Quotes and Definitions from "City and Nature – An Integrated Whole" (2000) by Trausti Valsson The book: https://notendur.hi.is/tv/Content/Books/City%20and%20Nature.pdf

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Notes and Sources

From the book "City and Nature – An Integrated Whole" (2000)

From the Foreword (p. 6 in the book)

"I welcome this insightful work, which reflects attitundal changes of many young people, but sadly not their elders, throughout the globe; an wholistic world view".

"Some ten years ago, I wrote a new preface to the second edition of my "Introduction to Landscape Architecture" which I had altered considerably. If I were to do the same today, I would include much of what Valsson writes and recommends in his brilliant text, and change mine accordingly".

Michael Laurie. *Professor Emeritus Landscape Architecture and Environmental Planning University of California at Berkeley.*

From the Introduction (p. 7 in the book)

"... here theory is not pursued without a purpose. It is used to get down to the roots of western thinking to better understand why our cultures have for so long drifted away from nature." (p. 7)

"The core of this new scheme of thinking is not to see city and nature as opposites, as western culture has, but rather as an integrated whole. Guidance down this path can be found in eastern culture and design". (p. 7)

"One of the most remarkable things about binary pairs – that we westerners call opposites – is that, if they are given the chance of working together, each member of the pair mutually enhance each other. This phenomenon is known from the colour theory of 'opposite colours', where, for example, red and green can mutually strengthen each other. This law is called complementarity and the colours, complementary colours". (p. 7)

"Within the field of design we can experience complementarity at work when, for example, a house and a garden are designed together, because then the house is improved by the garden and the garden by the house. In this one example we realize that by applying this scheme, design can be elevated to a higher level". (p. 8)

"The most beautiful example in Reykjavík of the interplay of city and nature is in the downtown area of Kvosin – as concerns its interplay both with the old harbour and with Lake Tjörnin. Here again it helps to create a theoretical projection because if we imagine the lake and the houses placed somewhere farther away, we see that the two elements are not that remarkable, whereas together they create a highly remarkable complementary unit". (p. 8)

I. Man and his Methods

1. City and Nature

The City: Man's Shield Against the Threats of Nature (p. 9)

"In the history of civilization, cities and the forces of nature have for a long time been conceived of as opposites. The city, in its function as fortress and defence, is a symbol of man's struggle to protect himself against the threats of nature and other external forces". (p. 9)

"Humankind could then relax and was enabled to see the good and beautiful in the natural force that previously instilled fear. Attitudes towards nature are therefore based on the view of nature in each given period of time: is it threatening or tamed?" (p. 9)

"In the nineteenth century technology and knowledge started to release the nation from the tremendous grasp of fear and stagnation". (p. 9)

"During the dark Middle Ages the fear of evil spirits governed the mental world of all of Europe. The clergy used this fear to postulate Christianity as man's shield against the evil forces that exercised, as it appeared, the upper hand in nature and thus the city, being a symbol of safety, almost became synonymous with faith. Or as Matin Luther put it: "Our faith is a city on a steady mountain built". (p. 9)

"Because most cities provided security when fear and terror lurked in every corner of untamed nature, it naturally followed that the city acquired an image of the good and the beautiful in contrast to nature's image of the bad and the ugly". (p. 10)

Nature as the Image of the Good and the Beautiful (p. 11)

"Another historic development of the same period was also to have an influence on the image of nature...". (p. 11)

"... In only a very short period of time the image of the city was totally reversed: the formerly good and secure city was now seen as the image of the dangerous and the ugly". (p. 11)

"In only a few places did the integration of this proud sense of nationhood and the worshipping of Nature reach a higher degree than in Iceland. This was because few things other than nature and the Icelandic sagas have such a degree of uniqueness, in a European context, that they are capable of earning the deep interest and admiration of other nations". (p. 12)

City and Nature: An Integrated Whole (p. 15)

"... Iceland has produced two examples of the interplay of human habitation and nature that are of international importance: the turf farm and the coastal town at the time of fishing smacks". (p. 15)

"The author of this book, in his dissertation for the University of California at Berkeley, developed a theory of how to make use of this idea in design and planning. This book makes use of this theory in order to explain how successful the interplay of settlement and nature can be in design...". (p. 16)

"The first reason is because this type of superior quality of design can only be achieved with the interplay of two features that, as in the theory of colour, must be a complementary pair. The chief characteristic of such pairs is that they result from dividing a whole, as, for example, dividing the colour spectrum into a pair of "opposites" like red and green. Other examples of this process include the positive and negative charges in electricity and the north and south poles of a magnet". (p. 15)

"...houses and gardens today are not designed together but separately. Therefore the houses have little relation to their gardens and the gardens only a limited relation with the houses. As long as this approach prevails in the field of design, the supreme quality in the design of house and garden where the two are mutually enhancing, can not be reached, a quality that produces not 1 + 1 = 2, but an extra value: 1 + 1 = 3!" (p. 16)

2 Method Rules the World

Today's Method of Dissection

"The first section of this book explained how nature usually appear as a pair of opposites in history... there are various historical reasons for this polarity and its reversal, but at the same time it is very clear that what is imbedded deep underneath is a certain basic aspect of Western thought, i.e., the urge to define almost everything in terms of irreconcilably contrasting pairs. It is quite obvious that if we hold on to the position of defining, for example, the city and nature as a pair of opposites, little will be done to strive to connect city areas or buildings to nature". (p. 18)

"In order to start to approach the problem, nothing short of submerging oneself into the philosophical structures of Western thought will suffice in order to start to understand the fundamental reasons for the problem... It is a long story how Western dualism came into being. In examining this question, it is quite practical to start with Christianity, which divides everything into good and evil, heaven or hell". (p. 18)

"An example of how much a good building can do to enhance nature is the Hveradalir ski lodge. This realization suddenly dawned on the inhabitants of Reykjavík after the lodge burned to the ground in the early 1990's". (p. 18)

"The fact that we need not be slaves to the scheme of irreconcilable opposites can be learned from the Eastern scheme of thought. There "opposites" have the names yin and yang ... Both features are considered equally important because the two could not exist without each other". (p. 18)

"... dualism managed to take hold of Western science in the seventeenth century, not least because of the influence of Bacon, Descartes and Newton. The most fundamental feature is that science was divided into two groups: respectable science, which deals with that which can be measured, and the opposite; not respectable science, that deals with things not easily measured". (p. 19)

"...almost the only method was to cut things apart before starting to study them. This method rests on the naive assumption, that a knowledge of the separate parts would produce a better understanding of the wholeness, and the nature, of the subject to be studied". (p. 19) "In order to demonstrate how questionable it is to draw conclusions in this way, as does scientific dissection, the story of the four blind men that were examining an elephant is often told. One of them studies the trunk and concludes that an elephant is like a hose, another one researches the leg and concludes that the elephant is like the trunk of a tree, etc". (p. 19)

"We thus today, unfortunately, are stuck with this method of "cutting apart", which actually is the real meaning of the Greek word "ana-lysis" that is used internationally to denote this method. The science of "putting things together", i.e., "syn-thesis", on the other hand is little dealt with...". (p. 20)

Dissection: The Root of the Problem

"...to declare it a major task in the new century to create an understanding of how terrible the problems of compartmentalization are". (p. 21)

"...humankind originally invented the walled city as a shield against the threats of nature... In good years riches flowed from nature, but then suddenly she would strike with her rod of punishment so that people and livestock perished. Something was bound to cause this because such terrible occurrences hardly happen without a cause". (p. 21)

"One of man's oldest methods to find emotional stability in the unsettling chaos of life was to create abstract worlds of religion and philosophy. In this way humans managed to create a divide between themselves and reality and especially between themselves and the world of nature...". (p. 22)

"Within the field of architecture and planning, functionalism has been the worst because, as the term itself points out, it focuses on function in design but disregards features like form, feeling and value...". (p. 22)

"... planning of urban areas became self-centred, which means that all the attention is directed inward to the very important central areas of the towns, whereas the outer areas and edges are considered unimportant and thus get little attention and respect". (p. 23)

"...this god has so thoroughly shaped modern man, the humanoid robot, in his image that it is difficult for people come to understand even the most obviously incompatible attempts in the mechanical and sometimes appalling creations of modernism". (p. 25)

"Many believe that Nature is going to push the Machine aside as a model. This new worldview has already appeared in the ideology of the hippies in the 1960's, many of whom wanted to abandon the modern way of living altogether...". (p. 25)

3. A New Vision of Connectedness

A Holistic Worldview

"Five aspects that characterize the new worldview will be now examined... how the new attitudes and methods that follow from it will help solve some of the worst problems of our modern times". (p. 26) "On the Attitude Towards Nature: Until recently, people had no problem steamrollering nature almost without a trace of conscience". (p. 26)

"On the Attitude Towards Binary Pairs: The Western view is that binary pairs are irreconcilable opposites. The new worldview, on the other hand, considers pairs, such as man and woman, as polarized versions of the same thing. Thus both members of a pair are of equal importance and, furthermore, complementary rather than contrasting". (p. 27)

"On Method:... This book outlines a methodology on how to create wholenesses, how the interplay of binary pairs can be strengthened, and how to design border areas not so as to separate them, as is done today, but so as to let the boundary become an active interface that enhances the interaction of the two areas". (p. 27)

"The opposite is things that are interwoven and organic. Structures and patterns of this kind can readily be found in nature, and nature seems to be in the process of becoming a general model for the new worldview".

"On Human Values and Ethics: Today's perception sees humankind as master of nature...". (p. 27)

"...variants in the scheme that shows relationship of man and nature". (p. 28)

"Unfortunately this new nature-friendly attitude seems to be developing in the direction of such extremism that the extremist cannot tolerate the harvesting of nature, as in the case of whaling and even traditional fishing. There is also a trend among the extremists to try to bar man completely from many natural areas". (p. 28)

"... holistic medicine. It has as a starting point that man in his totality is one cohesive system: wholeness". (p. 28)

"... specialists frequently overlook solutions based on interrelationships of this kind. Eastern medicine, on the other hand, is primarily concerned with holistic aspects and with the connections between systems". (p. 28)

A Revolution of Connections

"City planning of the future must also experience a revolution of connections, not a revolution of electronic connections but connections between areas and functions in the city". (p. 30)

"In this book we are primarily dealing with resources connected to nature, in and around Reykjavík". (p. 30)

"A *Revolution in Connections* at this place will have to include a programme of moving the polluting industries away so that the coastline can be claimed for residential and outdoor areas, areas that

would make use of the enormous possibilities that present themselves with the proximity to the coast and the ocean". (p. 30)

"Let us now look at five primary features one works with in design and planning...". (p. 30)

"*Creation of Wholes* is an ancient goal in design. The problem in our modern times is that the whole, whether a house or a city area, are cut apart from their environs". (p. 30)

"Creation of a Balance is yet another ancient goal in design. Today's architects create a balance between a house and a garden by designing the house as a self-contained unit". (p. 30)

"The new paradigm, on the other hand, includes time as an active parameter. Active time means that everything, both nature and the creations of man, are in a constant process of change and in a constant search for a 'dynamic' balance". (p. 30)

"Eastern design has a method against this, i.e., to insert a small core of the opposite member of the pair into the first member, for instance a small pavilion into the garden or a small atrium garden into the house". (p. 31)

"The Treatment of an Edge or an Interface:". (p. 32)

"Within this model the outer walls of the house are not only an edge but an interface where the interaction of inside and outside is to be managed. The interface of a house and its environs thus can have many types of functions and therefore must have thickness". (p. 32)

"The 'edge' between the city and natural areas should also be called an interface. This underlines the fact that the interface has a thickness, a width. If this is done, enough space is provided for the various activities that are applicable for interconnecting city and nature". (p. 32)

Methods of Connecting

"The preceding section presented an overview of five main tasks in design: the creation of wholes, balance, interaction, uniformity and finally how to handle an edge or an interface between spaces". (p. 33)

"Modern scientists often cite the importance of Eastern thought for the development of their ideas. The Danish physicist Niels Bohr did this by putting the T'ai Ch'i symbol in his insignia as he was knighted, together with the Latin phrase 'Contria sunt complementa' (Opposites are complementary pairs)". (p. 33)

"It is important for designers to know the origin of the basic concepts within the holistic theory in order to be able to apply them in a more methodical way in design and planning". (p. 33)

"I. Wholeness created by a circle. A good example of such a whole is how the complementary pair of Kvosin and the Old Harbour are stronger as a unit because their overall form comes close to forming a circle". (p. 34)

"II. Dynamic balance created by a curved line. Here it is best to take a coastline as an example. If the coastline is a straight line, there exists a static (dead) balance along the shore. If, on the other hand, the coastline protrudes, city areas on these headlands reach beautifully into the ocean". (p. 34)

"III. Creation of an interaction by placing complementary pairs side by side. Interactive and complementary pairs include, for instance, ocean and land and city and nature...". (p. 35)

"IV. An emotional balance provided in a uniform area by inserting a core of the opposite within it. This principle means that one can enhance how binary pairs interact by placing a core of the opposite member of the pair within each of the two pairs, e.g., within a house and within a garden...". (p. 35)

"... the designer has the task of recreating a coastline with new landfill with the goal of connecting land and water as well as possible, he or she can make use of the four principles...". (p. 36)

"I. Try to let land and water form a circular unit.

II. Increase the penetration of land and water into each other by means of a curved line.

III. Choose pairs of activities that fit together, e.g., a sailing club and a good sailing area.

IV. Create cores of land in the water (e.g., skerries or little islands) and cores of water in land (e.g., small lakes or pools)". (p. 36)

II. REYKJAVÍK - THREE PERIODS

4. Age of Integration

Man - Nature: A Unity

"In this second part of this book the development of Reykjavík will be examined in terms of the interrelationship of man and nature". (p. 37 in the book)

"The history of Reykjavík is therefore very suitable for a study of how a town may start to grow in interplay with nature...". (p. 37)

"The interaction is typified in three distinct periods". (p. 37)

"This first chapter (the book's fourth) covers the initial period where almost total integration of settlement and nature was the chief characteristic". (p. 37)

"The next chapter then studies a period of alienation from nature that was caused by a mindless pursuit of technology and money... ". (p. 37)

"The third and last chapter of this section finally deals with the period of the reconnecting of city and nature...". (p. 37)

An Uneasy Union

"The Age of Settlement in Iceland was therefore a golden era but this was to change dramatically. The number of settlers increased to such an extent that in many places the limits of what nature can sustain were reached, and therefore the quality of the land started to deteriorate".

New Golden Era

"Let us now continue our story at the beginning of the twentieth century, as the fisheries were starting to make the nation rich again. The migration of people from the countryside to the shore increased year by years...". (p. 44)

"The world of the Icelander was now, suddenly, the new phenomenon of the coastal town. This meant reducing the connections to the natural environment, but the substitutes were the two contact surfaces of these towns with nature, i.e., the coastline and the edge where the town met the hinterland...". (p. 44)

"At the shore the future was in the making each day: boats landed, laden almost to the point of sinking, fish were unloaded and processed, and the boats went out to sea again". (p. 44)

"In this way Reykjavík, and other coastal towns, came to be in interplay with the two interfaces with nature: the interface that processed the bounty from the sea and the border that was active in utilizing the resources of the land". (p. 44)

"The history of these edges will be recounted later in this book and also the story of other interfaces...". (p. 45)

"Although Reykjavik developed into a town at the beginning of the twentieth century, its connections to nature remained strong for a long time. The main reason for this was that the livelihood of the townspeople, far into the century, to a large degree depended on what nature gives, i.e., the bounty of both the ocean and the land". (p. 45) "But how should city planning aim at establishing and preserving an interplay of city and nature? The opinion of the author of this book is that the city should be allowed to be a city, and nature, nature but now with an emphasis on a carefully planned interplay with each other". (p. 45)

"Here it is quite illuminating to study what happened in a similar way in other countries. Let us first look at the case of the beautiful old city centres. Many of them were wrecked in World War II, and in other places modernism finished the job of destruction and presented us instead with terrible, modernistic boxes". (p. 45)

"... the industrial revolution led to the break-up of a societal pattern where each individual was accorded some measure of respect and dignity. What came instead was a faceless mass of workers..." (p. 45)

"No wonder that many idealists concluded that not much was to be gained by this development towards urban industrialized society. One of these was William Morris. As he got to know the Icelandic Saga Age, he saw it as a splendid societal model". (p. 45)

"...in May 1940, the harbour of Reykjavík was suddenly filled with warships laden with goods and soldiers in uniform. The British army disembarked and started to occupy all the main buildings and open areas in the city". (p. 49)

"The British, and still more the Americans later, brought with them immense amounts of trucks and tools of the highest technological standards. By sitting down at the controls of a powerful bulldozer the cuckolded Icelandic could see the possibility of regaining some of his respect in the eyes of the Icelandic women – and in the process, also for himself. The bulldozer operator who uprooted nature the most and the longest and turned it upside-down was the greatest and best". (p. 49)

"With all the fine jobs for the military, the respect for the branches of trade connected to the natural environment on which the city was based also started to decline. The women now said that the seamen, the harbour and the coast did not have a very pleasant smell". (p. 50)

Separation of City and Nature

"The planning maps for Reykjavík offer an opportunity to compare changes from period to period, and in this way to study the changes in attitudes towards nature". (p. 51)

"The first master plan for Reykjavík was issued in 1927". (p. 51)

"...But now the war years had come and the notorious plan of 1948 followed in their wake. This plan proposed that an industrial belt should run along the entire northern coast, i.e., from Grótta to Ellidaárvogur. In this plan, not a single outdoor or residential area was shown on the coast or in connection with it". (p. 51)

"It is the opinion of the author of this book that a large container harbour like the one planned for Eidsvík has no place in the middle of a residential area...". (p. 53)

"... a plan should be made to rid the most beautiful coastal areas of polluting activity". (p. 53)

"A study is needed to re-evaluate the coastal areas, a study that defines the best coastal areas and districts where outdoor and residential areas can best be linked to the beauty of the coast". (p. 53)

"In such a long-term view, the planning of the coastal areas and the adjacent water area should be seen as one task because the activities on the land that borders the sea need to have a relation to the water outside, both functionally and in terms of appearance". (p. 54)

"Now: What is the main conclusion of this section? It must be that the planning of the interplay of the city, the coast and the ocean areas has not been successful in Reykjavík in recent decades". (p. 54)

"The other main conclusion is that we have not had an understanding of the natural values of a coast and an ocean". (p. 54)

"Another unfortunate thing in the building up of these eastern areas was that it was exactly this period that was the worst in the architecture of the modernistic block neighbourhoods...". (p. 54)

Separation leads to Alienation

"This book has explained how the Western method of dissection has cut apart the integrated wholes of society and human existence". (p. 55)

"This is what shapes the life of modern man: dead residential neighbourhoods, ugly working districts, and conveyor-belt shops". (p. 55)

"The lively mix and the fulfilment that we experience in old districts are qualities that are unthinkable in cities that have the machine as a model". (p. 55)

"This book has explained how the Western method of dissection has cut apart the integrated wholes of society and human existence". (p. 56)

"This is what shapes the life of modern man: dead residential neighbourhoods, ugly working districts, and conveyor-belt shops". (p. 56)

"The lively mix and the fulfilment that we experience in old districts are qualities that are unthinkable in cities that have the machine as a model". (p. 56)

"Now somebody might say: We understand this about the segmentation and how bad the lack of social contact is - but why all this talk about the necessity of connections to nature and the importance of wholes, balance and harmony? Yes, we are here dealing with emotional qualities that are much harder to explain than the functionalistic qualities". (p. 56)

"The pleasure we take from contacts with nature are somewhat different from the spiritual fulfilment man enjoys as he listens to or looks at a work of art. Both, however, are definite needs that we have, just as we have a need for vitamins and certain foods". (p. 57)

"...we Westerners often choose to disregard the spiritual side of things, in our case here, the spiritual need of people for close contact with nature. This disregard derives partly from the Western understanding that man is superior to nature and that it is his inborn right to regard it as subservient". (p. 57)

"This view of reverence for nature is gaining a foothold. And many think that nature will replace the machine as the scheme we regard most highly because it is more proper as a model of the world..." (p. 57)

6. Age of Reconnecting

Connecting Man and the Environment

"As explained earlier, the Second World War was the beginning of a period of an astounding recklessness in the treatment of nature and the environment". (p. 58)

"What today is most baffling to us is both how blind people of this period were to how high the sacrificial costs were in terms of the natural environment...". (p. 58)

"A watershed book of this nature, in design and planning, was published in 1968. It is called Design with Nature and was written by Ian McHarg. This is considered to be one of the most important books in the history of city planning". (p. 58)

"Today the whole world knows guiding phrases like 'sustainable development', and in Iceland this kind of environmental planning has, for some time, been used in the management and control of the fisheries". (p. 60)

The Outdoors: A Source of Health

"At the beginning of the Industrial Revolution in the nineteenth century, the science of medicine made a remarkable discovery: a bad and polluted environment leads to a poor state of health". (p. 61)

"This led people to the simple and logical conclusion that if the bad health in the terrible industrial cities was to be improved, the cities themselves had to be improved". (p. 61)

"Here an important question surfaces: If there is very little pollution in a city, are there then health reasons for having widespread green areas within the city limits? - Yes, there are to some degree, not least because it has been shown in recent decades that outdoor life and activities are very beneficial for people's health, both mentally and physically". (p. 62)

"It was because of this that in 1974 Reykjavík devised a very ambitious plan on the environment and the outdoors. This plan was popularly known as the Green Revolution. The plan's main task Facilities for outdoor activities and physical training were also a part of the plan was to improve the green areas and to make then more beautiful. (Beauty is also health enhancing!). Facilities for outdoor activities and physical training were also a part of the plan". (p. 62)

"In reviewing the green plan today, we are surprised how little the plan dealt with the outdoor activities on the city's coastline". (p. 63)

"The third and last section of this book, which is called Connecting City and Nature, studies the various types of interfaces in some detail". (p. 64)

The Vision of a Connected World

"The first section of this book described how the Western worldview had been shaped by the conception of opposites as well as by the method of dissection...". (p. 65)

"The consequences were that, for almost every task at hand, the method became the same, i.e., to cut the task at hand into pieces and to work on the pieces separately...". (p. 65)

"The outcome, as concerns our societies and cities, is that they have also been divided into such mechanistic 'boxes'". (p. 65)

"The task of this book is to demonstrate how bad this is and to try to convey how important it would be if a method could be created that was capable of reconnecting and remixing the things that modernism has cut apart with such negative consequences". (p. 65) "The holistic worldview, which now seems to be taking shape in the world, gives us various indications as to how we can again approach things in a holistic way". (p. 65)

"The first step towards creating the necessary willingness to tackle a problem is achieving a deep understanding of how serious the problem is. Such an awakening has recently happened in the field of the global environment...". (p. 65)

"Social measures are used to help solve, or counteract, these problems. To a much lesser degree the problems are traced back to a still deeper root - to the isolated and dead residential neighbourhoods, the isolated apartment blocks, and finally to an isolated flat...". (p. 66)

"Because of this it is obvious that we will have to develop a methodology in design and planning that focuses on creating connections and integration in cities and also on the task of creating the wholes again that for a long time modern people have sought to separate...". (p. 66)

"The necessity of this reconnecting... was explained in chapter three, which actually is a summary of *The Theory of Integration* that the author created in his dissertation for the University of California at Berkeley in the 80's". (p. 66)

"The method focuses on the design of borders between areas in cities and on borders between city areas and natural areas. Today these borders are mostly designed in a way that separates them". (p. 67)

"We are therefore now, as concerns sanitation, already in shape to begin making an effort to redevelope most of the coastline as an area for recreational and residential purposes. This could become one of the largest and most important tasks in the city planning of Reykjavík in the first decades of the twenty-first century". (p. 68)

III. CONNECTING CITY AND NATURE

7. Connecting the City and Water

Evolution of the Connections

"This chapter explains in particular how the city meets water areas – where the coastline itself plays the most important role". (p. 69 in the book)

"The study of the city/nature interfaces starts with an elaboration of the various types, and traces how activities linked to them have developed. This discussion defines what has characterized the interfaces and how they have contributed to the strengthening of the relationship of the city and its water areas, or conversely – as was quite common around the middle of the twentieth century – how changes in the coastal zones led to a reduction in the connections between city and water". (p. 69)

"The second subsection of each of these six chapters sketches what measures can be taken to recreate the former splendid and close connection of a city with its natural environment. Although the examples are from Reykjavík, other cities can also profit from the way the four design principles, explained in the chapter Methods of Connecting (p. 33), come into play to help achieve effective interfaces". (p. 69)

"... the city plan of 1948 reserved the whole north coast from Grótta to Ellidaárvogur for fish production, industry and harbours. For a long time this industrial belt was so sparsely occupied that the inhabitants of Reykjavík who lived farther behind it had ready access to the coast. But as the town grew the number of sewers that discharged by the shore increased and ever larger tracts of the beautiful coastal landscape became submerged under rubbish heaps and landfill". (p. 71)

"The lack of understanding of all the natural treasures that were lost in this way, and all the filth that accumulated, is hard to understand today. The uprooting of society and its values that came with the occupation by the Allies in the Second World War, however, explains some of the destruction". (p. 71)

"Around 1970 the industrial belt began to fill up, which means that access to the coast started to become more difficult. The situation today is worst at the Sund harbour area because there companies decided to close large areas off from the public. In addition, a wall of windowless warehouses was built along Saebraut Highway so that even visual contact with the beautiful Sound from the road and the neighbourhood was lost". (p. 71)

"The Danish plan of 1965, calling for Saebraut to become a main artery with ever increasing traffic, has meant that this thoroughfare is a growing obstacle to the contact between city and coast. Not much can be done to alleviate the situation; not even a few pedestrian bridges can be of much help. A step for improvement would be to move companies from the coast that do not belong there, for example, the bus company and the oil harbour". (p. 71)

"Along the south coast the relocation of the airport is the largest issue, and perhaps the south slope of Öskjuhlíd Hill should also be developed as a residential area". (p. 71)

Methods of Connecting City and Water

"This book has outlined measures that are needed if people would like to institute changes to help the citylife to connect to the shore: 1) Removal or relocation of most of the dirty activities from the coastal zones; 2) Creating landfills – for example, north of Skúlagata and Saebraut Streets – to create space for leisure and residental areas in the coastal areas that run directly into the water, i.e., to create a direct contact with nature; 3) Removing the airport and planning a central axis that would go from Kvosin across the peninsula to Skerjafjord; and 4) Building residential areas along the south coast and also on the low hills from Öskjuhlíd towards the cemetery". (p. 72)

"Another very important planning goal is that the ocean area outside the city has a functional relationship with settlements on the coast. A residential area by a dirty industrial harbour, for instance, is not pleasant. If the coast has a boating harbour with an adjacent sailing area, the harbour and the water can enhance the charm of the coastal settlement...". (p. 72)

"This type of relationship-planning creates a magical complementary effect that gives the result 1 + 1 = 3 instead of 1 + 1 = 2, which is the result if land and water do not have this functional and visual relationship". (p. 72)

"...ideal conditions for coastal settlements, i.e., where the area faces south, where there is a beautiful water area and a view, and finally where the land has enough slope so that most of the settlement can enjoy a visual connection with the water". (p. 72)

"The best conditions in Reykjavík for such settlements are therefore on the south slope of the Geldinganes Peninsula in the Eidsvík Inlet and on the south-eastern part of the island of Videy". (p. 72)

"The most splendid conditions for coastal settlement, however, are in the concave bowl rising from the south-east coast of Videy. A traffic link to the island could easily be established from the Gufunes headland across the shallow sound. The residential area would enjoy a special interplay with nature because of its location on an island with an almost virgin coastline". (p. 72)

"As to the planning of coastal areas, it is of most importance that the coastline itself remains in the public domain and that activities and facilities will be located there that help connect the life in the city to the coast and the ocean. The boating clubs and the thermal beach in Nauthólsvík offer a good start...". (p. 74)

8. Connecting the City and Adjacent Areas

Development of Interfaces

"The interface of the city with the countryside differs from the interface with the ocean in that it constantly moves farther out as the city grows. This interface, for most of Reykjavík's history, has played an important role as the surrounding areas provided agricultural space to supply the inhabitants with 'the fruit of the land'". (p. 75)

"...cottages were built by workers and seamen who moved to Reykjavík from the countryside in response to the opening of new jobs connected with the fisheries". (p. 75)

"This new border of cottages had to be built outside of the border of the tún of the officials as these men were powerful enough to keep them out". (p. 75)

"The third border that developed was for gardening". (p. 75)

"As the Great Depression hit Iceland in 1930 the town of Reykjavík reacted as did towns in many other countries by allotting a great number of cottage areas on the outskirts of town so that the unemployed could survive by gardening and farming on a small scale". (p. 75)

"In many countries these separate areas were called colonies or colonial gardens. In some countries they still exist and are used either as homes or as summer cottages. When the military came to Reykjavík during the war, these areas experienced a boom because suddenly there was a large market for their produce: chicken, eggs, potatoes and vegetables". (p. 75)

"During the war a great number of country people migrated to the city to take advantage of the work offered by the military...". (p. 75)

"These people were used to farming and raising livestock and wanted to continue to farm. Therefore still more gardening areas were allocated on the outskirts of town and also special areas for school gardens because people considered working with the earth to be of great educational value. Areas for sheds for sheep and horses were also developed...". (p. 75)

"With the emergence of horseback riding, golf, hiking, and skiing as sports and leisure activities, the fifth border area has been created. This border reaches to about 30 km into the hinterland. The recreational areas that fall into this group include the golf courses at Grafarholt and Korpúlfsstadir, the stables at Arbaer and Vididalur, and finally the skiing areas, which are further away, in Skálafell, Jósefsdalur and Bláfjöll". (p. 76) "Already before the war the sixth border had started to develop outside Reykjavík, i.e., an area of summerhouses ca 30 to 60 km distant from the city. The number of these cottages has grown constantly...". (p. 76)

"Because of advances in communication technology and a growing flexibility at work, it is likely that a new style of living is coming into being, i.e., that people will live in such homes outside the city, surrounded by the beauty of nature and also have a small flat in the city". (p. 76)

"If this form of living develops further, the makeup of the city may change considerably. There would be a lessened demand for large flats in the city, as well as gardens with the houses, and people, who can then escape the city whenever they want, will have fewer complaints about congestion. Icelanders, though, as they have been so used to wide spaces through the ages, are likely for a while to want to live in cities that are more spacious than in most other countries". (p. 76)

"The young generation that has got to know the vibrant city life that the densely built cities abroad can offer has started to call for such city life in Iceland. This generation does not want to live in suburbia but rather in the old part of town where a culture of coffee houses and night life has been created, and has flourished in Reykjavík since around 1990. On the other hand, it is not certain that this generation is as keen on summerhouse living as the older generation but rather wants to be on the move, both within Iceland as well as abroad". (p. 76)

"Although double residency requires proximity to the city - preferably at a distance of not more than 60 km in order to be able to drive to work or to a meeting comfortably - summerhouse areas still farther out, or up to 200 km, will prosper". (p. 76)

"A special advantage of these areas is the contact for people who have their roots in the old Icelandic culture". (p. 77)

"These country areas also gain from the proximity with others; the level of services rises and many things can be learned from the newcomers. In bringing the urban and rural together, we are therefore creating a complementary effect, where both gain from the partnership". (p. 77)

"As concerns Reykjavík itself – and especially on the border where the city areas meet nature, in the second half of the twentieth century there has been a decline in the variety and vitality of functions, just as happened along the city's interface with the ocean". (p. 77)

"The decline of the land/city interface progressed in several steps, just as along the coast. The biggest step was when people were driven away from their garden lots in the 1960's and 70's. This was because of the need for space for the new neighbourhoods and also because the modern

Icelander prefers having everybody cast in the same mould and has little tolerance towards people that step out of the norm. There are, however, signs that the youngest generation wants more choices in types of residency and is more tolerant towards people that choose individual lifestyles". (p. 77)

"Compared to the variety of life and functions that existed in Reykjavík up to about 1960, the present monotony is striking. No chicken and ducks run around quacking and sheep have been outlawed". (p. 77)

Interplay of the City and Adjacent Areas

"Most cities have some kind of a green or open space system. In the twentieth century it became popular to plan green "channels" going from the hinterland into the city. Sometimes the hinterland resembles the palm of a hand – as does Heidmörk, for instance, as it lies just beyond Reykjavík – and the green areas that penetrate the city, the fingers. This green scheme is therefore often called 'a finger plan'". (p. 78)

"Most cities have had good experience with green systems like this, especially as these channels have been of help as people have tried to develop alternative systems for locomotion and leisure activities, such as walking and bicycling paths, to try to counteract the ever-expanding use of cars". (p. 78)

"This area is called the *Green Scarf*. This very Icelandic term has come into being because the area that will be forested will provide a shelter belt for the city and will also stop snow drifting from the barren heaths and accumulating in the suburbs. i 1 The Green Scarf and its forested areas will improve the conditions for outdoor activities at the edge of the city, not least because of the shelter that it will provide. A possible drawback could materialize if the trees grow so tall that they shut off some of the beautiful view toward the heaths and mountains that we enjoy today. The same holds true for the recent planting of trees along roadsides. These trees will grow to hamper the open view we enjoy from our cars today". (p. 78)

"The third rule describes the *Creation of interaction by placing complementary pairs side by side*. This means that if a residential area is at the border, the adjacent open area has to include those facilities and features that best fit the residential area. When this is the case, complementarity is achieved so that the residential area is improved because of the open area, and the open space improved by the presence of the residential area. The interaction thus creates an extra value that otherwise would not be there". (p. 78)

"This approach transcends the traditional limits for city planning, namely, the coastline and the city fringes. Close collaboration of city planners and landscape architects has here become the first principle". (p. 79)

"Finally, it should be kept in mind that space has to be reserved along the border, the interface itself, for functions that can attract people to the border area and help them to enjoy and make use of the facilities in the open areas". (p. 79)

"Attention should be called to how many opportunities for recreation and enjoyment are linked to the beautiful and vast natural areas that border on the city – both the ocean areas and the wilderness areas". (p. 80)

"Today's city plan does not do much to bring these natural areas into close contact with city life but rather focuses on the patches of green within the city that are called recreational areas even though, in fact, they offer only poor possibilities for outdoor activities". (p. 80)

"This book therefore proposes that the policy for a recreation plan for Reykjavík be turned around in such a way that the tremendous recreational areas that border on the city will be made approachable and will automatically lead to a subsiding of today's regrets regarding the present useless green patches". (p. 80)

"As this state of understanding of the recreational value of water and wilderness areas has been achieved, we will be in shape to utilize the opportunities that the green patches offer to make the city more dense so that in the future it can develop into a truly urban area". (p. 80)

9. Relations to the Elements

Vast Spaces and Hidden Forces

"What probably has most characterized Icelandic existence through the ages are the vast spaces of the landscape as well as the small and sparsely settled population. Countries like Poland and Russia share this characteristic with Iceland... the foundation of the culture of these countries is the vast open spaces". (p. 81)

"Icelandic and Russian art... most of the time, dwells on the spaces in the landscape as well as on how small man is vis-à-vis the large scale of nature". (p. 81)

"The possibility of volcanism and the threat of storms are a part of the daily scene in Reykjavík because the force that lurks under the earth's solidified surface fills the landscape with a powerful meaning...". (p. 81)

"We can compare life in Reykjavík on a quiet day to the calm before a storm; a tension of danger and fear is in the air, a tension that has accompanied Icelanders from the early ages. The struggle with uncertainty has left Icelandic faces firmer and emptier – but there the surface is deceptive because underneath lies a dormant volcano". (p. 81)

"In this dark country reminiscent of Ragnarök, the end of the world, the sun is the harbinger of joy. As it breaks out of the clouds this dead and cold country comes to life. The people hasten out of their houses, the streets become filled with life, and joy and thanks is behind each serious face. In the sun-filled air everything becomes strikingly clear and sharp". (p. 82)

"This is the frame and the scene of this city in the distant North Atlantic. In few other modern cities does humankind have more feeling for how much life depends on how the forces of nature twist or turn". (p. 83)

"Defence posture against the weather is no longer the dominating fact of the lives of the Reykjavíkeans who also gain from the fact that people now understand the forces of nature much better than in earlier times. As the storms rumble over the land, people may be scared, bur most often the results are more just the spice of life". (p. 83)

Relations with the Environment

"National Romanticism and the Neo-Renaissance came with the first scare architect, Gudjón Samúelsson, as he, together with others, started work on a city plan for Reykjavík. For example, he designed a "Citadel of Icelandic Culture" for the large square on the top of Skólavörduholt Hill". (p. 84)

"This high-minded period in planning and social vision can be said to have climaxed with the building of Hótel Borg and the millennium festivities of the Althing in 1930. What replaced it was the mechanical and uninspired style of functionalism. This style produced boring and mechanical neighbourhoods like Nordurmýri, where there is no real view nor direct contact with beautiful natural areas...". (p. 84)

"With this central emphasis on the view, the formation of urban space got out of hand. In the suburb of Breidholt I a good solution was reached because people in the U-shaped blocks both enjoy a view outward and also a view to the semi enclosed common space within the U-form". (p. 85)

"This hill building-scheme is very Icelandic; people want to adore a scene of natural beauty from a detached distance. Icelandic individualism and the deep-rooted focus on wide vistas mean that nobody wants to have their view disturbed, and there is in turn very little interest in turning inwards to create a close community with one's neighbours in pleasant and enclosed spaces and squares within a neighbourhood". (p. 86)

"Many young people, on the other hand, now have an interest in forming such close communities, even if it means hardly any view and only small gardens". (p. 86)

"These changes in the preferences that come with the younger generation - i.e., the wish for a community and city life – is replacing the wish to live in isolation on hilltops in a suburb...". (p. 86)

10. Relations to the Geological Forces

Aspects of Volcanism

"The two largest places in the northern hemisphere are the North American and the Eurasian plates. The spreading rift between them lies in the mid-Atlantic, and Iceland is the only sizeable landmass where this belt of faulting and volcanism appears above the surface of the ocean. That the two plates are rifting apart leads to periodic earthquakes and volcanic activity and molten rock from the earth's depths rises through cracks and erupts...". (p. 87)

"The belts of active volcanism are the areas in Iceland that are both the most dangerous as well as the most valuable. They are valuable because of the geothermal hot water associated with them and also because in some areas the cracks act as tanks that fill with fresh drinking water. Some of the fault areas, on the other hand, are dangerous because of eruptions and earthquakes...". (p. 87)

"The benefits of the heating system are tremendous: cheap heat makes life in a cold country with no coal or other fossil fuels much pleasanter than would otherwise be the case, and a strong bathing culture has been created in a country that does not have any warm beaches.-The gains in improved health are also very great because the low cost means that the open air hot-water pools remain in operation all winter, even in blizzards and freezing temperatures". (p. 88) "... steam is used to drive electrical turbines, producing clean energy. The steam then passes through a condenser and again becomes hot water, which is transported to the city, via a pipeline, for space heating and for greenhouse and industrial use". (p. 89)

"In Nesjavellir a recreational area has also been created as a by-product of the production of energy". (p. 89)

"There also is the idea of letting the spill over run into a natural depression to create a geothermal swimming pool in the bosom of nature, as was done to form the Blue Lagoon on the Reykjanes Peninsula". (p. 89)

Enriching the City Through the Use of Geothermal Water

"Successful use of greenhouses led people to start building small ones in their own gardens, which later developed into glassed-in verandas. If there is sun, people can sit there and bask in "southern" warmth and vegetation, even in mid-winter. Many have also added a hot tub for bathing". (p. 90)

"Around 1975 a development began of heating pavements, driveways and even streets, with the run-off from the heating system. Now all pavements and pedestrian areas downtown, and also along Laugavegur and Skólavördustígur are heated, so that the snow melts away and the winters look warmer". (p. 90)

The advantages in terms of safety and cleanliness downtown are also tremendous. The next step needs to be to heat green areas like Austurvöllur...". (p. 90)

"Most people who have experienced simple pools out in the countryside, for instance along the coast and in the mountains, know the singular and deep connection one feels with nature and also to one's own primal roots. It would be a treat if such pools were to be placed in some of the outdoor areas in Reykjavík, and even a swimming canal could be built so people could lazily drift through an outdoor area". (p. 91)

"We have now in four chapters discussed many realistic proposals for strengthening the contacts between urban life and the four elements of the environment: water, earth, air and geothermal heat from the depths of the earth. This study shows us that a realistic future plan can be made to realize the vision of integrating the city and natural elements in a very close and enchanting way". (p. 92)

"By carrying out such an intensive plan, Reykjavík would gain an absolutely unique position in the world in terms of a close interplay of city and nature". (p. 92)

11. Neighbourhoods and Open Spaces

How Connections Have Developed

"The first two suburbs, Skuggahverfi by the coast towards the east and Hlídarhúsahverfi by the coast to the west, were also in the beginning in very close contact with both the ocean and open land. The construction of roads on landfill along the coast in the 1920's was the first step in separation from the sea, as was explained in the seventh chapter of this book". (p. 93)

"The ties of the town's evolution to the countryside and its agriculture, and later other functions there, remained strong for some time. The types of activities at this interface have been constantly changing. The importance of recreational activities, in particular, has strengthened, whereas agricultural functions have almost disappeared". (p. 93)

"... generally the appearance of the old town is very mixed, so much so that it can be called a style or characteristic of Reykjavík. Many see in this an expression of how individualistic the inhabitants of Reykjavík are - and thus, to this extent, very different from their kinsman in Scandinavia, who want to thrust everybody into the same mould". (p. 93)

"As planning control started to become stricter after 1960, tolerance towards aberrations in life styles and types of buildings in the city quickly evaporated. The suburbs that were built in this period are just as dead and mechanistic as in the Scandinavian bedroom areas". (p. 93)

"The separation of each of the prime functions of city life – sleeping, working and commerce – were also a part of this planning vision. In order to make these separations as distinct as possible, long traffic arteries were constructed as to isolate these city functions into distinct boxes. Institutions were placed in one box, sleeping quarters in another, and a patch of green in a third.

This has had terrible consequences because, with the steadily growing traffic, people in many places are not able to pass over these traffic arteries on foot into the next box". (p. 94)

"In some places in Reykjavík, neighbourhoods are in a close and beautiful contact with green areas, free of any hindrances. One can mention the direct connection of the houses below Laugarásvegur to Laugardalur Valley, the Fossvogur neighbourhood to Fossvogur Valley, and the direct link of Breidholt III to Ellidaár Valley". (p. 95)

"The most effective planning method to avoid thrusting large highways through the city itself or placing them on the border between neighbourhoods and natural areas, is to place them outside the settlement areas. Good examples of this include some parts of the Outside-of-Town highway and secondly the Sundabraut highway that will go from peninsula to peninsula to the west of the settlements...". (p. 95)

Connecting Neighbourhoods and Open Spaces

"The rules on how a neighbourhood and an open space can best be connected are similar to those for connecting city and water: 1) The neighbourhood and the open space should form one circular unit together. 2) The border between them should not be a straight line that divides but rather a line that interlocks the two areas. 3) The neighbourhood and the open space should have a relationship in terms of functional and visual characteristics. In this way the neighbourhood is improved by the garden and the garden by the neighbourhood. 4) If small garden cores are placed in the neighbourhood and small house cores in the green area, the connection between them becomes still stronger". (p. 96)

"If planners follow these rules the connection between a neighbourhood and a green area becomes stronger. A very important additional feature is that no separating or divisive elements like traffic arteries should be placed along the border but rather the opposite; the elements and outdoor activities that attract people to the interface and thus help open up the green areas for the people". (p. 96)

"Activities that are helpful in this regard include a restaurant and an outdoor centre that afford a view of the green area and are convenient as points to venture from in order to enjoy the natural environment and outdoor activity - In order that the connecting activities have enough space, the interface should have a thickness rather than be only a thin line, which most often is the case on planning maps. If a great deal of connecting activity is placed in this interface - i.e., activity that both reaches into the neighbourhood and into the green area - the interface area can strongly enhance the interrelationship". (p. 96)

"Today the large Geirsnef area is very little used and no residential area enjoys a connection to it or to the boating harbour there. In order to implement as vivid a connection as possible between the Ártúnshöfdi residences and this large outdoor area, a few pedestrian bridges would have to be built over the river. Also a recreational centre needs to be built on Geirsnef". (p. 96)

"By observing how the feeling of togetherness is produced by the form of a landscape concavity, we can better understand how convexity, which is the opposite of concavity, as with the rounded hills in Reykjavík, works against the goal of creating a feeling of community, because everybody turns away from the residential area and looks toward the distant mountains". (p. 98)

"This habit of turning away from the community and staring into the far distance was what the people who moved from the countryside were used to doing, many times each day, in silence. The

younger city generation, on the other hand, seems rather to want to turn their vision inwards, towards the settlement and the life in town, as in Kvosin in the early days". (p. 98)

12. Buildings and Open Spaces

The Lack of Connections Reflects our Mode of Thinking

"In the first chapters of this book it was explained that the dualism that divides everything into irreconcilable opposites, such as city/nature and buildings/open spaces, is one of the basic characteristics of western thinking". (p. 99)

"In the history of western culture and environmental design this has resulted in cities that are almost fortified against nature, and most western homes are characterized by a defensive position against the environment, a stance that is well expressed in the popular phrase: "My home is my castle." (p. 99)

"...we have here been led astray by aesthetics that looks at the design of settlements and buildings as a visual game, where it is of minor importance that the result is meant to provide home and society for human beings". (p. 99)

"This method of thinking of planning as a game of setting our blocks or cubes, was very popular for most of the twentieth century and is in fact only one more example of the alienation that has dominated our western culture. As we compare this kind of design to the Icelandic turf farm buildings and the old fishing villages and their magnificent interplay with the environment, we better understand the dishonesty and stupidness of this type of planning". (p. 99)

"Architects and planners are trained to let things look good in photographs or in a model, but much too often there is a severe lack of responsibility towards their task of shaping societies and the lives of people. This is well expressed in a famous sentence, that describes the works of some of them as 'private jokes at public expense'". (p. 99)

"Most social research indicates that the alienation of the individual from his society and his environment is the primary reason for the severe social ills of today...". (p. 99)

"A method that has the goal of separating construction from the environment and putting individuals and activities in boxes, is bound to have a very negative social effected". (p. 99)

"This method of integration is aimed at tearing down the older error of western thought which looked at binary pairs like city and nature as opposites that will not gain much from being closely intertwined...". (p. 100) "If we now look at the binary pair of house and garden, we see that by building a house we are also polarizing, i.e., a tension; an energy situation, has been created between an enclosed and an open space". (p. 101)

"As with electrical and magnetic poles, the "electric" relationship between these pairs does not come into play unless the poles are close enough the pull of the separated polarities must come close to reunite to be effective, just as with the pull of north and south poles of magnets". (p. 101)

"The law at work here is the universal law of entropy, which says that it is the basic nature of the world that natural wholes, that have been polarized and separated, have a strong urge to pull together again, thus creating an energy situation between the two poles". (p. 101)

Connecting Buildings and Their Environs

"In order to let the electrifying situation between enclosed and open space, as explained in the last section, materialize, a close connection between a building and its environs has to be established". (p. 102)

"The utilization of the tension between two electrical poles is achieved by putting instruments between the poles that convert the tension, for example into light or heat. In the same way, we can look at the border between a house and a garden as a place for "instruments" to create unexpected special effects between the "inside" and "outside" poles. Just as with electrical instruments the effects vary widely depending on how the interface is designed. A glassed-in terrace, for example, adds warmth and emits the sun's rays into the design scheme, whereas a roofed veranda creates a shadow and opens the space to a cooling breeze - the right thing for warm climates". (p. 102)

"Examples of such connecting spaces are a balcony or a portico where delicate plants can thrive, a protected space for chopping and storing firewood, an outdoor sink for cleaning vegetables, fish and game, a grindstone and storage for garden tools, etc. - This short description shows us how modern architecture - that is not interested in the interplay of outside and inside but ends in a concrete wall – is in reality very poor and simplistic". (p. 102)

"The house has become a centre for living rather than being only a box for storage where the people can neither get out nor are given the opportunity to do something useful while they also get exercise". (p. 102)

"To be active is of key importance because by being active a person becomes fulfilled, and acquires dignity by increasingly taking the responsibility for more aspects of one's own life: health, food

supply, recycling, education of children, maintenance of property, and activities that unite the family. It may sound surprising...". (p. 102)

"Let us now finally look at how emotional links to nature can be implemented inside cities. Here it is useful to look to the Orient because there people have had to create connections with nature even though limited to a small space within highly urbanized areas. - The atrium garden is here the core feature". (p. 103)

"It is interesting that psychology today explains these gardens as the need of the urban dweller for a link to nature because man formed and developed through thousands of years of cohabiting with nature... The knowledge of the psychological importance of such natural symbols has led to the planning of such miniature gardens for space stations". (p. 104)

"The U-shaped atrium garden which opens into a larger garden is rather common in Reykjavík. This form helps the garden area reach into the house and also creates a pleasant sheltered nook. Glazed walls around the garden make the connection between house and garden still more intimate...". (p. 104)