## Prospects for Permanence and Change:

Conventions of Dimension in Architecture

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### Abstract

Prospects for Permanence and Change: Conventions of Dimension in Architecture

by Craig Allen Whitaker

Submitted to the Department of Architecture on April 11, 1982 in partial fulfillment of the requirements for the Degree Master of Architecture.

This thesis explores dimensions as one aspect of a disciplined design process. In the natural landscape and in sensitively designed environments there are what might be thought of as systems of dimensions which establish a kind of dynamic equilibrium. By this I mean that the order one observes in, for example a Shaker Village, is felt but often not readily apparent. This is due to the repetition of equally dimensioned but differently configured places. What is perhaps most interesting is the comparative study of dimensions of different sites around the world that reveals a certain consistency of sizes in relation to use.

The emphasis of the design explorations with respect to dimensions focused on larger than building size decisions to enable me to come to some understanding of how preliminary site planning issues can be addressed for very large sites. For this purpose a twenty acre property in Seattle, Washington currently under development by the City was chosen.

Intertwined with any dimensional system is of course the knowledge that, as Adolf Loos pointed out in his writings and architecture, what is small is often large by comparison. This kind of relativity is expressed in the title by the word "conventions", and in the thesis by the "readings" of the site. Also addressed in detail was a lightweight concrete building system, the intentions of which are reflected in notions of permanence and change as necessary counterparts in architecture to the spiritual life to which I believe we aspire, each in our own way.

Thesis Supervisor: Fernando Domeyko Title: Associate Professor of Architecture 

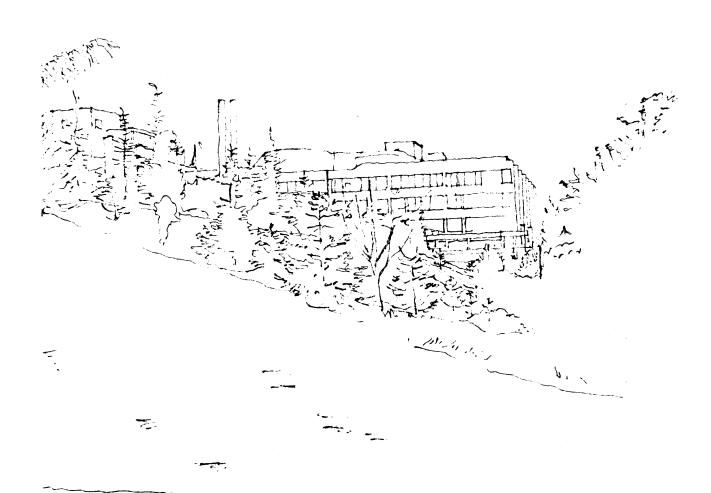
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### INTRODUCTION

Seattle is an unusually beautiful city located on the east side of the Puget Sound. On a foggy winter's day the sounds of the big ferries docked at the water's edge can be heard as far away as Lake Washington -- a distance across which you would expect the muffled tones to be lost in the constant purring of the city. Often they do become lost, but on a Sunday morning when all else is quiet the sound of the Yakima or Spokane's husky warnings can be heard -- even on the twenty acre site far from the ferry landing where the city is beginning its development of the old Coast Guard site.

Sometime around 1979 the federal government began to auction off properties which they no longer needed. The site which I have chosen for my thesis was one of these properties. The purchaser was the City of Seattle. They began to define a site development program which would take advantage of the site's proximity to the Children's Orthopedic Hospital. The selection process considered requests from different community groups as well as development packages of designated teams of developers and architects. In the end the city selected those groups which could benefit from housing and from being close to the hospital.



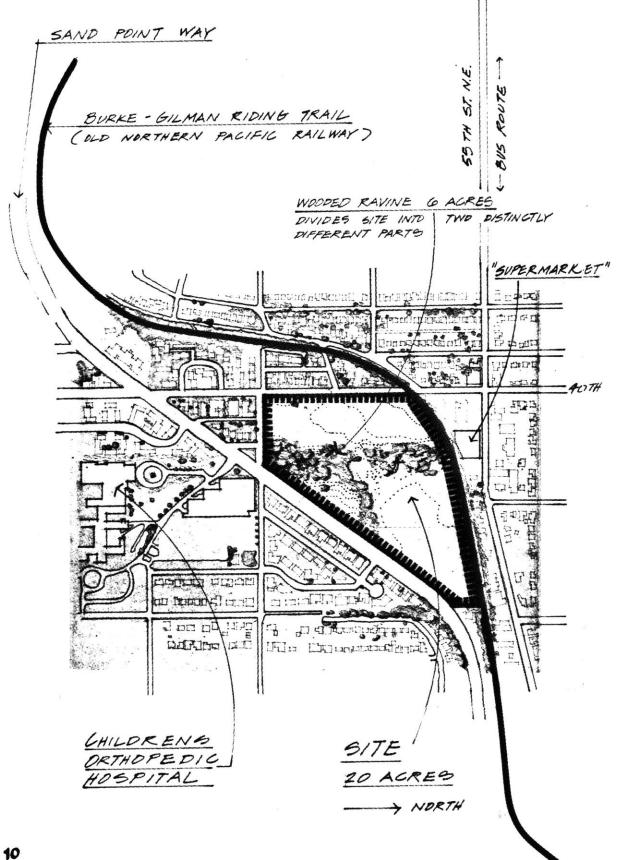
Children's Orthopedic Hospital
View from south edge of site.

PROGRAM

This selection process created four different user groups to be represented on the site: 1) low and moderate income housing with twenty four of the one hundred and eleven units to be for elderly housing, 2) housing for children oncology patients and their families while the child is receiving treatment at the hospital across the busy street,

3) permanent housing for independent living households for physically handicapped people and 4) Children's Orthopedic Hospital Housing, for brief stays by parents with a daughter or son who is in Children's. Of the one hundred and fifty units of housing, thirty nine units were for health related units.

The program requirements presented a challenging problem and the need for a detailed investigation of the site. My initial interest in this site, however, was independent of program concerns — I wanted a site whose size and topography was large enough to present design explorations where the making of places would evolve out of an intimate understanding of issues other than restrictive lot dimensions or the dominant city on which Seattle is organized. I wanted some slack to enable landscape and buildings to develop in concert with one another.



### PROGRAM AND SITE

The program outlined by the architect/developer team chosen by the City of Seattle was used as a beginning frame-work for the thesis. But this was <u>only</u> a rough reference because the primary emphasis, in the development proposal that outlined four different density determined schemes, is <u>on</u> private housing uses. As density is increased by way of adding more of the same type of buildings (two-story town house-type units) the amount of "recreational" area is decreased.

As outlined by the City's development procedure, each of the housing groups selected for inclusion in the project has obtained its own architect. From speaking with the architects for the Ronald MacDonald House and the United Cerebral Palsy Independent Living Houses it became evident that each architect was proceeding without regard for what the "guy next door" was doing. Nor did the planning document provide any clue as to how the "odd man out" -- the community of people living around the site -- would have its interests addressed except to say that there would be some soccer fields, maybe, depending on density of the selected scheme.

Therefore the emphasis of the thesis has been to understand the design of site by first understanding how the site is related to the community around it, and even to the city and region. This meant that the design of the site would have to address the public dimensions of the program as well as the private. For this reason the design was not done with anything more than a rough idea of densities and building types. This means that the uses listed below do not have specific numbers of square feet, or numbers of "units" placed along side them.

The following uses are essentially those proposed by the City after asking for submissions from interested housing groups. As the readings of the site developed over the course of the thesis they suggested more public uses that could be included in the site, such as a public promenade, a small 11

restaurant, two theatres -- one inside and one outside, and a Saturday public farmer's market. These uses, as well as the Children's Daycare School proposed by the City, are proposed as fitting, (not on the basis of numbers of people that might support them), for a specially configured site with a meaning that is essentially public, even though there are going to be private uses, ie the housing.

THE SITE, a twenty acre property acquired from the United States Coast Guard by the City of Seattle, is currently being developed by the City and a selected private developer. The primary user groups selected for the site because of their health-related functions are:

The Ronald MacDonald House: a temporary (up to six months) housing arrangement for children with cancers receiving both long and short term treatment at the Children's Orthopedic Hospital located across the street. There are twenty bedrooms as well as common living rooms and kitchen. Families including siblings are often required to stay with the children receiving treatment in the cases where compatability for bone marrow transplants is indicated.

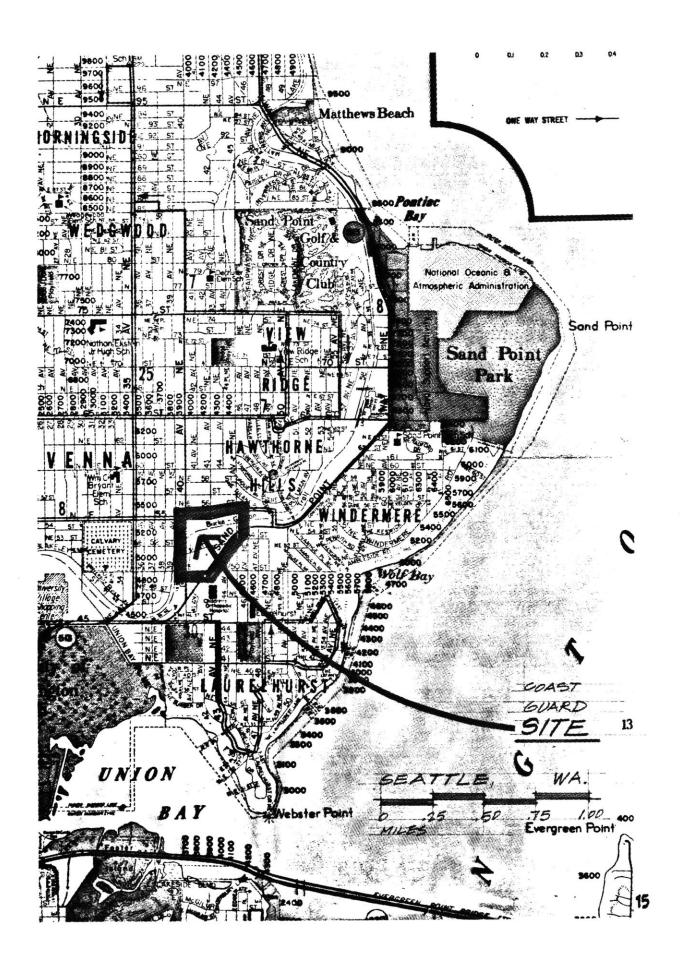
Children's Orthopedic Parent Housing: for temporary stays for parents with children in the hospital.

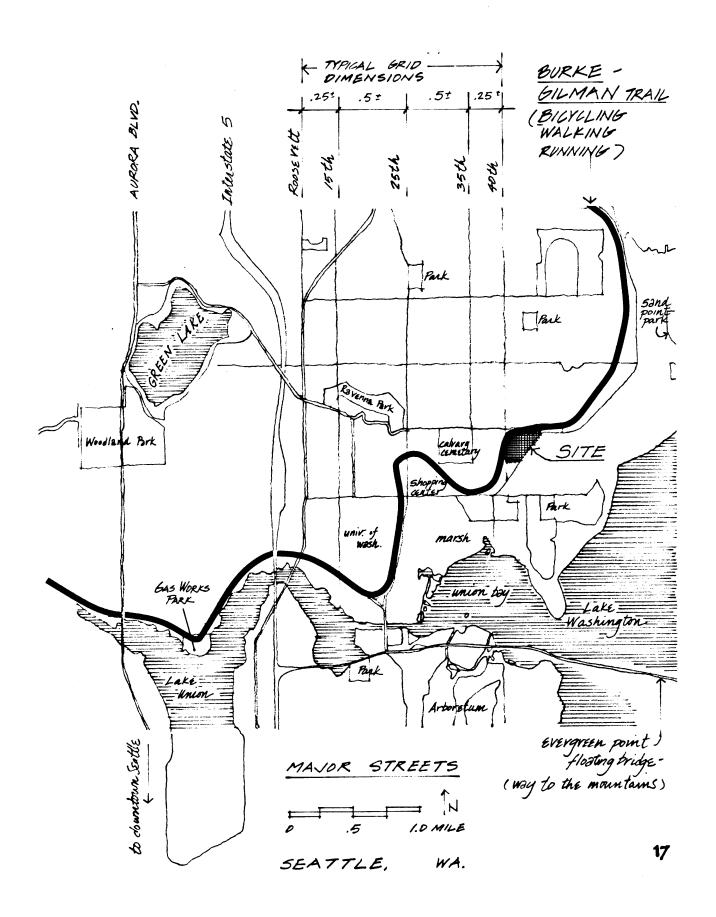
The rest of the housing on the site is for more permanent groups, some of which, by nature of their non-profit and special economic needs, were selected over more traditional housing groups:

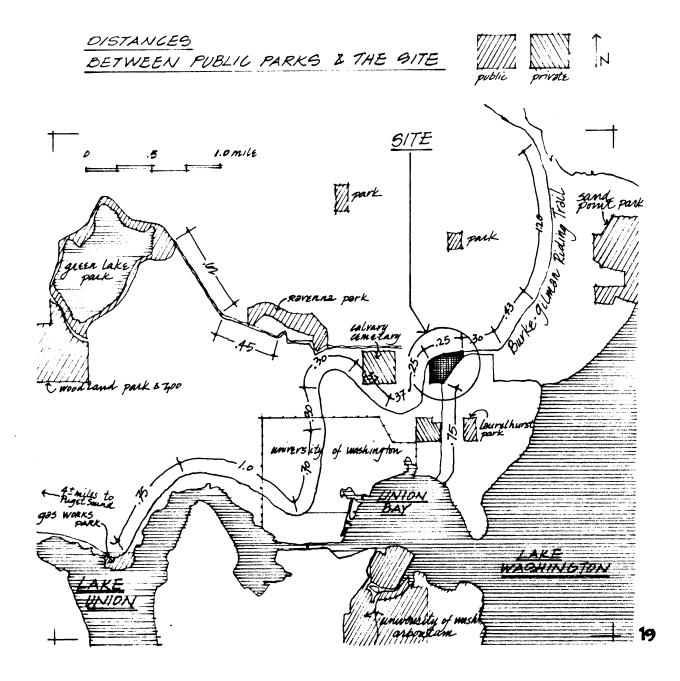
Two independent living clusters of apartments for United Cerebral Palsy work-sponsored families. Apartments for Elderly.

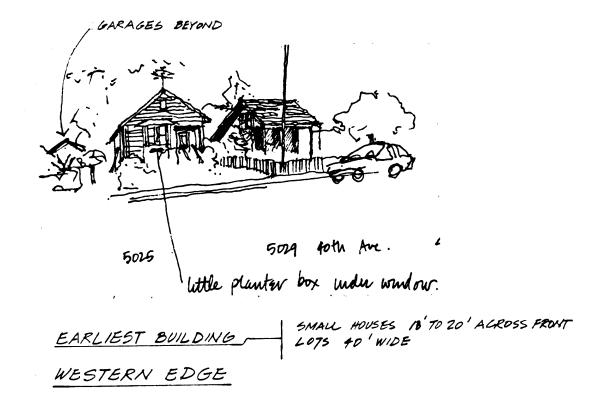
and apartments for Low and Middle Income Families.

FIRST READINGS OF THE SITE in relation to the city...



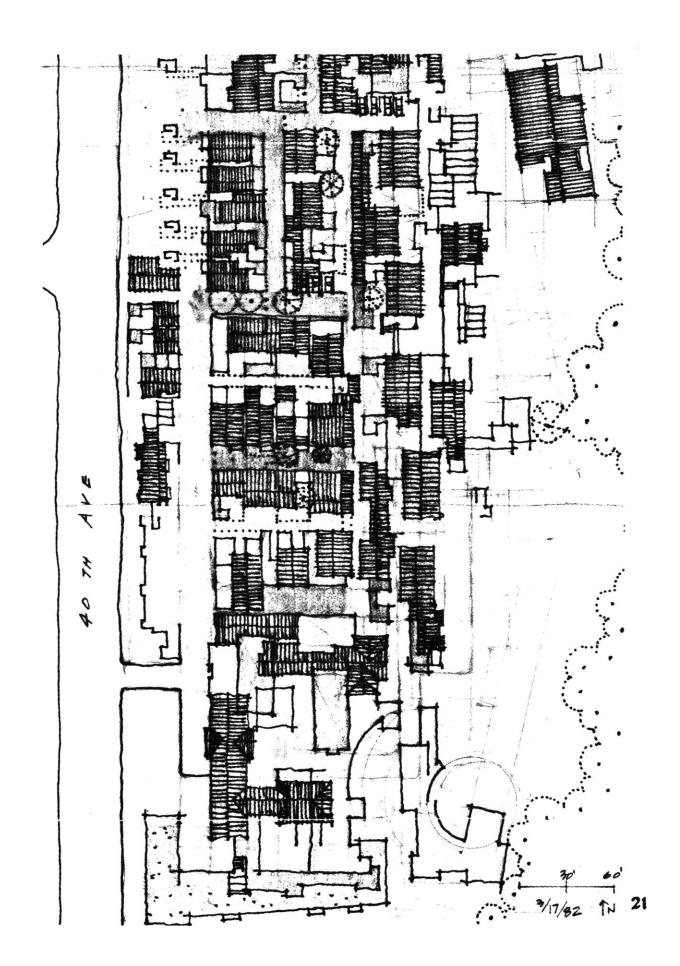






### FIRST SITE EXPLORATIONS

The first part of my explorations
was begun with limited understanding of the
site in relation to the surrounding neighborhood.
Living several blocks away, while I attended the
University of Washington, I knew the area but I had
never been into the site because it was only a place
overgrown with blackberry bushes, surrounded by a
chain link fence. Yet the unique location of the
site, along the Burke Gilman Trail, meant that I had



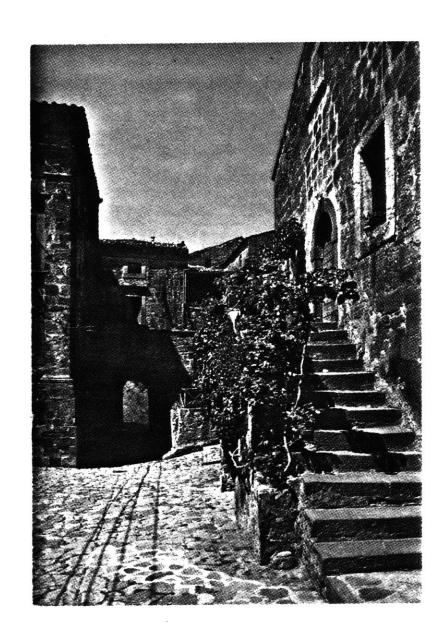
run past there several times. Not only was there an important and desired potential that the site be used for recreation space for the neighborhood but there was also the opportunity that this site would and will become part of a much larger group of users who use the Burke-Gilman trail.

without an understanding of the layered perspectives of Capitol Hill to the south, or of the subtle changes in grade I began to design the western portion of the site (that is divided in two distinct sides by a wooded deep ravine) with little regard for small one story homes across the street or for the views into and out of the unusual places I discovered when I was finally able to visit the site. Where I had previously thought of this place as the last undeveloped quarter mile square of oaks and straggily pines and brush broom I was to come to value the potential of this site as

a very special place. But these impressions had to wait until I visited the site six months later. In the meantime I was faced with two problems.

The lack of understanding of dimensions was causing the design to become very dense and the direction was built so literally that the relationship between the lightly wooded ravine which divides the site (from north to south) and the community of houses became very disconnected. In fact the problem of the relationship between the surrounding neighborhood and the site, previously defined by a street (40th Ave N.E.), became repeated within the site.

My reasons for building on this part of the site were due in large part to the generous length of the western edge of the ravine, some eight hundred feet. My hope was to build a narrow street parallel to the ravine with houses or apartments on either side thus taking advantage of the big dimension to make a village-like path. It was not until this fall, after a few months away from the thesis, that I began to realize that a more thorough analysis of the site would be made in order to really integrate this important project into the surrounding life of the place.



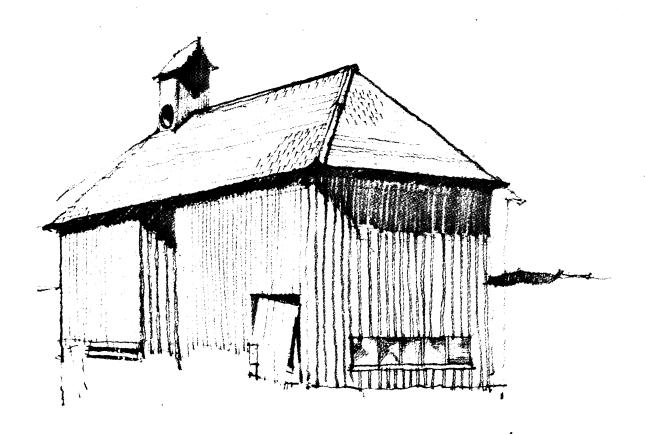
Development of a Lightweight Composite Building System

My experience of living in a small town in Italy brought home a better understanding that permanence and continuity are such important aspects of architecture that we too should make architecture by which we can measure change in our own lives. More to the point perhaps is that the sense of community of a small town in Italy, that seems so urban, comes from the way the place is organized and built. The permanence of the materials is matched by the quality of the organization. In turn both of these qualities point out that the notion of what is urban has nothing to do with numbers of people. Since I equate community with the sense of urbanness that I observed in how the doors lead to small porches overlooking the street (direct access between what is very public and very private) I realized that a sense of community can be found in even the smallest grouping of buildings. But to make the urban closeness possible it was important to develop a building system that would be more permanent (fireproof), provide for privacy (sound insulated) 25 and <u>practical</u> (allowing for change and energy efficiency). For this reason a concrete building system was developed even though the conventional building system in the North-west is wood frame construction.

# Character and Practicality as another Aspect of Dimension that stems from Conventions of How Something is Made.

The Northwest Indians often had to move seasonally in order to fish and hunt. They accommodated the sense of permanence by building frames of large diameter and long logs around which they lashed hollowed out vertically placed wooden planks. When they moved they would remove the planks and lash them to their canoes to take them to a frame in another place that was already built in previous years.

This image of planks lashed around a framework served as a reference for the building system as did observations of Northwest farm architecture where the vertical is also often emphasized even though the boards behind, that actually clad the barn's frame for example, were often horizontal. This sense of character that is part of a style was an important reason for initially exploring concrete planks placed vertically. After working with the system it became clear that vertically placed planks were most efficent because the ends of the concrete could bear the floor loads, instead of the frame. The frame then could be much lighter.



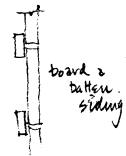
2 double square hipped roof hop born near Marquom, Oregon Ridge & hip control by wooden corner & , price

example of the vertical plank construction hypital of early northwest barns; even houses, though covered with horizontal weather boarding, were built with vertical planling

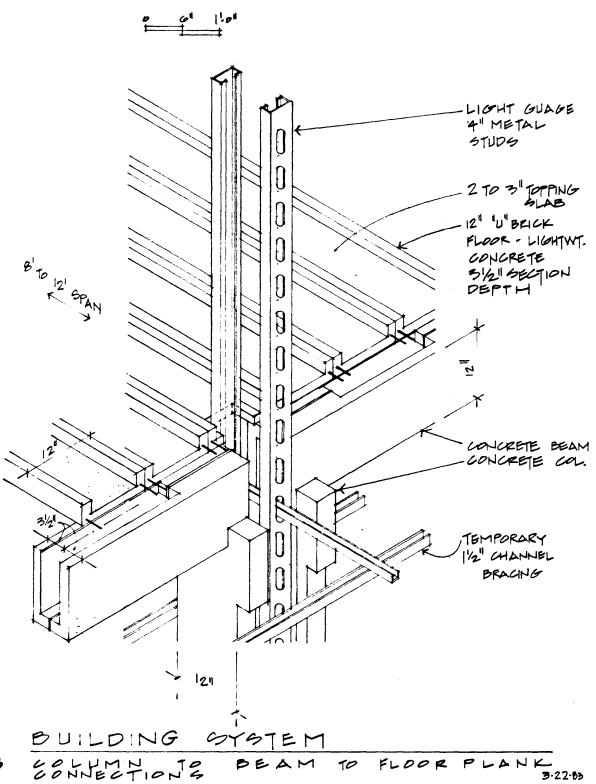
hops barno - early

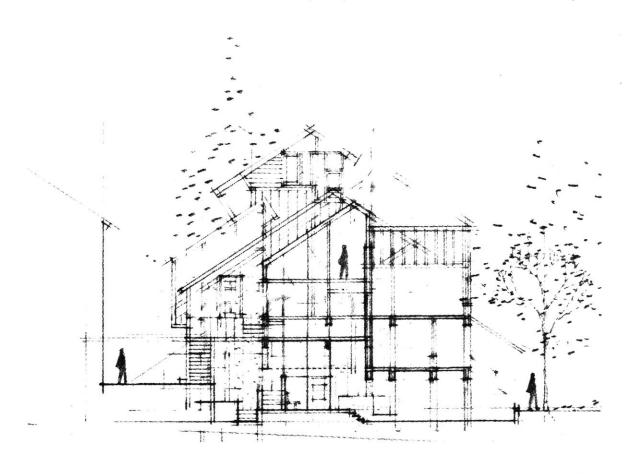
i. p. 219 Vaughn

sept 16, 1982



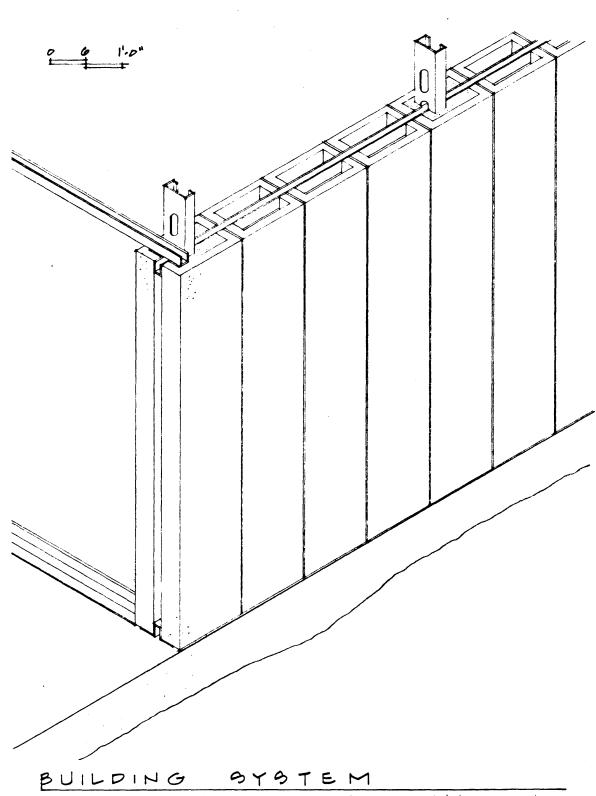
NOTE: LIGHTWEIGHT FRAMING SYSTEM COMPLETES UPPER FLOOR WALLS & ROOF ENCLOS.





SECTION

P 8 10



BUILDING SYSTEM FLOOR TO WALL & FRAMING CONNECTIONS 3.22.83

The model shows the lightweight steel frame around which the "U" brick precast concrete panels are attached. This system is an efficient use of both the concrete and the steel because the commercially available studs provide only a temporary framework for the erection of the wall planks. Actual bearing for floor loads and lateral loads (i.e. wind and earthquakes) is the job of the wall planks. This differs from other composite systems because it does not require the steel frame to be strong enough to support the floor loads during construction. In this system, the floor planks, which are very lightweight due to their thinness (1 1/2" at the thinnest to 4" at the thickest), always bear on the end of the wall planks. Each member weighs less than 200 pounds which is a weight which two people can comfortably lift.



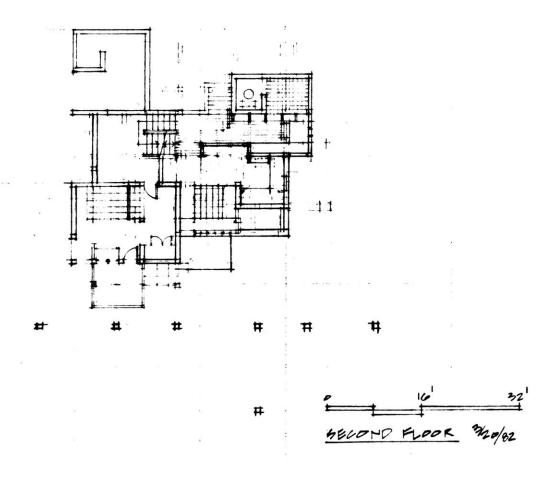
Second Floor of the Smallest Apartment

The one foot wide concrete planks establish the

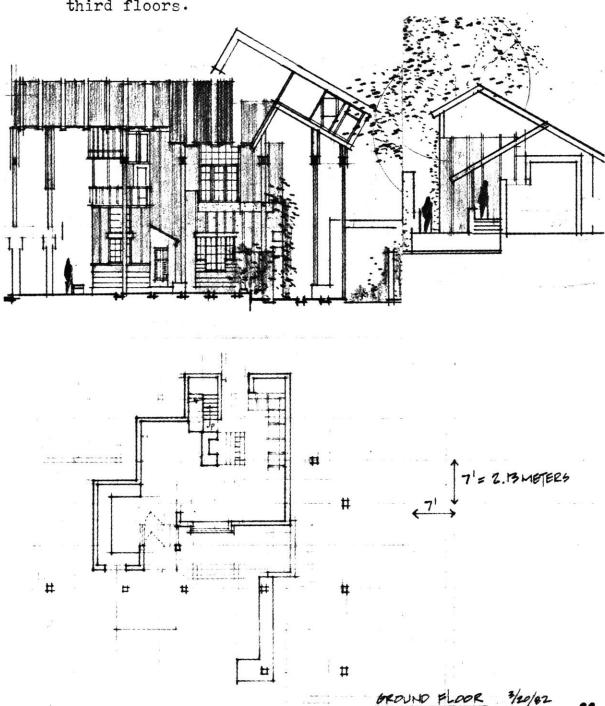
"ground" out of which the steel frame may continue.

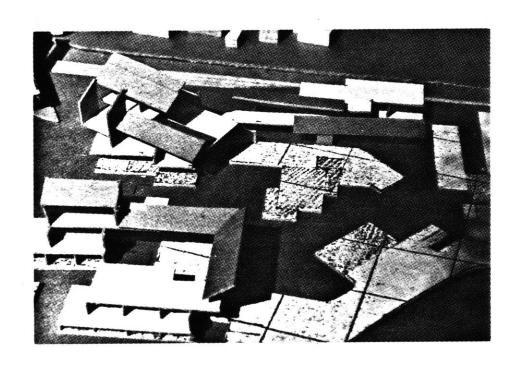
Where the ground floor configurations are the most

permanent the upper levels can be built with other containing more changeable transparent materials -- ie wood and glass.



The steel frame makes an arcade at the lower levels and provides a framework for lateral extensions at the second and third floors.





# The apartments are sited so that together they form the outside spaces that are most open to the south. The gridded base of the model serves as a design reference for the dimension of these outside spaces. Based on a 50 x 50 foot grid the outside space in this photo is about the same dimension as the main outside spaces in the Shaker Village described later in the thesis -- about 100 by 175 feet. Also the buildings are oriented a few degrees east of due south as is appropriate, as a general rule, for temperate climate like Seattle's.

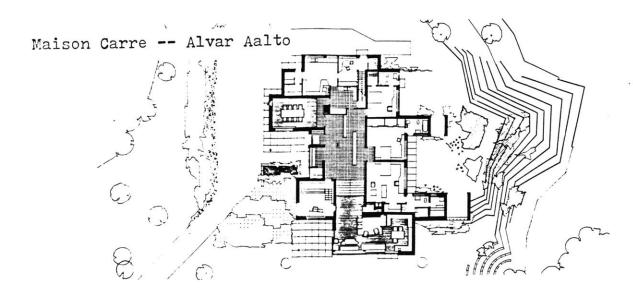
The concrete building system is intended to construct buildings which are more permanent than would be possible with conventional wood frame structures. The objective is practical in terms of climate — ie the Pacific Northwest is an excellent place for "earth tempering" because the winter ground temperature is always well above freezing. This property contributes to the insulation of all buildings constructed below grade or bermed with earth. In summer the humidity is low, therefore there is little liklihood of condensation.

In comparing cultures and attitudes towards archtecture for use over several centuries, Reyner Banham observes that

the peculiarly American history of relying on regenerative installations rather than conservative and selective structures. Wood frame building allowed mobility for a relatively lightweight culture moving westward into a zone of abundant power.

The lack of permanence means perhaps that our conventions to which we assign value are tied up in quantities rather than qualities -- therefore change seems meaningless because there is little to compare it to.

The ground floor plan of the largest apartment or ->
house shows how the primary walls of the concrete
provide a framework within which one can build. The
incompleteness of the containment makes further completion possible with lighter materials. The living
territories could be made on either side of the wall.



Much like the interlocking plan of Alvar Aalto's

Maison Carre the inside walls define outside places
of the same room size dimensions -- thus a sort of
transparency is achieved which is phenomenal as well
as literal. An equilibrium of dimensions provides us

with the memory of what is the same inside

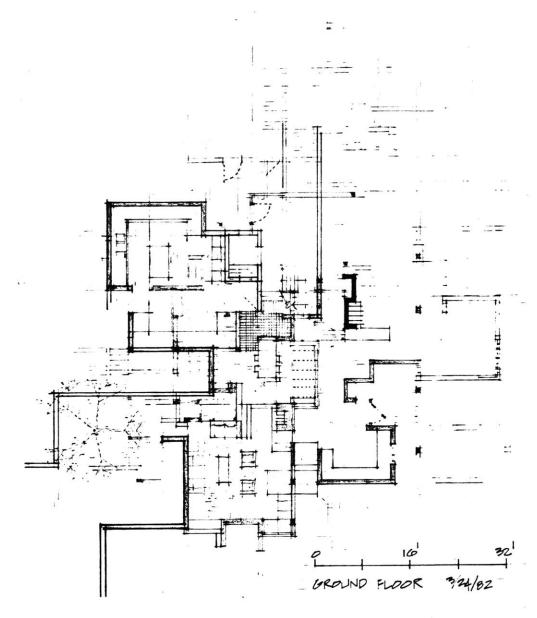
(or vice versa outside) without literally

requiring the walls be transparent. But the

transparency is dynamic because the same

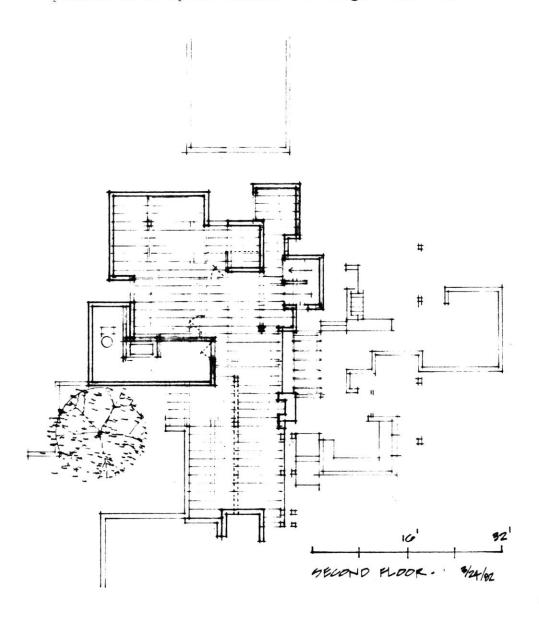
dimensions, or quantities, have different and

continuously changing quality -- light.

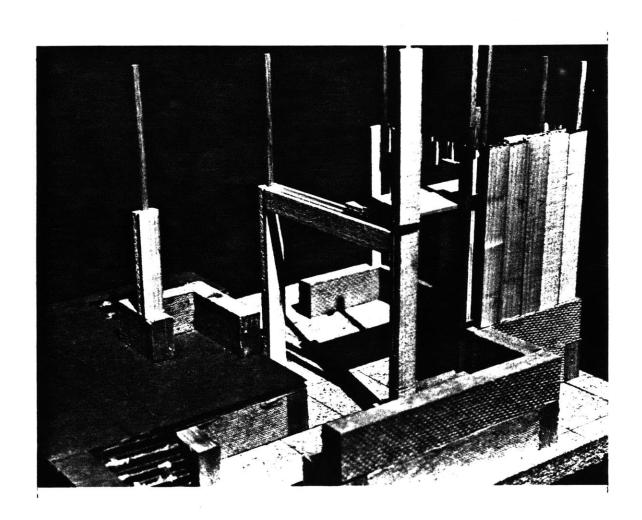


# Framing Diagram with Building System

FRAMING DIAGRAM shows the layout of the planks with spans limited to eight and ten feet.



Model of structural system showing columns with planks bolted around upright steel posts. Refer to the axonometric on page  $2\vartheta$ .



## Readings of The Site

After the development of the building system and the design explorations of both large and smaller sized apartments with the building system) it was important to understand the problem from a different viewpoint which led to two major explorations. Readings of the site were begun and a study of larger than building-size dimensions were explored. But it was the "reading" of the site that really led to a good understanding of how the site might be organized.

The idea of "reading" a site came from a studio with Italian architect Giancarlo de Carlo. The purpose in the studio and as the readings are used here is to understand the site's physical and human dimensions — ie how is the site related to the surrounding neighborhoods?, how do people walk around the edges of the property? (which is currently surrounded by a six foot chain link fence), what are the views into and out of the site?, where are the quietest parts, the gentlest parts, the most public, the highest parts, ect.?

#### SITE READINGS

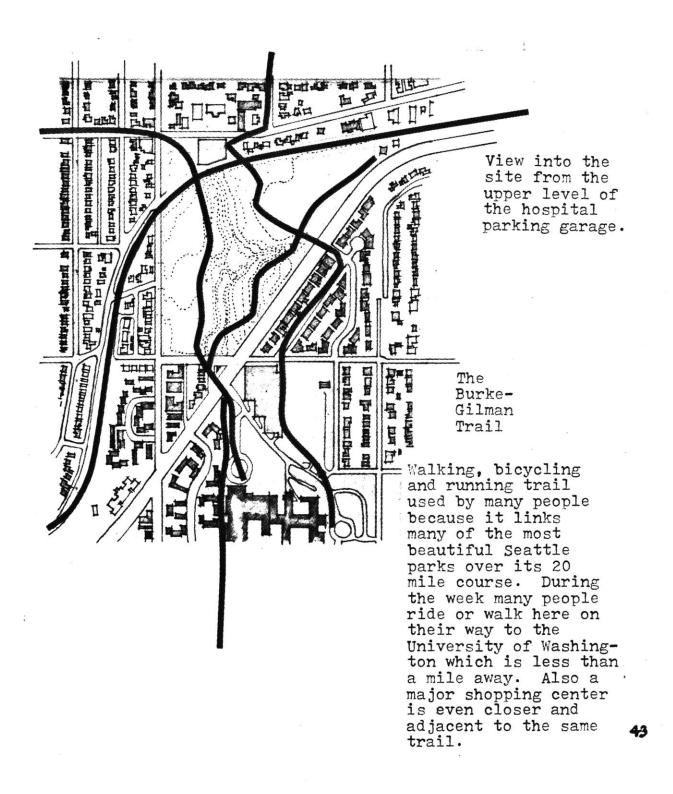
These "readings" show the composite of projected pedestrian paths and connections with the surrounding neighborhoods. Individual analyses were done defining:

- 1) Site originating paths for people living on the site and walking to work or visits at the hospital.
- 2) Cross site paths for those people living near the site who would find it convenient to walk through or along the wooded ravine.
- 3) Cross site trips that result from people living on the southern and western site edges who would want to use the grocery store at the northwest corner of the site.
- 4) Regional cross-site trips made by people using the Burke-Gilman Trail who would want to stop at the supermarket or to use the recreational facilities that have been proposed by the city.
- 5) Cross site trips made by people leaving their children at the neighborhood requested daycare center.

This analysis defines, as the diagram shows, three distinct parts of the site -- the western edge bordered by 40th Ave. NE, a six acre wooded ravine, and the eastern edge of the site bordered by the Burke-Gilman Trail along the north and a busy arterial road (Sand Point Way) along the southeastern edge.

There is activity along the edges of the site as well as edges internally defined by the three zones or parts just defined above.

View to the intersection of the major arterial, Sand Point Way, and 44th Ave. NE from the roof of a old radio transmitting building still standing in the center of the eastern third of the site.





SOUTHEAST EDGE - SAND POINT WAY

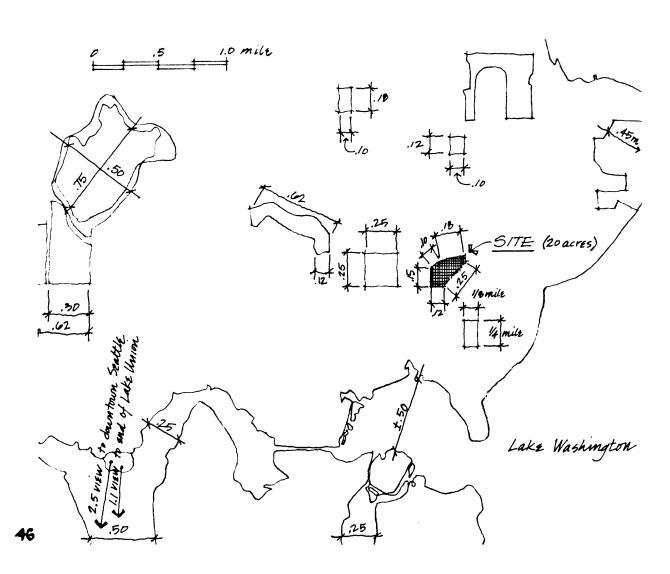
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miles		feet		meters
.06	=	3/7	=	<b>9</b> 7
./2		635		194
.15		792		240
.18		950		290
.25		1320		404
.62		<i>3</i> 273		1001
.75		3960		1211
1.10		5808		1776

### DIMENSIONS OF PUBLIC PARKS

14



The site development plan presented by the City of Seattle's developer and architect includes recreational space for on-site users as well as people living in the surrounding community. Because the site borders the well used Burke-Gilman Trail small farmer's markets could be supported on weekends. People walking, riding or running along the Trail would support these markets and they would also be able to take advantage of the park and recreation facilities.

However it became a question of whether the site would be connected to the city in any real regional sense as a park alone. This plan shows that the special irregular tear dropped shape of the site makes this place like other "natural" landscape parks like those at Greenlake or Ravenna. However the dimension of the ravine or even of the entire twenty acres is no greater than a quarter of a mile which is small in comparison to more regional parks.

For example the dimensions of larger parks double and triple which makes significant differences in our perception and memory of these places. Another example

of <u>significant differences</u> are the views from Gas Works Park of downtown Seattle. From the park's location at the north end of Lake Union to the outlines of the central business district is 2.5 miles or three times the greatest view dimension of the Greenlake park which is three quarters of a mile.

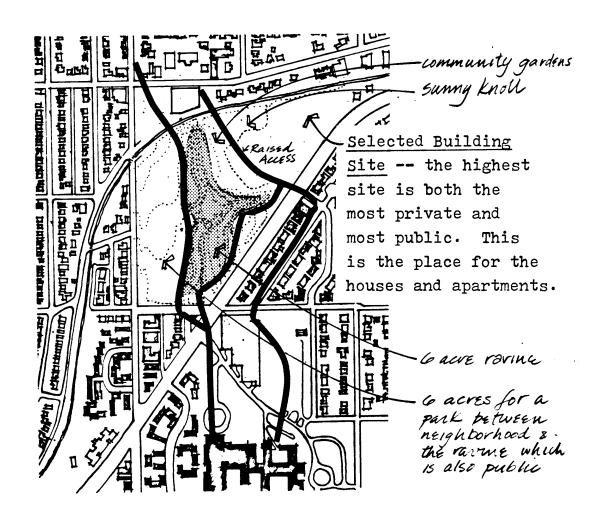
point between a regional sense of public parks and a neighborhood perception of this place as their own natural landscape. It is easy to distinguish where one would want to go to find a specific type of place in Seattle because the differences are significant; thus it can be concluded that this site would never become a regional (north Seattle) park because it lacks the amenities (views and location close to water, or as in the case of Freeway Park proximity to an urban center) and dimensions of parks nearby.

But the site is, despite these restrictions, a ambiguously defined site in terms of public use because the Children's Hospital across the street is a regionally important place serving all of the Pacific Northwest states. This fact along with the health related housing to be built on the site, as well as the proximity of the Burke-Gilman Trail and the busy arterial, Sand Point Way, suggest an intensive effort should be made to

develop a dynamic design which can mediate between two sets of issues:

- 1) The preservation of the six acre ravine and its delicate ecology in sympathy with the housing and public uses on the site.
- 2) A creative resolution of the potential conflicts between public and private uses of the site.

In summary public and regional uses would best be cultural as well as for recreation because this could serve people living on the site, those in the houses around the property, people staying for extended periods of time in health related housing, and the city itself. As a home away from home for some, a place to go to for others and as a new neighborhood for many the potential conflicts will have to be resolved with unconventional methods of access and organization.



### SELECTING A BUILDING SITE ON 20 ACRES

the reading of possible paths across

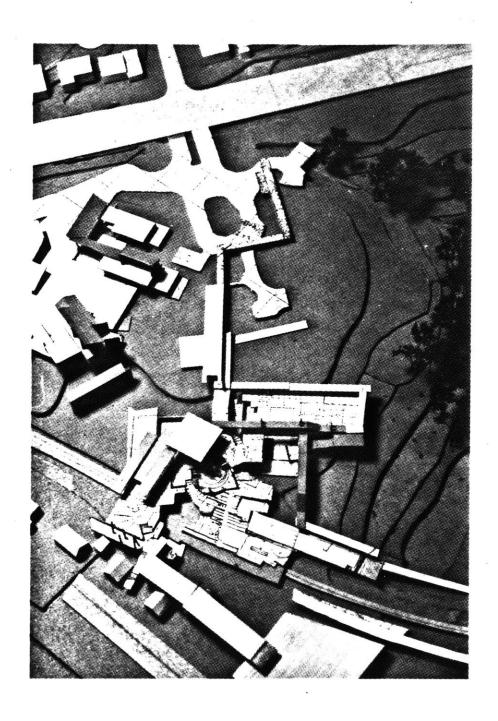
In selecting the eastern most and highest location
( 120 versus 85 at the bottom of the ravine and 100 on the western edge) a sunny knoll protected from wind by the woods of the ravine would be separated from the private areas of the housing on the eastern third of the site. Rather than let any one use whether public or private control cross site access between the housing

and this sunny knoll it would be better to raise the public access, as it is in the Italian city of Perugia, eight or ten feet above natural grade. The "pea patch" gardens that are part of the City's program are then both public and private — they can be seen and reached from the raised and sunny access which would run north and south while at the same time the level differences allow the pea patches to be the front yards of the houses because they are not separated by a "street".

#### DESIGN EXPLORATIONS OF THE SITE

If the site is going to be public then the elements that are useful are of a different dimension than any found in most housing clusters. Not only this but the somewhat ambiguous relationship between this neighborhood and the city provides a positive clue, as does the wonderful Seattle weather, for continuous structures with <u>public</u> organizations and associations—in other words the "image" of places we have special memories of, like Seattle's Pike Place Market.

## Design Explorations of The Site



and Elements of Place

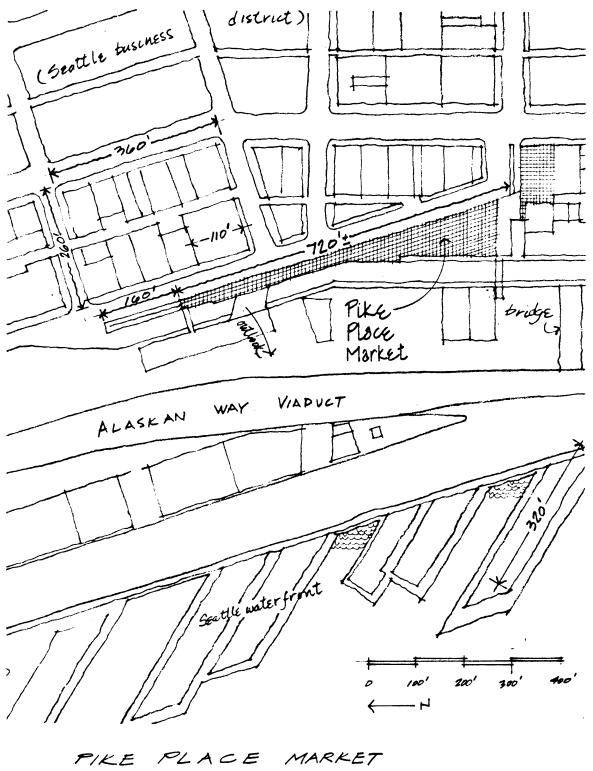
In downtown Seattle on a high bluff is a farmer's market that is a favourite place for almost everyone who lives in Seattle. Whether it is a weekday or the busy weekend both tourists and Seattlites peruse the fresh vegetables, buy a stainglassed souvenir or eat lunch in one of the many small restaurants. One of the nicest qualities of these places is that all this diversity is gathered under one fairly continuous shallowly sloped metal roof -- defining an inside place, protected from the Seattle rain, that is almost seven hundred feet long. This element with its great length easily defines a public place inside as well as a continuous edge of another discreet space, the street outside.

And the waterfront below the market is also, just now, beginning to develop as a place along a "walk" to the waterfront parks. A bridge was recently built, as well as several sets of stairs, to make it possible to negotiate the to cross the streets dividing the market from the water's edge. This connection is not at all visible, one must find it or

know it from previous visits. But it doesn't really matter. More important is the sense of place that one feels whether inside or out.



From the outside, walking down a sloping side street towards the market the view over the thin whitewashed portico with its green roof is of the Puget Sound and those ferries that would let out slow bellows on a foggier day... and miles in the distance lay the beautiful Olympic mountains.



PIKE PLACE MARKET

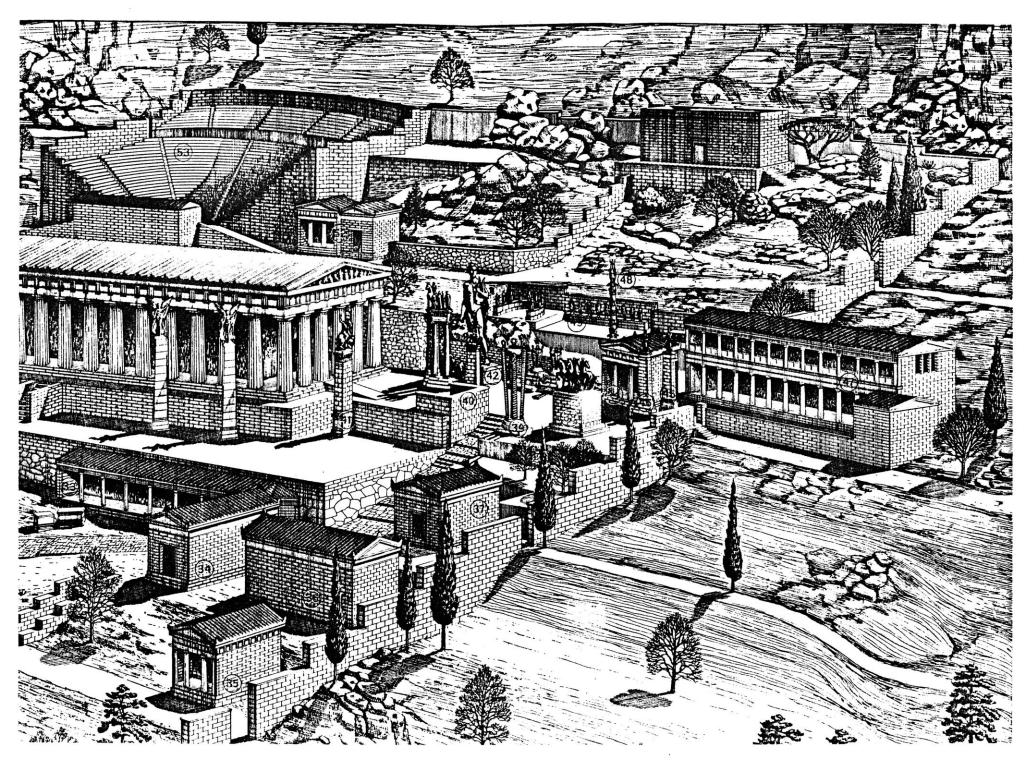
SEATTLE, WA.

PLAN DIMENSIONS OF PUBLIC PLACES

The experience was similiar to walking down one of the side streets near the site's western edge and being able to look past trees and houses to the wooded ravine beyond. As described the Pike Place Market was an element that served several purposes, one of the most important of which was the place as a transitional element in terms of both use (getting to the water) as well as a visual reference to a larger landscape.

The drawing of Delphi (reconstructed) also shows such inbetween places one would have come across upon when entering or leaving the temple precinct or the treasuries. These buildings were also very long. One was 70 meters (230 feet) while another was nearly 40 meters (131 feet).

Between these two buildings and following the same contour, approximately, is the Temple of Apollo, some 60 meters (197 feet) in length. From east to west their total dimension would equal, including the space between the buildings, about 250 meters (819 feet) -- surprisingly close to the length of Pike Place Market.

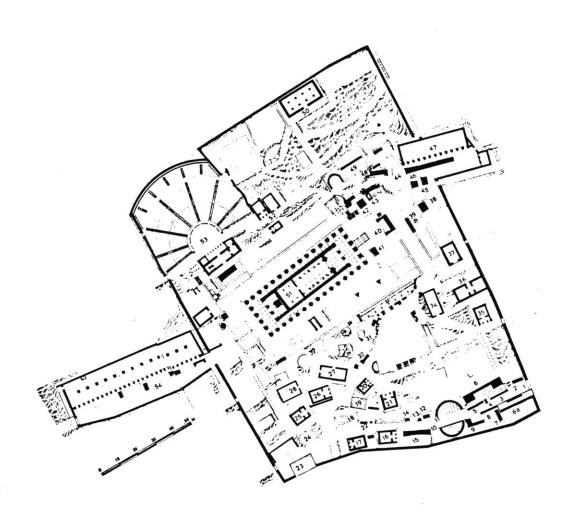


DELPHI

DRAWING FROM DELPHI BY MANOLIS ANDRONICOS .

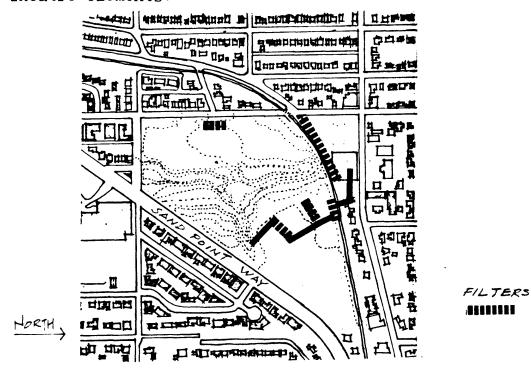
The first explorations of the site involved trying to understand what the dimensions of outside spaces should possibly be. For this the Shaker village at Watervliet, New York was very helpful. But the stage inbetween was to decide how, as the readings determined where, public places might be built. There were really two issues -- the first came from the observation of how, when you look over the roofs of the Pike Place Market to the Puget Sound beyond, there is a greater sense of depth, a layered depth. The second stemmed from the observation of the pattern of public meeting places at each entrance into the walled precinct at Delphi. These long thin elements, that are shown in the reconstructed drawing of Delphi and in the plan, actually "build" a way along the hillside with a structure that begins outside of the walled area and extends into the area of treasuries and temples.

The drawing on the next page actually shows the second pass at the design of the site in which the attenuated "promenade" like structure is proposed. The diagram on this page is abstracted from the design

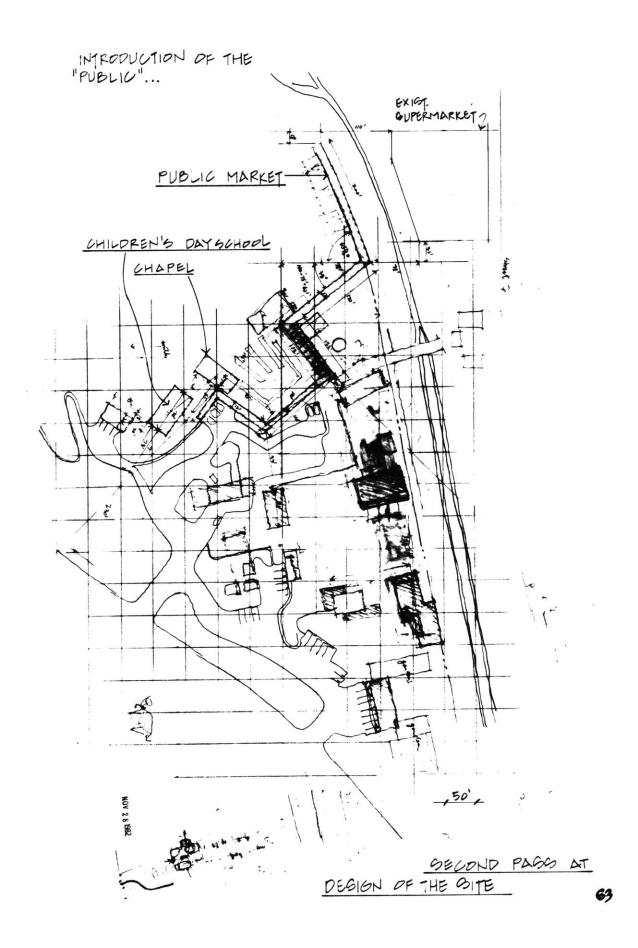


PLAN OF DELPHI

drawing, and shows elements of similiar dimensions to those at Delphi, and of similiar relationship to the landscape as one sees the Puget Sound beyond the thin roof of the Pike Place Market. Uses "build" the corners as outlined later in the description of the Theatre elements.



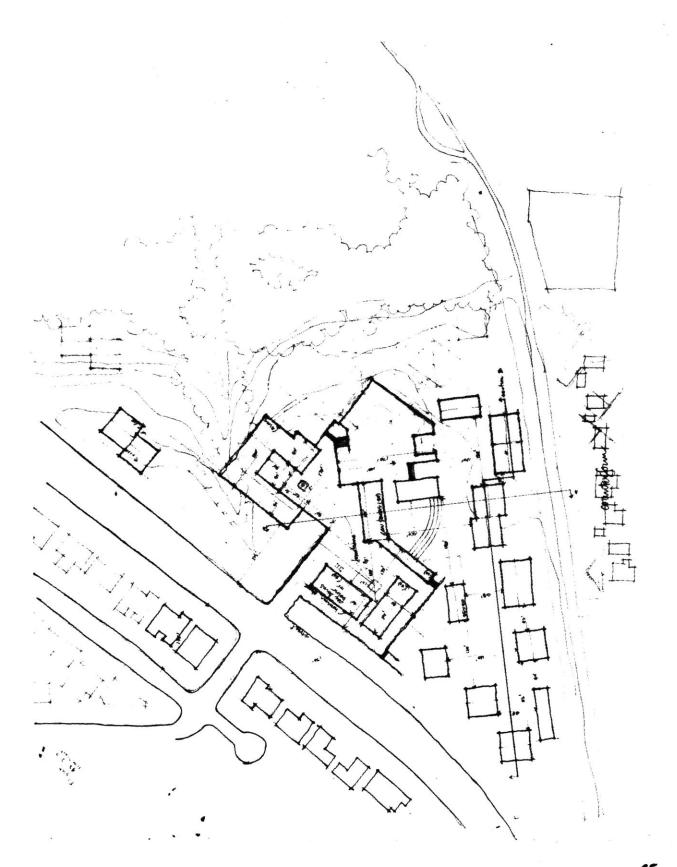
There are excellent views into the site from the west where the streets leading into the site are steeply sloped; and the views from the southeast (Sand Point Way) into the property are also very good. Therefore the elements of the public promenade that are perpendicular to these views are either like filters through which one catches glimpses of more interior parts of the still public gardens or these elements are, as Pike Place Market, things over which one sees past to yet the next, and larger, "landscape". Use, transition and perception (as at Pike Place) are part of the publicness of the promenade.

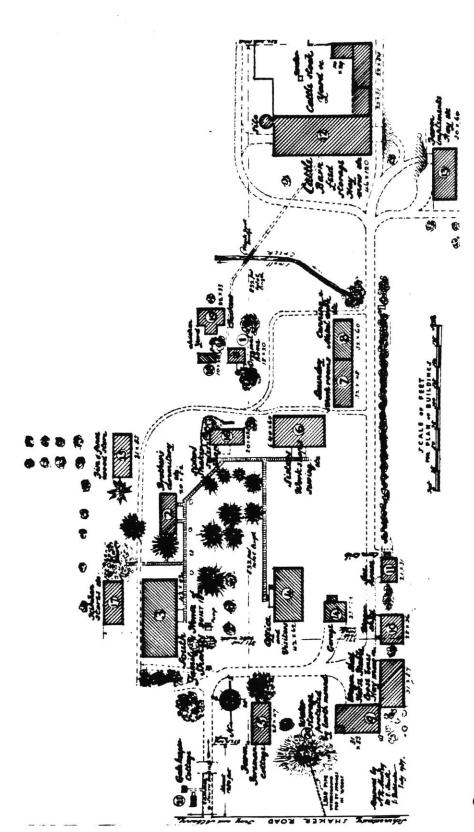


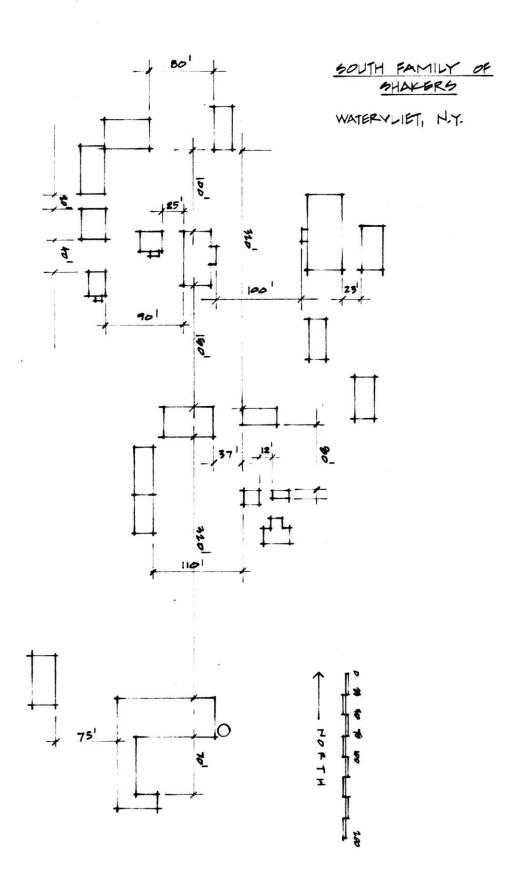
The very first drawings of the thesis
that went beyond the design of individual buildings
were done without the benefit of the site "readings".
One of the problems encountered was that the western
edge which at first seemed the most logical place
for housing was in fact the least appropriate site.
This was because the housing, if built west of the
wooded ravine, merely moved the built edge one hundred
feet closer to the most beautiful natural part of the
landscape. But by placing the housing on the triangular higher eastern section, the western section can
be a place opening up as a park between the ravine and
the row of cottage like homes across 40th Avenue.

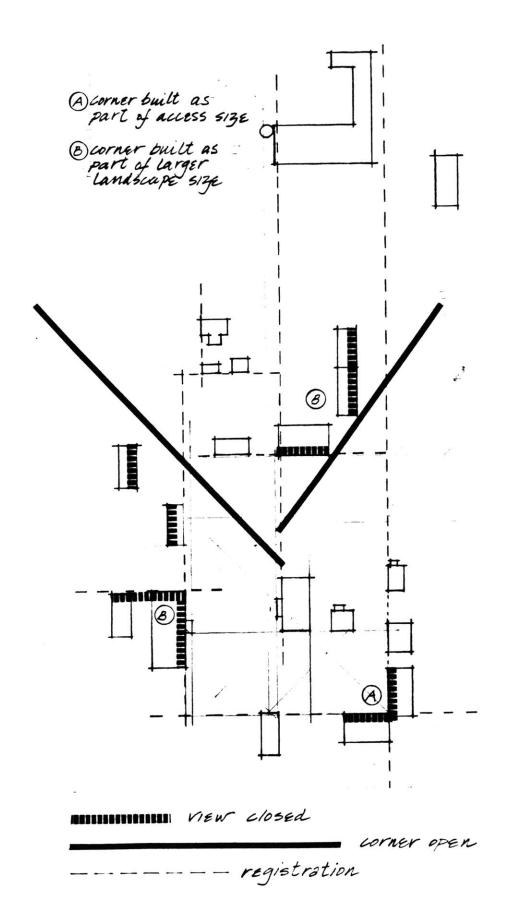
This drawing explored the use of dimensions of the Shaker village in making a series of three outdoor spaces with dimensions between 120 x 120 and 150 x 150 feet, defined on three sides by buildings and open on the fourth southern side. The dimensions of the buildings themselves, an average of 50 feet across and 70 feet long, are similiar to those of the existing duplexes across the street -- as well as coming close to the size of the Shaker buildings.

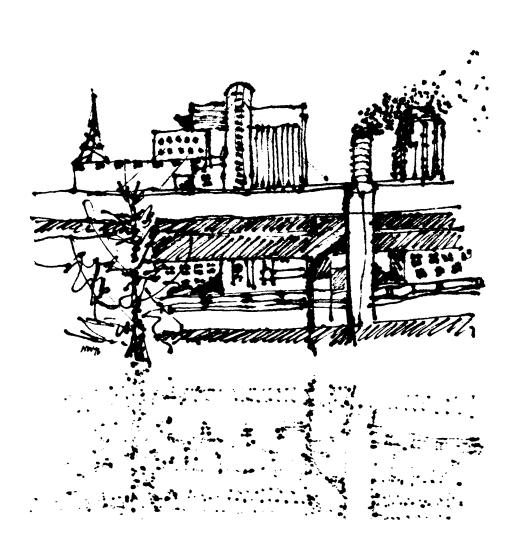
From the study of the Shaker villages it was ob-











View of Seattle's Downtown from the Waterfront

#### THE PROMENADE

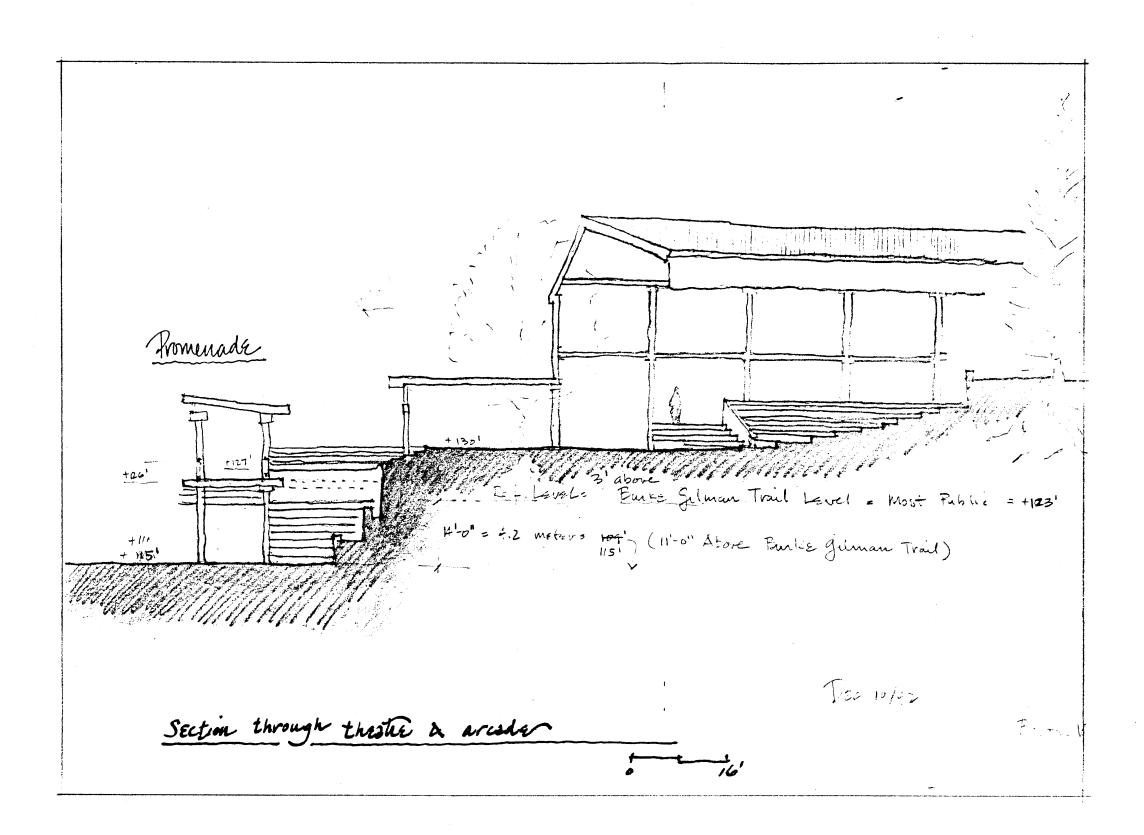
In a city where the views of water are so much a part of the way of life it is natural that the edge where land and water meet is a place that is very important. Fortunately the diverse topography allows elements that would normally divide a city -- such as a highway -- to slip almost unnoticed under the nose. This is possible for example along the waterfront where there are series of steps that lead up steep hills to places like Pike Place Market by slipping underneath the viaduct high over head. Only in a city where there are sectional differences like this can such intricate interlocking happen.

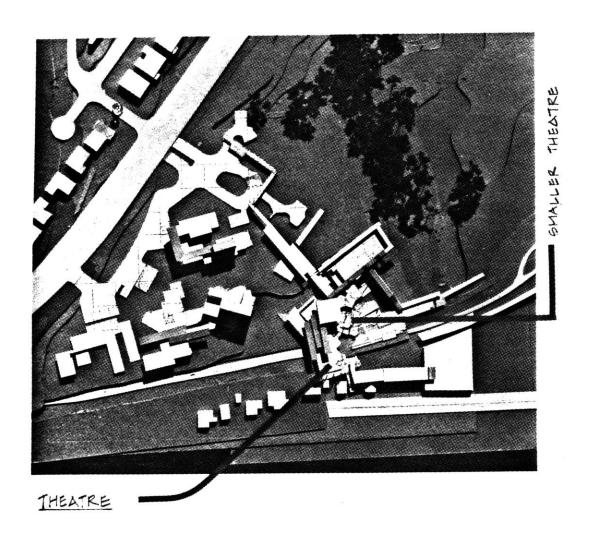
The promenade on the next two pages is a similiar kind of interlocking...

## Promenada

The walkway is raised at the center of the site so that the largest outdoor space is connected, laterally below this public promenade, with the more private outside "territories" of the houses. In this way the houses are directly connected to and can make continuous use of the largest part of the site for their gardens.

People walking through the site would, in effect, pass through a garden with stairs at corner points that lead down to the more private, yet still publicly visible, gardens.



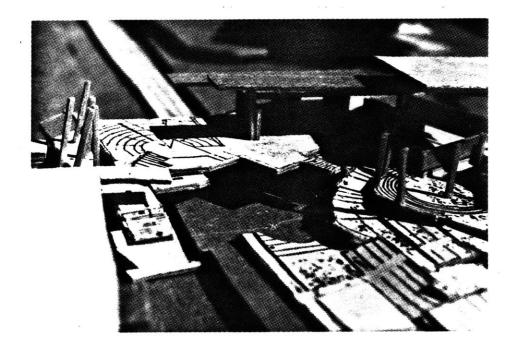


DESIGN OF THE PUBLIC PLACES --

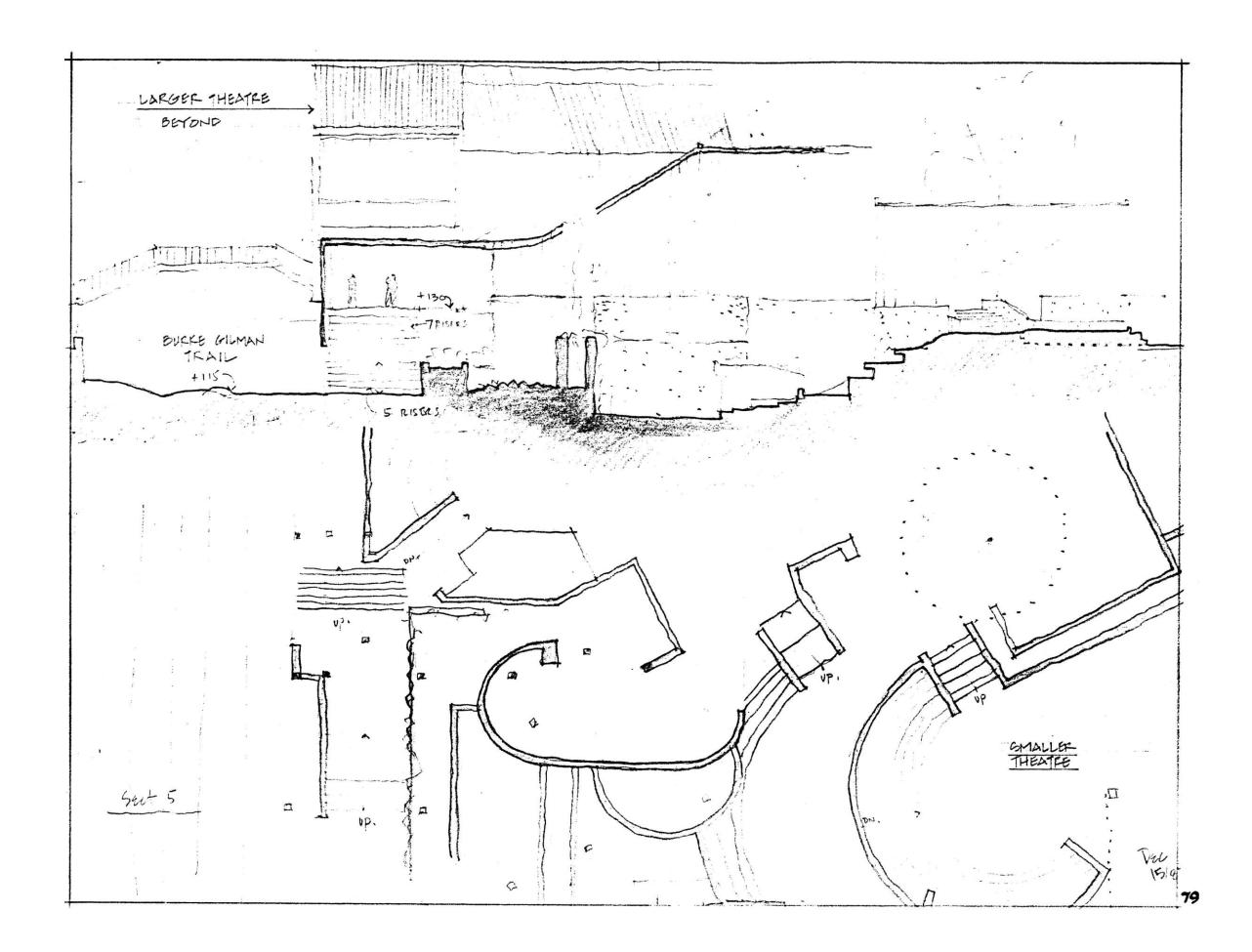
THE THEATRE...

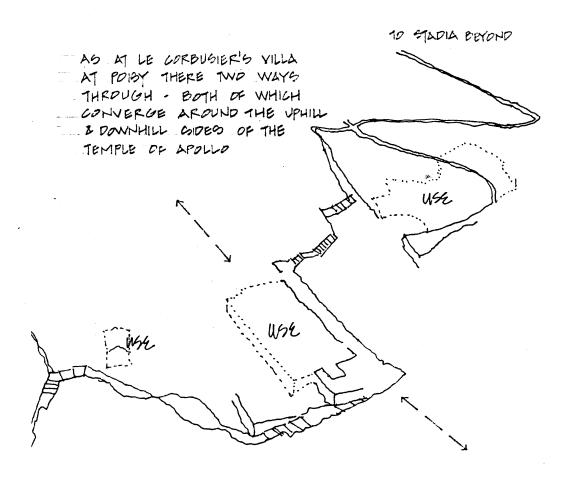
### THE THEATRE

The projected reading of ways one might walk through the property showed, in addition to a understanding of the site's size in relation to other parks, that the north to south path



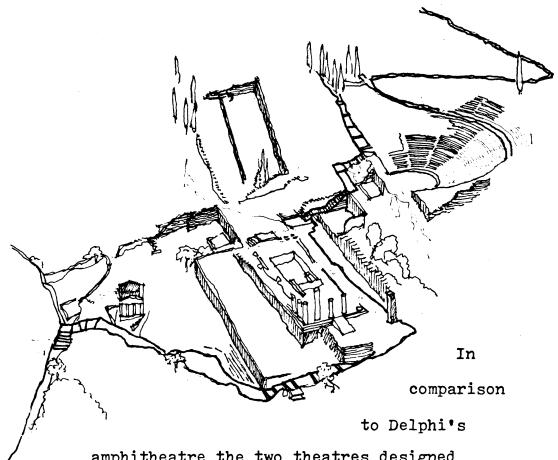
intersecting the Burke-Gilman Trail would make an important place for a small theatre, restaurant and perhaps even the community's meeting room. This view of the two theatres serving as places around which movement occurs was compared to the theatre at Delphi where one walked from the the sacred precinct of the Temple of Apollo, or from the treasuries located even further down the steep hill, up through





DIACRAM OF DRAWING (AT RIGHT) OF DELPHI SHOWING HOW PUBLIC USES "SUILD" CORNERS OF THE PROMENADE.

the theatre (50 meters, or 164 feet across) and on to the stadia carved out of the hillside above.



amphitheatre the two theatres designed for Seattle are covered and much smaller in size; the largest of which has a 34 foot (10.5 meter) radius compared to the 82 foot (25 meter) radius of the Greek example.

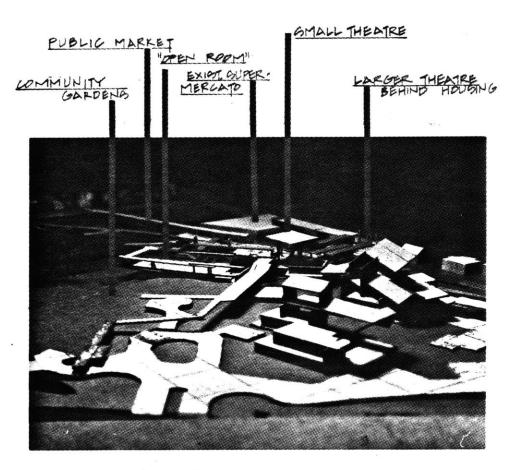
Instead of building out of a hillside
the site in Seattle affords a small sunny knoll
ten feet above the Burke-Gilman Trail. One
of the theatres, the smaller one, is built
here because of the view out of the site to



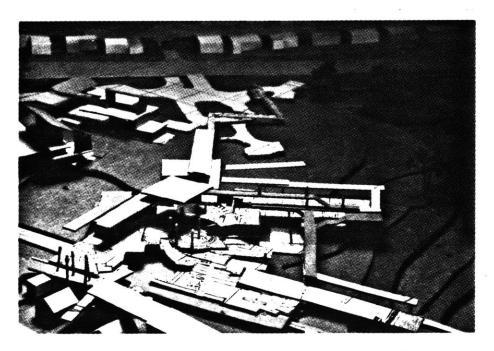
the Seattle hills to the northwest. But for the larger theatre its location above the running trail precludes the massive construction of stone.

It is <u>industry</u> which has done the carving on the Seattle property, bulldozing its way along the northern edge of the site to make way for the Northern Pacific Railway -- which is today used as the riding and walking trail.

•



THE PROMENADE (FROM GAND POINT WAY)



THEATRES & "OPEN ROOM" (FROM NORTH)

Rather than literally interpreting the example of Dephi the theatres approximate the organization of the Greek example building places at corner points along the path from the Children's Day School at the south to the market at the northwest corner of the site.

## CHANGING PIRECTIONS

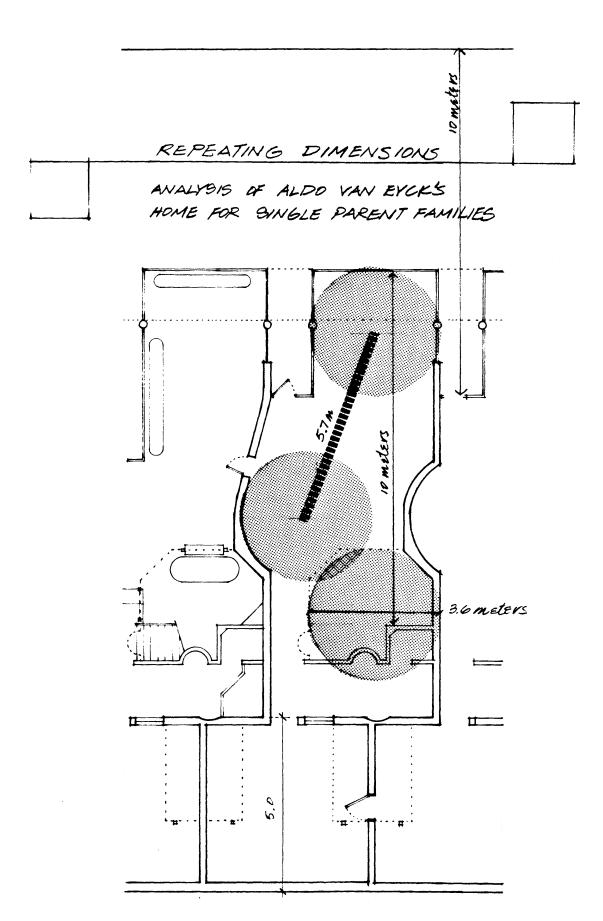
One walks around these partially complete round forms by way of a stairway from the Burke-Gilman Trail and in the process gradually one changes from the east-west directions of the Burke-Gilman Trail to the north-south countermovement of the public framework, of which the theatres are corner points. The theatre as a bridge is wide enough to support use as well as movement.

## DIMENGIONG & TRANGFORMATIONS

A transformation of the Delphi reference was made when we observed that the dimension between the public outdoor space and the existing market

was larger than one would want if new uses adjacent to the Burke-Gilman Trail were to be integrated with uses built along the edge of the existing supermarket. Therefore when the model (1:60 feet) was built the public framework was moved closer to the bicycle and jogging trail in order to make the diagonal measurement from new to old a more intimate 100 to 175 feet (30 to 53 meters). This change moved the largest theatre to a position directly over the Burke-Gilman Trail. This made the previously ground related from more like a bridge but in terms of organization the theatre builds the corner, as it does at Delphi.

Though the transformation might appear contradictory and capricious in structural terms, the organization as it relates to use, both as a place -- the theatre -- and as an object one walks around and/or through to change directions and levels, is much like the system of places along a path that characterizes many of the best architectures in which architecture is like a landscape of related elements carefully assembled (dimensioned and organized).



Repeating Dimensions are one of the ways a kind of dynamic equilibrium can be established with the result that differently configured but similiarly dimensioned spaces can be both the same and different. The drawing on the preceding page preceded the paper -- A Constructive Language -- with an interest in understanding what van Eyck was referring to when he lectured at MIT last spring and mentioned that a 10 meter inside dimension was explictly repeated and overlapped with an outside space. From this I became interested in exploring the possible sources of van Eyck's ideas about dimensional systems in the work of, for example, Paul Klee. But to go beyond the many connections I found I wanted to explore how such an "internal" discipline might transform "external" givens by way of these philosophies. dimensional analysis is not included for lack of time, nor is the paper concluded in a final sense -- it only begins to come to some observations of how van Eyck has transformed the external given, the concrete frame, from a object (fact) into part of a language with spiritual associations of the vertical contrasted against the horizontal (as in Mondrian's art and philosophy).

# A Constructive Language

AN INTERLUDE --

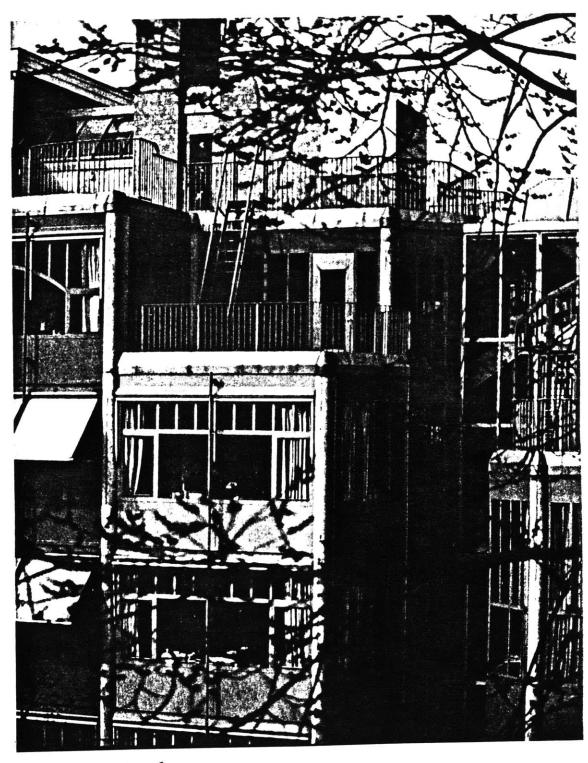
A GTUDY OF DIMENOIONO AG PART OF THE CONGTRUCTIVE (3 POETIC) DIGCIPLINE

A STUDY OF THE HOME FOR SINGLE PARENT FAMILES BY DUTCH ARCHITECT ALDO VAN EYCK

The purpose of dimensions is not arbitrary because our perception of space is cultural -- ie interpretations of material conditions in a variety of ways. Simply stated dimensions represent quantities, about which Giulio Carlo Argan, in speaking of Paul Klee, says:

"It may be said that Klee's art and theory represent an attempt to reconstruct the world according to values of quality; and since these values are not given and are embedded in layers of false experience, it becomes necessary to distill these values by a transformation, a 'reduction to the quality of the quantities...' "

Introduction to Paul Klee's notebook <u>The Thinking Eye</u>, p 15.

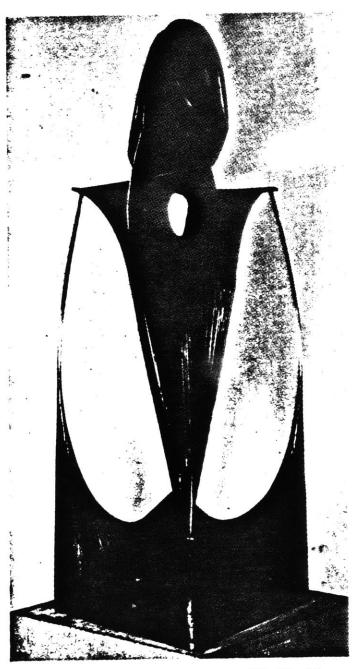


ELEV. FROM STREET

HOME FOR SINGLE PARENT FAMILIES

1974 - 1980 ARCHITECT ALDO VAN EYCK

AMSTERDAM



Antoine Pevsner Twinned Column 1947 Bronze 42" x 20" x 17" The Solomon R. Guggenheim Museum, New York

#### Introduction

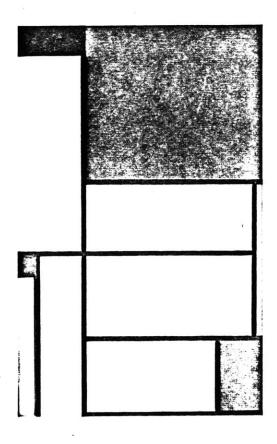
The first thirty years of the modern movement was a time that today seems almost unequalled in its creativity; a creativity in art and architecture characterized by convictions of architects and artists who believed that more objective and universal insights into the very nature of life, and its visible form, could parallel equally exciting discoveries of other fields -- science, philosophy and literature above all. Instead of, for example, the literary associations of the nineteenth century Art Nouveau that led to a "sensationalist faith in the primacy of physical form over programmatic content" as it did in Henry van de Velde's work, the new art and architecture was to be "erected on" what the co-founder of Russian constructivism Naum Gabo called "the real laws of Life",

All is fiction...only life and its laws are authentic and in life only the active is beautiful and wise and strong and right, for life does not know beauty as an aesthetic measure...efficacious existence is the highest beauty.

The source of authority for art and architectural ideas was no longer reached or decided upon by appealing to societie's preferences for accepted styles, and in this sense art became a revolutionary medium. Nevertheless it was hoped that in architecture as well as art that a "return to first principles" would avoid an " 'art for art's sake' introversion so long as plastic art remains an intrinsic part of a much wider cosmic

unity...(because) there (would be) a reintegration into the comprehensiveness of daily life".

An important part of this reintegration of art stemmed from architects who through friendships with artists, or as artists themselves, wanted to unify the plastic arts. One approach of a founder of the Dutch de Stijl group, Theo van Doesburg, was to make architecture and art a unified whole by integrating principles of color and composition postulated first in the paintings of Piet Mondrian, the other founder of de Stijl. Yet another approach was that of painter and architect Le Corbusier who, along with a painter named Amedee Ozenfant, founded a painting movement in 1917 known as Purism. Through his writings and paintings Le Corbusier defined how architecture could be functional in an intellectual sense as well as addressing practical standards. This was not the same kind of integration of painting and architecture that the de Stijl group sought because Le Corbusier's theories were related to objects of everyday use which meant they had important meanings already associated with them. By comparison Mondrian's ideas were based on his own metaphysical reasoning that said only the horizontal and vertical at right angles to each other could produce a harmonious painting. Thus Mondrian's system was derived from conventions"internal"to art, whereas Le Corbusier's were "external" and more broad based in society's conventions. 5 Yet a third approach was outlined by the Russian Constructivist's co-founder Naum Gabo when he wrote in 1937



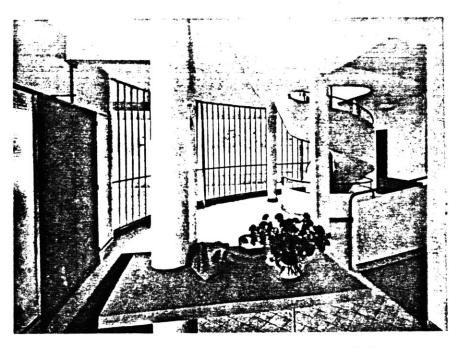
PIET MONDRIAN

TABLEAU I, 1921 (29% × 255/67)

COLECTION MUSEUM LUDWIG,

COLOGNE

that there was a "content in form". This distinguished avant garde art from periods where formal styles were selected for associations of a past romanticized by the present as for



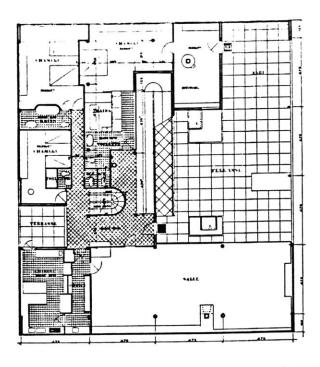
LE COPPUBIER

VILLA AT FOIST

example the "archeologically" aware mid-nineteenth century Gothic, in England, represented a desire to resurrect values of the organic society of medieval time.

These three architecturally interested art movements all developed in the late teens and early twenties by building on the work of earlier artists, especially Cezanne and the Cubists. But by the nineteen thirties it was recognized that there were serious problems with attempts to integrate art and architecture as de Stijl architect van Doesburg attempted for the last time in the renovation of the Cafe Aubrette. "Having finally demonstrated that relief structure alone could suffice to articulate architectural space, van Doesburg unexpectedly reconciled himself to admitting to a division of labor between architecture and art, particularly as this concerned the house that he designed for his own occupation in Meudon, in 1929. As well as this observation Kenneth Frampton notes that "the final design (of his house) abandons the transcending plastic principles of de Stijl and instead embraces the precepts of functionalism, particularly as these had appeared in the purist works of Le Corbusier..."

As described earlier Le Corbusier's references were objects of common and everyday use which, even though abstracted in the Purist vocabulary, importantly made it possible for his architecture to continue to develop a unity of plastic expression where de Stijl failed. This was because, simply, his working method was more practical because he could achieve



PLAN . LE COROUGIER . VILLA AT POIGY

dynamic formal and spatial relationships with a vocabulary that was not limited to a singular geometrical type as Mondrian had insisted upon, and which van Doesburg had modified with the introduction of the diagonal. ternal metaphysical canon of de Stijl neoplasticism that "had assigned the physical to the horizontal and the spiritual to the vertical" was effective for Mondrian's art but not for architecture. But the geometry of Purism was, it seems, more an attempt to raise objects of everyday use from mere industrial artifacts to objects of quality. The difference was that Le Corbusier, as Mondrian, selected the "subjectmatter of (his) painting" by "a variety of metaphysical, aesthetic and other arguments" but "Purism begins with elements chosen from existing objects...that serve the most direct human uses..." The significance of this difference is that both van Doesburg and Le Corbusier wanted to activate plastic space but Le Corbusier's sculptural approach in architectural could produce movement by the interpenetration of volumes. While van Doesburg was limited to an architectonic orthogonal formalism that was abstract and without the "emotion intellectuelle et effective" of Le Corbusier's more complex melding of his and society's conventions. 12

when Le Corbusier met with a small group of fellow modernists at La Sarraz, Switzerland in 1928, it was to promote modern architecture's acceptance. The original founders of de Stijl and Constructivism remained committed to their ideas,

even though their influence was not to have the importance for architecture that Le Corbusier's was. By the late thirties the initial creative period in art had ended leaving Mondrian and Gabo to write about their ideas in an English publication, CIRCLE, by a group formed in London in 1938.

This also seemed true of architecture as a general rule. The Congres Internationale d'Architecture Moderne, formed out of the 1928 La Sarraz meeting had in the early thirties turned to city planning issues under Le Corbusier's guidance. But the complexity of modern architecture's foundations that gave individual modernists ideas their value to society was overlooked and simplified by more limited interpretations. After a certain amount of time the struggle to establish modern architecture as a legitimate enterprise met with such acceptance that its success was to lead to problems because architecture was not the homogeneous discipline that Henry Russell-Hitchcock and Philip Johnson depicted in 1932 exhibition they organized for the Museum of Modern Art. But in the mean time the "Functionalist line in architecture was virtually the ruling style by 1945". 179

It was about this time, the late forties, that a young group of sympathetic architects, born about the time de Stijl, Russian Constructivism and Purism were established, began to question the modern architecture that was their heritage. In the early fifties these architects, mostly Europeans and a few Americans, were given responsibility by CIAM for the program

of the tenth congress at Dubrovnik in 1956, in part to quiet

their objections to "abstracted functionalist thinking" characteristic of the 1933 Athens Charter that came out of the

fourth congress. The Dubrovnik meeting marked the official

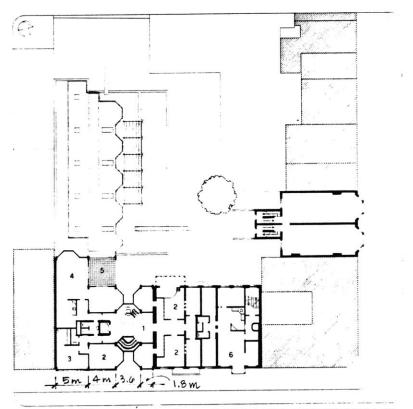
end of CIAM, and the beginning of Team X -- the name those who

organized the tenth meeting took to distinguish their group.

Team Ten members were J.B. Bakema and Aldo van Eyck of Holland, G. Candilis and S. Woods of France, Alison and Peter Smithson and John Voelcker of England, J. Soltan of Poland, Gier Grung of Norway, Ralph Erskine of Sweden and J. Coderch of Spain. Since 1962, when Alison Smithson edited a selection of member's writings and excerpts from group meetings, Aldo van Eyck and the Smithsons have come to represent, at least from the outside, polarized viewpoints and therefore stand out as the self styled spokesmen of the group. The important point is that van Eyck more than the others embraced whole heartedly the discoveries of the early modernist artists and architects, while the Smithsons were more interested in the development of Brutalist art developing during the fifties in Europe. Over the years their differences seem to have grown but at the time of their formation in the early fifties, when CIAM was struggling with criticism of its city planning ideas, many of the future Team Ten members agreed that there was too little discussion of specific architectural issues or buildings. Architecture and planning had been unfortunately split into separate disciplines. They needed to be reunited because only in this way could the four abstract functional categories found in the Athens Charter -- Work, Dwelling, Recreation and Transportation -- be replaced by a more integrated approach to both large and small scale situations. Architecture and issues of "identity" and "association" with real places were more important than any abstract categories.

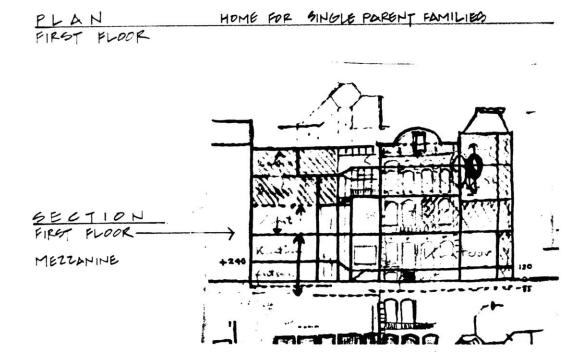
Outside of Team X, and the debate with CIAM, the diverse inquiries of the first thirty years were stagnant in comparison to the reductive modernism that had become successful because it combined an identifiable style with industry's production methods. Most unfortunate of all the interpretation of functionalism ignored, in favor of a style, how, as in Le Corbusier's art and architecture, a formal language might abstract forms related to useful conventions, existing and potential, of society. For example how the qualities of a place (light and space and materials, and their construction) might build within the classical vernacular that had existed since neo-classical seventeenth century.

This is the background against which Dutch architect Aldo van Eyck participated in the sixth congress of CIAM at Bridgewater, England in 1947. Like Mondrian and Le Corbusier van Eyck has remained committed more than any members of Team X to devolping an expressive language that can make architec-



Primo piano: 1. hall; 2. stanze di lavoro; 3. medico; 4. bambini 1-6 anni; 5. loggia; 6. abitazione portiere.

First floor: 1. hall; 2. workrooms; 3. doctor; 4. children 1 to 6; 5. loggia; 6. janitor's lodge.



ture useful in both a functional and transcendent sense. The purpose of this paper then is to continue to outline van Eyck's expressive language in a critical sense by first determining on what basis criticism can proceed, and secondly by examining his most recent building in detail.

We, as architects, are continually faced with a nagging problem of architectural styles -- if they are too particular they often seem to be a matter of someone's personal taste. If they are so general that they offend no one they usually lack the qualities to which we would like to aspire in architecture. Quantities become nothing more than that -- just materials assembled quickly to meet a budget but lacking useful character.

When it happens that a building like Aldo van Eyck's Home for Single Parent Families is completed it seems that for once a building of quality has been built. This is because van Eyck has taken enough time, six years in all, to resolve both a complex design that must work within an existing urban context, and to conceive construction details that go far beyond the reductive standards of most modern buildings.

But is this a good building, and by what standards might one critically appreciate this Dutch architect's architecture?

Historian Peter Collins was able to criticize Auguste

Perret's architecture according to standards of economy that
reinforced concrete construction has made possible. He showed that Perret used concrete in a way that was sympathetic
to a long standing preference in French architecture for a
trabeated style of columns and flat lintel construction.

Before the architecture of Perret's time the flat vaults

and coffered ceilings of a building's porticos, for example, were made from small and carefully cut stones. Arched construction was not acceptable to more easily build the required spans, and because larger stones could not be quarried in France, it was necessary to resort to an intricate dovetailing of stones and iron reinforcing pins. The style of architecture, in spite of these limits, was more important than practicality in building terms — in other words the conventional style was "semi-autonomous" of empirically limiting material conditions.

By contrast Perret's use of concrete made possible, in modern terms the expression of the trabeated style of the French neo-classic that dated several centuries to the development, along with radical changes in society and government of the state, of new institutional building programs (such as the theatre and improved housing) demanded a new style other than the religiously associated Gothic. Architecture had to be socially acceptable as well as empirically possible. For this reason Perret's architecture was responsive not only to specific issues internal to the design of a building, as economy and structure are, but his architecture also worked within a society's expectations for a certain stylistic convention.

Perret's later work continued to show the use of a modern material (concrete) and a rational structure (the concrete frame) to build space. Therefore Collins

could appreciate Perret's adherence to principles of economy and practical functionalism even when the style of architecture or the building type was not new or innovative. By contrast many critics considered Perret's first works -- the apartment house at 25a rue Franklin (1903) or the Garage in rue Ponthieu (1905) or projected theatre designs -- more significant than later public government buildings where his "preoccupation with the creation of a new 'national-classical' style (was) an obsession that was severely to limit the development of his later work". These critics praised Perret's architecture for using the concrete frame in new building. types, like the urban apartment house, where the concrete frame made possible a "u" shaped plan around a forecourt. The strength of the ribbed vertically attenuated structure allowed the building to be taller than adjacent older buildings.

There are positive points to Collin's critical method because he can use semi-autonomous standards (such as economical use of structure) for criticism independently of particular styles, even though he still recognizes stylistic conventions. But to reason from a general category to specifics is often not appropriate if it leads one to overlook other issues.

This is the case in trying to come to terms with Aldo

van Eyck's architecture because at times when the purpose of architecture is limited by serious economic restraints, and confused by a current widespread rejection of modern architecture in favor of historical styles, it is natural that we should not base criticism on prior categories such as economy. Therefore, almost sixty years after the productive advances of Perret's time, useful criticism should, in the case of van Eyck's work, explore his development of an architectural language based on many of the ideas that

came to light around the turn of the century and since, through the astounding intelligence, artistry and perseverence of a small number of artists in every media and field.

In fact rather than reasoning from a general category, like economical use of material and the rational organization of a building program with a concrete frame, it makes more sense to eamine one of the ideas that significantly influences this language.

In a lecture at MIT last spring and in recent articles van Eyck says he has been reconsidering the notion of "transparency" because he believes it is the fault of modern architecture to exclude "openness" in favor of "enclosure". Examining this "notion of transparency" is a way to also explore how van Eyck expresses his and the client's <u>intentions</u> to make the Home for Single Parents and their Families a place 'open' and part of the community to which the mothers and their

children will soon return. Both client and architect hope that this kind of openness will, idealistically, encourage the families to become active and interested in both the goings on inside the house, its collective life, and in the activity of the outside world.

The style that results from van Eyck's notions of transparencies bears resemblance to Perret's classical expression of structure, like the apartment house at 25a Rue Franklin. The conventions of a preferred style, such as the trabeated classicism that preceded Perret's modern interpretation of it, are much more difficult to assess in van Eyck's architecture for several reasons. In identifying with the early modernists van Eyck is working in a style that had its roots in a period that was revolutionary in the sense that it, out of a natural course of discovery, spurned older conventional styles. A style that was once radical is now accepted as a unavoidable matter of fact. But beyond the intentions of van Eyck what are some of the relationships between a style culled from principles of early modern art as well as architecture that make van Eyck's language more than a self-styled set of decisions understandable only to architects? Just as the discussion of Perret's work is an example of a dialog, between architecture and the culture it serves, that can be interpreted (to the degree that styles are agreed upon) to understand why architecture makes an important part of our culture. How does Aldo van Eyck's architectural language



ELEV. FROM ROOF THE 5 CHILDREN'S APARTMENTS

contribute first to the interpretation of the client's program, and how does this language express the why that makes culture and architecture related?

## Frames and Frameworks

The concrete frame used by Perret has continued to be so important to architectural practice and theory that, as Colin Rowe says, we equate modern architecture with the frame. Therefore when Team X challenged the functionalist doctrine of the Athens Charter of CIAM's 1933 congress it was not an attack against modernist style or the architects who had been so important in the first thirty years of its development. Instead Team X proposed, at least in the beginning, to rejoin the disciplines of planning and architecture by introducing the idea of a "framework".

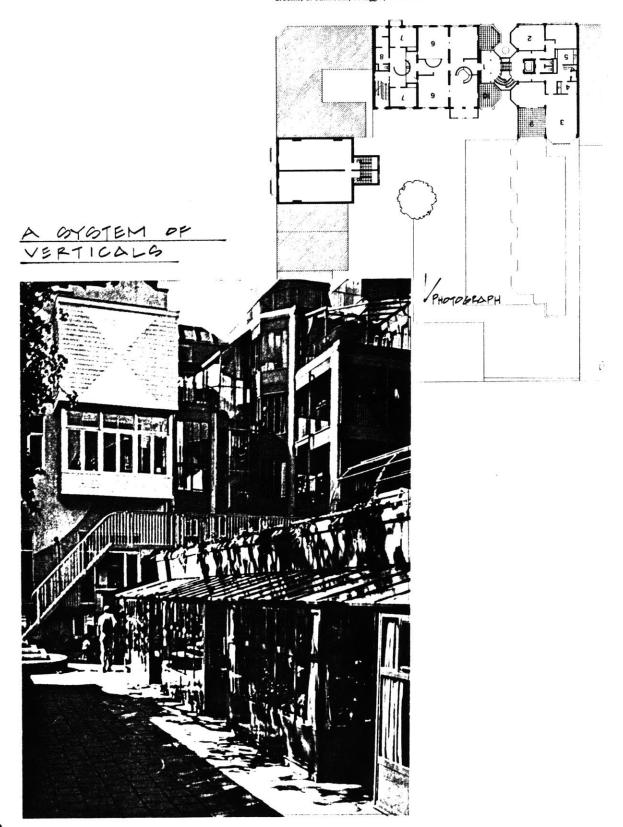
For all of Team X this meant that architecture could only be built if there was either an intimate understanding of the "realities of a particular place", or more likely that a basic organizing framework would, in van Eyck's words "set the stage as it were -- for the twinphenomenon of the individual and the collective..." This would allow the realities to occur because there was an integrated understanding of how architecture supports common daily activities. The framework would allow new architecture, of city and house alike, to be a complex "order" of "human association" and "identity" 123 that would not occur if only the issue of individual buildings

or functionalist categories were the subject of discussion.

The work of van Eyck began to address the idea of a framework for human association most concretely in the Amsterdam Orphanage that he built in 1962 on the outskirts of town. In this structure, which is based on a repeated 3.36 meter module, the expression of a heavy concrete framework is contrasted against against lighter infilling walls and windows.

In the Home for Single Parent Families van Eyck has moved away from his original estimation of the frame as an object to an exploration of the frame as part of an aesthetic language. In doing so van Eyck is combining ideas about the frame that date back to Le Corbusier, and the work even of Le Corbusier's teacher, Perret. Yet the idea of the framework as an organizing structure for different kinds of activities remains a strong part of his work. (In other words space is not "codified" in a one-to-one sense with specific activities as it was in Adolf Loos' architecture.)

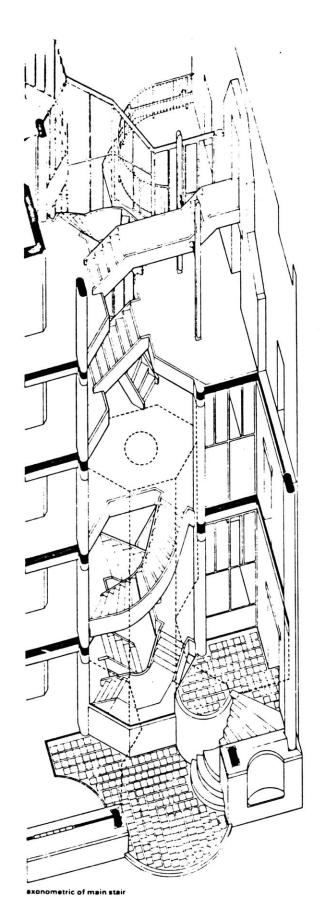
In moving away from the more literal idea of the framework of the Orphanage van Eyck is, it seems, moving toward a a set of conventions that are associated with the history of the concrete frame. Therefore the assessment of how van Eyck has interpreted this building method, which is by now conventional in its widespread acceptance, will lead to a better understanding of how van Eyck thinks his architectural language Second floor: 1. hall; 2. workrooms; 3. babies; 4. kitchen; 5. tableware; 6. parents lodgings; 7. parents bedrooms; 8. bathroom; 9. loggia; 10. terrace.



is related to the client's and users needs, and by extension to the society of which the building is a visible part.

Though van Eyck would deny that "style" is the basis by which one begins to design it seems clear that it is in fact very much the beginning point. If it were otherwise van Eyck would seek to achieve the transparency and sense of "openness" he intends with a less expressive detailing of the building. The character, if style were not so tied to fact in his eyes, would be sacrificed to a more economical set of construction details. For example the columns of the concrete frame are visible from both inside and outside, even though, as Perret did at 25a Rue Franklin, the primary structure in its entirety might equally well have been enclosed with a less expensive continuous exterior cladding. (This is not to say that the structure could not still be expressed through reveals and small setbacks, etc)

Instead, in the Home for Single Parent Families, only the vertical dimension, the column, of the frame is exposed. and the horizontals, the edges of the slab and supporting beam, are covered by brightly painted metal spandrel panels. The columns become part of a system of verticals along with the uprights of the thin metal railings and window mullions. And since the columns are set out from the outside edge of the beams this makes the beams seem as though they are part



Home for Single Parent Families

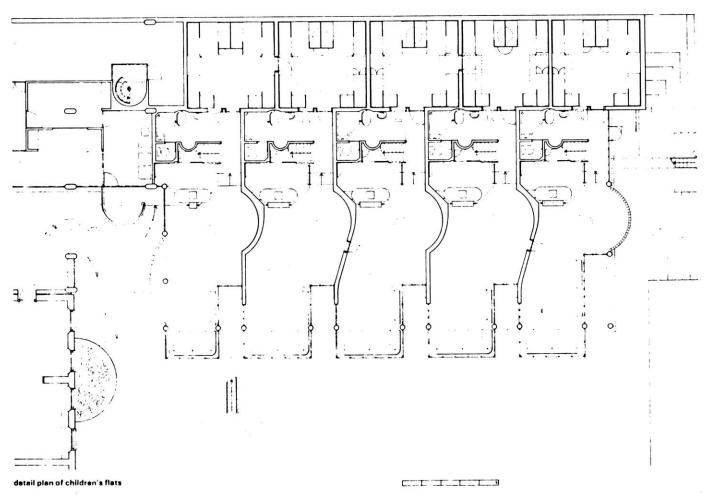
the enclosure. Therefore the selective expression of parts of the structure contributes to a feeling that the building is dematerialized and transcendent -- much like a Paul Klee drawing or painting in which an "individual" image, to use Klee's terms, is contrasted against a background of less particular "dividual" (similiar and repeated) parts. This kind of constructive language contributes to the sense that, because the building's parts are so clearly detailed, this is a "framework" -- the form of which was built in a additive method. This contributes to the associations of vernacular architectures which were in fact built additively.

The delightful ambiguity that results from some of the primary structure reading as part of the oblique planes of the enclosing windows and spandrel panels begins, however, to suggest the real source of many of the principles of van Eyck's develoring language. In 1947, even before his collaboration with future Team Ten members, van Eyck stated his enthusiasm for individual artists and architects who believed as Piet Mondrian did that "The culture of particular form is approaching its end. The culture of determined relations has begun." This meant that like Paul Klee and Mondrian van Eyck would seek to make architecture that reflects an understanding of the "dynamic" forces that lie beneath the surface of reality. Especially in the work of Klee and Mondrian one can see

many ideas that reappear in the work of van Eyck. ample the emphasis on repeated geometrical configurations is analogous to Klee's discussion, in his notebooks, of "individual" (non-repeating) and "dividual" (repeating) structure. More generally van Eyck's use of repeated dimensions can be thought of as a way of establishing equilibriums, of unequal and asymmetrical parts, symbolic of nature's dynamic processes. The use of repeated dimensions makes it possible to think of the frame as a unified structure that has columns locations of which do not have to be decided upon until the basic organization is outlined. The control of dimensions, outlined later in the paper, makes it possible to achieve the order that is otherwise lost when the frame is no longer laid out a priori on a regular orthogonal grid. But this kind of language is internal to van Eyck's own way of working, and while valuable to understand on its own, is not as important in terms of criticism as is an understanding of the types of spaces that result from the selective expression of structure, and the varied column spacing just mentioned.

# Greek Stoa & Home for Single Parent Families

The way in which van Eyck places the emphasis on the columns ties his work squarely into a kind of modern classicism, while at the same time the ad hoc column spacing and the corresponding staggered column heights that outlines an 131

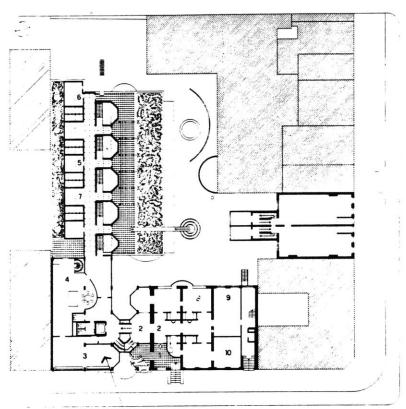


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overall assymetrical form makes the building's image seem romantic, like a painting by Klee. The ambivalence between classical and romantic structures points out that van Eyck's idea of the frame is somewhere between what Colin Rowe described as the European concept of the frame as "idea" and the use of the frame in Chicago School architecture as a "fact".

Van Eyck would like, through an emphasis on partial geometries, transparencies, and constructive expression to divert attention from association with any one specific historical image. Instead van Eyck would like to simply make architecture "more useful" -- its only basic requirement. In fact the choice of a frame for the most public half of the building, a five story structure nearest the street, versus the containing continuous walls of the children's apartments points out van Eyck's belief that different vocabularies correspond to different uses, in almost a one-to-one fashion. The result is that, rather than a specific building type, for example a Greek temple, van Eyck's emphasis on a constructive language is meant to be atopological. But is it?

This question is an important one because, in practical terms, the types of spaces that van Eyck builds are direct evidence of how he interprets the client's brief. It seems that the already described classical expression of structure begins to give a clue that van Eyck has built a "counterform" reminiscent of the meeting place of the Greeks -- the stoa. The organization of the most public part of the building, the



Piano rializato: 1. Entrata; 2. hall; 3. mensa; 4. cucina; 5. camera ospiti; 6. assistente notturno; 7. nicchie per giochi: 8. coordinamento centrale; 9. sala riunioni; 10. amministrazione.

Mezzanine: 1. Entrance: 2. hall; 3. refectory; 4. kitchen; 5. guest-room; 6. night assistant; 7. niches for playing; 8. central co-ordination; 9. meeting room; 10. administration.

PLAN - MEZZANINE LEVEL

REFECTORY

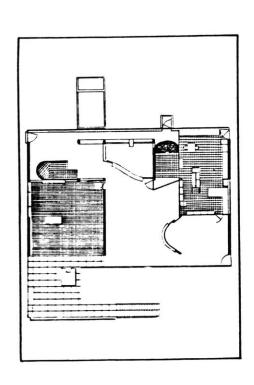


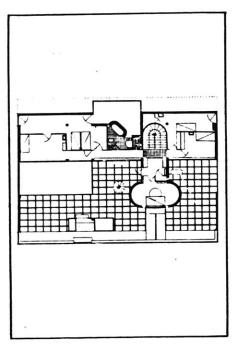
five story high concrete frame, confirms this. And in turn this leads to difficult questions which van Eyck must have faced in balancing the potentially conflicting requirements of a institutional client, the Hubertus Association, with the needs of the fifteen mothers and their children.

Van Eyck says a House should be a City, and a City a House. To do this he organized the Home for Single Parents and their Families around an 'L' shaped plan. The corner of the 'L' is where van Eyck built his five story concrete frame. This serves as the most public part of the building, the image of which is reinforced by its "openness".

From the outside on the street a sense of the public part of the City inside is begun when the columns, extending up unbroken from a solid concrete "plinth" to the flat terraces on the roofs, seem to define space in the same plastic way they did in ancient classical Greek architectures. Even the roundness of the ends of these column/piers pressed to flatness on the sides by the enclosing walls recalls the way in which the classical columns, with entasis, seemed to form and be formed by space.

This idea is reinforced by the shallowness of the interior space that wraps around the enclosed cella-like elevator
mechanical shaft that extends from the ground level bicycle
room to a point well above the roofs of the building. This
shallowness is the result of adding together two modules in





LE CORBUSIER - YILLA AT GARCHES

such a way that their combined length (nine meters) begins to suggest a stoa-like space that wraps around the enclosed mechanical sections of the building. This makes the refectory, for example, seem, because of its greater length in proportion to width, more like the directional forms of the stoa, that, like the refectory, paralleled and built the edges of a public way.

This observation came to mind in reading Colin Rowe's discussion of Le Corbusier's villa at Garches in which it was pointed out that even though

the glazing of the garden facade
might have suggested a single large room
behind and might have inspired the
belief that the direction of this room
was parallel with that of the facade...the
internal divisions deny this statement
and instead disclose a principal volume
whose primary direction is at right angles
to that which might have been presumed,
while in both principal and subsidiary
volumes the predominance of this direction
is conspicuously emphasized by the flanking
walls. 30

At Garches Le Corbusier builds the inside with volumes perpendicular to the principal facade whereas van Eyck builds spaces with individual and combined directions that parallel the street, over which the broad windows of the refectory, for example, look. Thus what is appropriate for a villa by Le Corbusier is private, deep spaces, but for van Eyck the publicness of this part of the program needs spaces which are shallower and more related to a single emphatic direction like the stoa, or the street outside.

- 1 Frampton, Modern Architecture: A Critical History, p.97.
- 2 Chipp, <u>Theories of Modern Art</u>, p.328, excerpted from the "Realist Manifesto" August 5, 1920, by N. Gabo.
- Giedion-Welcker, <u>Contemporary Sculpture: An</u>
  <u>Evolution in Volume and Space</u>.
- Banham, Theory and Design in the First Machine Age, pp. 208-211.
- 5 Class discussions -- Themes in 20th Century European Architecture, Prof. Stan Anderson, Spring '81.
- 6 Gabo, "The Constructive Idea in Art", CIRCLE, p.6.
- 7 Rowe, "Character and Composition".
- 8 Frampton, "Neo Plasticism and Architecture: Formation and Transformation", De Stijl 1917-1931, p. 113.
- 9 Ibid.
- 10 Frampton, ("Neo Plasticism and Architecture...") P.III
- 11 Banham, (Theory and Design...) P21.
- 12 Ibid.
- 13 Class discussion -- Modern Architecture: 1750 to Present, Prof. Stan Anderson, Fall '81.
  - & Banham, Age of the Masters. actual quote.
- 14 This was the opinion of Team Ten members as stated in the Primer, and individually, as for example Aldo van Eyck stated at the 6th Bridgewater meeting of CIAM before Team Ten was formed.
- 15 Smithson, Team Ten Primer, p. 2.
- Banham discusses the influences of Brutalist art on the Smithsons who believed young architects would develop new architecture in use of modern materials (plastics for example) whereas van Eyck is much more interested in the principles of art and architectural language that were understood for the first time in the period 1900 to 1930, and even, in some cases (as the Impressionists), before.

- 17 Smithson, op.cit.
- 18 Class discussions -- Spring \*81. -- of Peter Collin's critical arguments on Auguste Perret's architecture found in a difficult to locate book by Collin's on Perret -- Concrete.
- 19 Class discussions.
- 20 Frampton, Modern Architecture: A Critical History, p.108.
- 21 Aldo van Eyck, "What is and isn't Architecture, A Propos Rats, Posts and other Pests", <u>28 Lotus International</u>.
- 22 Architectural Review, March '82, "Street Urchin, Home for Single Parent Families by Aldo van Eyck".
- 23 Smithson, Team Ten Primer.
- 24 <u>Ibid</u>.
- 25 <u>Ibid</u>.
- 26 Paul Klee, The Thinking Eye.
- 27 Rowe, "The Chicago Frame",
- 28 Aldo van Eyck uses this term throughout his writings.
- 29 Mondrian, "Plastic Art and Pure Plastic Art", CIRCLE.
- 30 Rowe, "Transparency: Literal and Phenomenal", p. 50.

# Aldo van Eyck -- a Constructive Language

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