

UBC-SC .......... B.C. Department of Lands & Works, New Westminster to Yale road route, 1865.
UBC-SC ...... Map of location of Western Union Telegraph Line from New Westminster to Yale; J.C. White, 1866.

PA-MD ...... Map of a portion of the Colony of B.C. prepared from various sources including original notes from personal exploration between 1832-1851 by Alexander C. Anderson, 1867.

PA-MD ...... Fraser River, circa 1872.

PA-MD ...... Map of New Westminster District published by Woods and Turner, Civil Engineers, for the B.C. Department of Lands & Works, 1876.

PA-MD ...... Plan showing lands on the east side of Sumas Lake inundated by the rise of the Fraser River, and the position of proposed levees to reclaim same, 1876 (see additional detail map, too).

PA-MD ...... Map of New Westminster District published by Woods and Turner, Civil Engineers, for B.C. Department of Lands & Works, 1882.

CMR ...... Plan of township #23 East of Coast Meridian in New Westminster District; first surveyed in 1868 by G. Turner, and revised four times to 1886.

UBC-SC ...... Topographical Surveys Branch, Canada Department of the Interior, 1885.

PA-MD ...... Map of New Westminster District published by Rand Brothers Real Estate Brokers (Vancouver and London), 1886.

Post Confederation Speculation (1886-1918)

UBC-SC ...... Map of New Westminster City and District, Albert I. Hill, 1889.

PA-MD ...... Map of New Westminster District published by Rand Brothers Real Estate Brokers, 1892.

UBC-MD ...... Port Moody Sheet, Surveyor General's office, Ottawa, 1902.

PA-MD ...... Fraser River and Burrard Inlet, surveyed by Capt. G.R. Richards, revised 1906, the Admiralty.

NWD ...... British Columbia, plan of township #23 East of the Coast Meridian; Canada, Department of the Interior, revised to 1904.

UBC-SC ...... Map of New Westminster District; D.R. Harris, 1905.


UBC-MD ...... Yale and Port Moody Sheets, maps #10 & 11: Surveyor General, 1913.
UBC Chilliwhack Township: map of existing architecture from pre-1914; Sandilands, et.al. *Architecture of the Fraser Valley*, p.93.

CHSM Sketch of Chilliwack Valley: the conceptual map of Chief Sepass, circa 1901.

**Productive Expansion (1919-1946)**

CMR Map of Sumas Lake before reclamation; F.N. Sinclair: *A History of the Sumas Drainage, Dyking and Development District*, 1919.

UBC-MD Map of New Westminster District; Canada, Surveyor-General, 1921.

PA-MD Preliminary map of the Lower Fraser Valley; B.C. Department of Lands, Map #4P, 1931.

CMR Map of Chilliwack Municipality as compiled by A.E. Humphrey, BCLS, 1939.

PA-MD Map of the Lower Fraser Valley, B.C. Department of Lands, 1946.

UBC-MD Map of Sumas Area; Canada: Department of Mines and Resources, Surveys and Engineering Branch, 1941.

UBC-MD Chilliwack; B.C. Department of Lands and Forests, National Topographical Series, 1948 (published 1951).

**Industrial Growth and Functional Integration (1947-1971)**


UBC-MD Chilliwack Lake; B.C. Department of Lands and Forests, 1958. (see also the Langley sector).


UBC-MD Recreation land capability; Canada Land Inventory, 1967.

UBC-MD Computer outprint of present land use; Canada Land Inventory, 1968.

UBC-MD Land capability for wildlife and waterfowl; Canada Land Inventory, 1969.

CMR Various maps, past, present and future; *A Draft Development Plan for the Township of Chilliwack*; Willis & Cunliffe Engineering Ltd., 1970.
UBC ......... Lower Mainland Regional Plan, the Lower Mainland Regional Planning Board, 1968.


Note: Other maps are cited in the thesis' text, which have not been included in the bibliography. The originals have not been reproduced in the text, partly because of the expense, and partly because I believe it is rewarding to search through the various records for the whole experience. Many of the maps are aesthetically pleasing as well as informative.
APPENDIX C
Letter to Chilliwack Historical Society re: Assistance

108-3755 West 6th Avenue
Vancouver, B.C. V6R 1T9
August 22, 1976.

Mrs. Margaret Hepburn, President,
Chilliwack Valley Historical Society,
The Chilliwack Museum,
Chilliwack, B.C.

Dear Margaret Hepburn,

As you may have been aware, I have been working for some time on a history of the Chilliwack Valley for the degree of Master of Architecture at the University of British Columbia. During the past while, three of your members: Dorothy McCutcheon, Earl MacLeod, and Casey Wells, have been of great assistance. Each has read the preliminary draft and has made a number of additions, corrections, and improvements.

The final draft of the thesis will be completed by mid-September. It would be advisable to have someone from the Historical Society to go over the final draft to comment upon remaining factual errors and upon errors in interpretation. There is some urgency for this person to read the thesis draft, for the completed version must be submitted by the first week of October to meet the fall convocation deadline.

I would appreciate it if you would select one of your members to read the final draft. They would receive the draft mid-September, and would have about two weeks to go over it. Would you please forward his/her name to the above address.

Sincerely,

Terrence C. Arnett.
Letter to Chilliwack Historical Society

Westward Inn, #232,  
119 Twelfth Avenue S.W.,  
Calgary, Alberta, T2R 0G8

Mrs. Margaret Hepburn, President,  
Chilliwack Valley Historical Society,  
The Chilliwack Museum,  
Chilliwack, B.C.

Dear Margaret Hepburn,

I would like to recommend six projects that your historical society might find pleasurable to support as a contribution to British Columbia Heritage Year in 1978. These involve the Archives' security, a Chilliwack Historical Research Library, the colonial landscape of one part of the valley, a biography, an anthology of rural literature, and an architectural heritage survey.

The first is the improvement of the present Chilliwack Archives' vault capacity for storage of irreplaceable documents, photographs, etc. The advertisement of such a permanent depository with security systems, would result in more of the valley's history being entrusted to the Archives. Copies of these records could then be made available to researchers.

The second is the creation of the Community Historical Research Library. This library would be composed of copies of archival material and of publications relating to each rural British Columbia community. It would be initiated and maintained by the local community to provide a source of information for students and residents on local history. Casey Wells has organized the prototype for this library and hopes to initiate the pilot library in Chilliwack as soon as possible. He should be given every assistance in this important task.

The third involves the colonial landscape of an area at the foot of Chilliwack Mountain which extends across the riverfront to Hope Slough on Indian Reserves #4, 5 and 8. These few acres contain a rich layer of history including several Stalo village sites, canoe point, the "amphitheatre", the Hudson's Bay Company cannery, a fish weir, the Royal Engineer Boundary Survey lodge and depot, several gold rush campsites, a mine shaft, Chilliwack Landing, trails, roadbeds and canals. A study of the various parts of this historical landscape should be begun to preserve for future generations the origin of settlement in the valley. At some time in the future, this area will be set aside as a heritage park. Restored architectural features, a relocated Chilliwack Museum, and a landing for the re instituted steamboat service on the Fraser will probably be built.
The fourth project is a biography of Earl MacLeod: Most Chilliwackians are unaware of how significant Air Commodore MacLeod's contribution to Canada has been. Discussions I have had with members of the aviation community have concluded he was the leading aviator in the public's service. In addition, since aviation was so interconnected with settlement from 1920 to 1950, he is a primary source of information on this critical period in the nation's history. A biographical sketch should be prepared. Perhaps in the future some writer will be able to make this research into a best seller.

The fifth project is an anthology of valley ballads and literature which celebrate rural life. There is a pressing need in British Columbia to re-establish an appreciation for the beauty of rural values. Such an anthology could make a contribution by including Stalo legends, early explorers' journals, pioneers' letters and writings, photographs, and ballads from the valley's past.

The sixth project involves a survey of the architectural heritage of the Chilliwack region. Such a survey would attempt to locate and describe the construction, site arrangement, condition through the years, functioning, influences on design, and any other factors which might reveal the personality of the builder and his responsiveness to the valley's environment. The two architectural highlights, Chilliwack City Hall and the MacLeod cabin at Chilliwack Lake, should receive particular attention.

All six projects can gain the modest financial support required for comprehensive research from the Provincial government under the terms of the heritage fund set up to celebrate 1978. I would suggest using the resources and enthusiasm of the faculty and students of the University of British Columbia.

Sincerely,

Terrence C. Arnett.
Errata:

p.vi......add another page to section G, pp.365-370a.
......add section H, Summary of Chapter IV, p.370b.
p.ix......add figure #38a Chilliwack River Road circa 1880, p.306a.
......add figure #39a Country Lane, Chilliwack circa 1890, p.306a.
......add figure #52a Farmhouse, Chilliwack, circa 1890, p.337
......add figure #57a Ashwell House, circa 1891, p.345a.
......add figure #58a Chilliwack City Hall, circa 1910, p.345a.
p.xi......typing error: Dr. Vernon Brink.
p.13......typing error: footnote #35 - Julius Kane.
p.29......typing error: footnote #47 - the reference number is p.35.
p.63......typing error: line 2 - under The Beaver, since it is a ship.
p.126......punctuation: line 3 - the soul.
p.131......add: figure #9 credit Sherwood and Pevsner, The Buildings of
p.173......typing error: line 5 - centuries old footpath.
p.189......typing error: line 19 - underline a priori.
p.238......incorrect wording: line 9 - the most tenuous of social, cultural,
or political ties.
p.243......writer's error: footnote #20 - I can no longer find reference.
p.265......spelling error: line 15 - imaginations.
p.276......spelling error: line 18 - established.
p.310......spelling error: line 1 - community.
p.328......typing error: line 5 -bears and cedar trees? The footnote
refers to p.389 in thesis.
p.360......spelling error: line 10 - F.E. Buck.
......spelling error: line 13 - enough.
p.365......typing error: line 15 - indent paragraph.
p.370a......spelling error: line 8 - Neanderthal.
p.370b......typing error: heading should be section H.
p.377......typing error: line 10 - such a strained landscape.
p.391......spelling error: line 4 - processing.
p.405......spelling error: line 10 - siege.
p.449......typing error: line 24 - Landslide!

also
p.x......inadequate time and funding: maps #4 & 5 have been combined.
......inadequate time and funding: map #7 has been deleted.