A STUDY IN DWELLING

THEESIS #

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This thesis is a study in dwelling.
My goal has been to gain an understanding of the meaning of dwelling and how that understanding might affect the creation of a built environment.

I began by exploring philosophy and theory relating to dwelling. Writings by Christian Norberg-Schulz, Martin Heidegger, Gaston Bachelard and others, pointed me in a direction of an experiential and existential study. In other words, to understand dwelling one must seek out the experiential phenomena that explain and define how we are in the world.

Before I get into concepts that relate specifically to dwelling, let me explain a concept that acts as a unifying element throughout. This concept is wholeness. Wholeness is an understanding of the relationship of parts to whole. "Just as there are no independently separate masses on the large-scale, then, there are also no independent elementary particles on the small-scale. At both levels, the whole is reflected in the parts, which in turn contribute to the whole. The whole, therefore, cannot simply be the sum of the parts -i.e. the totality- because there are no parts which are independent of the whole. For the same reason, we cannot perceive the whole by 'standing back to get an overview'. On the contrary, because the whole is in some way reflected in the parts, it is to be encountered by going further into the parts instead of by standing back from them." Henri Bortoff gives an example of wholeness by explaining the relationship of words to a sentence, the words representing the parts, and the understanding of the sentence, its meaning, representing the whole.

The meaning of a sentence has the unity of a whole. We reach the meaning of the sentence through reading the words, yet the meaning of the words in that sentence is determined by the meaning of the sentence as a whole. The reciprocal relationship of part and whole which is revealed here shows us clearly that the act of understanding is not a logical act of reasoning because such an act depends on the choice of either/or. The paradox arises from the tacit assumption of linearity - implicit in the logic of reason - which supposes that we must go either from part to whole or from whole to part. Logic is analytical, whereas meaning is evidently holistic and hence understanding cannot be reduced to logic. We understand meaning in the moment of coalescence when the whole is reflected in the parts so that together they disclose the whole."
The concept of dwelling.

The concept of dwelling, in short, means to "experience a total environment meaningfully." To better understand this, let's look at the parts of the statement. First, what is 'meaningfully'? We identify 'things' in our world and assign meaning to them. The word 'thing' comes from the word gathering. So then, a 'thing' gathers meaning. To experience meaningfully, one must first identify a 'thing' and then orient oneself to it according to the meaning associated with it. We then measure the meaning and it is this measure that is the meaningfulness we experience.

The environments we experience are multifarious. To explain environments as they relate to dwelling, I have singled out three. They are: the social environment, created by the interaction of people with each other; the physical environment, which is anything physically tangible, man-made or natural; and the spiritual/psychological or mind environment—'things' created by the human mind. Each environment, although identified separately, are inseparable parts of a larger whole. They overlap, interact with, and define each other. But, as Bortoft suggested, we must look closer at the parts to get a better understanding of the whole.

**social environment**

As humans, we are social by nature. We live in an atmosphere structured by our desire to interact with each other. There are differences in culture, language, values, beliefs, and views of the world but, a commonality is the need to exist with others. We live in communities created by our ancestors based on traditions of the past, and continue to create communities with those traditions and our vision of the future. The social environment is based on the meaning derived from interaction of humans with humans. Meaningfulness comes from the measure of that interaction.

**physical environment**

The physical environment consists of all things physically tangible. It is a sensory
environment. Meaning comes from the interaction of humans with physical 'things', natural and man-made. Meaningfulness, as suggested before, comes about through the measure of the interaction of humans with these physical 'things'.

**mind environment**

The mind environment is that which exists only in the human mind. This environment is a resultant of the other environments. In other words, the interpretation of meaning and meaningful experience through social and physical interaction form images in the mind that one interacts with. Some examples are religion, politics, and philosophy. Each of these concepts are images created as a result of interaction with and interpretation of 'things' in other environments. It is the mind environment within which one measures the meanings of 'things' to create meaningfulness.

To 'experience a total environment meaningfully', then, one must interpret the meaning of the 'things' experienced and measure that meaning. All 'things' exist in some type of environment. All environments are perceived and understood through the mind environment, thus creating a total environment. Through measure and interpretation in the mind environment, meaningful experience arrives.

There are an infinite amount of 'things' in our world, collectively and individually. For the purpose of expressing dwelling, I have selected a few 'things' to embody the ideas above and then used them as tools for design.

**Cooperative Housing.**

Cooperative housing, or cohousing, is an alternative type of living that seeks to create a balance between the individual and the community. As a means of introducing this concept, I have taken excerpts from a book on the subject of cohousing by Kathryn McCamant and Charles Durrett.
Traditional forms of housing no longer address the needs of many people. Dramatic demographic and economic changes are taking place in our society and most of us feel the effects of these trends in our own lives. Things that people once took for granted - family, community, a sense of belonging - must now be actively sought out. Many people are mis-housed, ill-housed or unhoused because of the lack of appropriate options... Pioneered primarily in Denmark and now being adapted in other countries, the cohousing concept re-establishes many of the advantages of traditional villages within the context of late twentieth-century life.5

Several years ago, as a young married couple, we began to think about where we were going to raise our children. What kind of setting would allow us to best combine our professional careers with child rearing? Already our lives were hectic. Often we would come home from work exhausted and hungry, only to find the refrigerator empty. Between our jobs and housekeeping, where would we find the time to spend with our kids? Relatives lived in distant cities, and even our friends lived across town. Just to get together for coffee we had to make arrangements two weeks in advance. Most young parents we knew seemed to spend most of their time shuttling their children to and from day care and playmate’s homes, leaving little opportunity for anything else.

So many of us seemed to be living in places that did not accommodate our most basic needs; we always had to drive somewhere to do anything sociable. Even if we saw a house we could afford, we didn’t really want to buy it. We dreamed of a better solution- an affordable neighborhood where children would have playmates and we would have friends nearby; a place with people of all ages, young and old, where neighbors knew and helped each other.

Professionally, we had both designed different types of housing. We had been amazed at the conservatism of most architects and housing professionals, and at the lack of consideration given to people’s needs. Single-family houses, apartments, and condominiums might change in price and occasionally in style, but otherwise they were designed to function pretty much as they had for the last 40 years. Perhaps our own frustrations were indicative of a larger problem, a diverse population attempting to fit itself into housing types that are simply no longer appropriate for many people.

Contemporary postindustrial societies such as the United States and Western Europe are undergoing a multitude of changes that
affect our housing needs. The modern single-family detached home, which makes up 67 percent of the American housing stock, was designed for a nuclear family consisting of a breadwinning father, a home-making mother, and two to four children. Today, less than one-quarter of the United States population lives in such households. Rather, the family with two working parents predominates, while the single-parent household is the fastest-growing family type. Almost one-quarter of the population lives alone, and this proportion is predicted to grow as the number of Americans over the age of 60 increases. At the same time, the surge in housing costs and increasing mobility of the population combine to break down traditional community ties and place more demands on individual households. These factors call for a thorough reexamination of household and community needs, and the way we house ourselves.6

In many respects, cohousing is not a new concept. In the past, most people lived in villages or tightly knit urban neighborhoods. Even today, people in less industrialized regions typically live in small communities linked by multiple interdependencies. Members of such communities know each other over many years; they are familiar with each other’s families and histories, talents and weaknesses. This kind of relationship demands accountability, but in return provides security and a sense of belonging. Cohousing offers a contemporary model for re-creating this sense of place and neighborhood, while responding to today’s needs for a less constraining environment. In villages, people work together to build a schoolhouse, raise a barn, harvest the crops, and celebrate the harvest. Similarly, residents in cohousing enjoy the benefits of cooperation, whether by organizing child care, common dinners, or social relationships by working together to address practical needs.

In preindustrial communities, work is integrated with the rest of life. Small towns are not divided into residential, commercial, and industrial areas; rather, residences are built on top of shops, and cottage industries flourish throughout neighborhoods. Although cohousing developments are primarily residential, daily patterns develop that begin to weave work and home life together again. Most cohousing residents go outside the community for their professional work, but there is also informal trading of skills within the community. One resident, a doctor, tends the cuts of a child who has fallen. Another helps repair a neighbor’s car. Several residents make wine together. A woman who makes pottery finds her best customers are fellow residents who buy her goods for gifts. These neighbors know each other’s skills and feel comfortable asking for assistance, understanding they will be able to reciprocate later.
Technological advances make it increasingly common for people to work part time or full time at home. In most living situations today, working at home can be very isolating. The cohousing environment allows residents to enjoy the benefits of working at home without feeling isolated. As the trend toward working at home grows, co-housing communities in Denmark are considering including office space in the common facilities. Planning restrictions and financing difficulties have not permitted commercial and office space in cohousing so far, but once these issues are resolved, the model can easily be adapted to accommodate a broader range of functions.

While it incorporates many of the qualities of traditional communities, cohousing is distinctively contemporary in its approach, based on the values of choice and tolerance. Residents choose when and how often to participate in community activities and seek to live with a diverse group of people. Cohousing offers the social and practical advantages of a closely knit neighborhood within the context of twentieth-century life.

Cohousing communities are usually started by a group of people who want the things mentioned above. They hold meetings, solicit others who might be interested, and begin the process of developing their community. Unlike most housing projects, the residents are, for the most part, the developers, designers, and builders of the project as well as the inhabitants and managers. Most are untrained in the process of creating a project such as this, so they seek out the consultation of professionals and learn as they go. This process can take quite a long time as the group decides what their goals are and how to achieve them. The advantage though, is that it weeds out those who aren't truly interested or don't fit within the ideals set by the group as a whole. At the same time it bonds the group together as they learn each other's strengths and weaknesses, so that by the time they actually move in and live near each other as a community, relationships are fairly well defined.

Unlike communal living situations where there is usually an ideology that binds the group together, sometimes with a central figure who defines the goals and standards by which the group lives, cohousing is rigorously democratic. Everyone has a voice in the planning and management of the community. In one example of cohousing in Denmark, even the children have a vote on...
issues that relate to them.

The cohousing project I am proposing is not necessarily an accurate portrayal of how a place might come to be. Rather, I have made assumptions about the type of people that live here, how they came together, and the process they went through to create this place. All of these assumptions were made in order to facilitate the ideas I want to express in my understanding of dwelling. The people are somewhat generic in that I haven't given them specific personalities and characteristics to design from. They are specific only in their representation of certain age groups, single or married, parents or no children. In a more realistic situation these people would define the goals and direction the creation of this community would have. I have imposed my interpretation of dwelling upon this place and the inhabitants, as well as the space, form, and order to reflect that interpretation.
The residents of this place are as follows:
- two single mothers in their late twenties or early thirties, each with one child.
- two families, both parents work, mid - thirties, two children.
- one married couple, near retirement, adult children that live away from home.
- one newly married couple, mid - twenties, no children as yet.

The space requirements are similar for each group with a few differences:
- space in the center of the dwelling, large enough to comfortably seat four to six people.
- space for cooking and eating.
- space for sleeping.
- storage space.
- entry oriented toward center of community rather than the street.

The dwellings with single mothers have one bathroom and there are two sleeping spaces, one for the mother and one for the child. They are located near each other with a common area between.

The dwellings with two parent families have two bathrooms, one on each floor; there are three sleeping spaces, one for the parents and one for each child.

The remaining two dwellings are similar in that they each have one sleeping space located on the second floor as a loft space.

The orientation of spaces in all the dwellings is similar in that the more active, less private spaces like the kitchen and living areas are toward the center of the community. The less active more private spaces are oriented away from community paths.

The shared spaces are as follows:

Common house -
- space for sitting located in center of dwelling, large enough for six to ten
people to sit comfortably.
- space for cooking, large enough to prepare meals for twenty people.
- space for eating, large enough to seat at least twenty people.
- space for storage located near kitchen
- space for trash bins, large enough to separate for recycling.
- space for children to play without disturbing adults.
- space for adults to use as a passive workshop, with laundry facilities.
- space for sleeping for guests.
- space for reading, bookshelves, sitting with comfortable reading light.
- greenhouse space.
- sauna/steam room
- three bathrooms, one half bath on main floor, and two with showers near sauna/steam room.

Carport/workshop -
- parking for ten vehicles.
- workshop with space for benches and large power equipment.
- storage space.

Shared exterior space -
- courtyard in the center of community.
- garden space.

The individual dwellings are smaller than what might be considered 'normal' in most housing. They provide a comfortable living environment yet encourage involvement with the shared space of the community. The common house provides amenities, like a large workshop, guest room, sauna, etc., that in other housing situations might not be affordable or reasonable. With the shared resources of the community these types of things add to a quality of life not always readily available. Obviously I haven't addressed all the amenities that a cohousing community might have but these things are representative of the possibilities the community provides.
Center, Path, Domain

To dwell means to 'experience a total environment meaningfully' and I have explained briefly how this happens. Another part of this has to do with the structure of the environments and how they are connected. Norberg-Schulz explains this structure with center, path, & domain. Centers are those 'things' which are known. Because it is known and understood it is used as a point of reference for measure of other centers and the experience of the unknown. An example is the idea of 'home'. Home is a center that one experiences and understands as a sense of security, family structure, values, etc.; all things that one learns as a part of the experience of home. When away from home, the memory of it acts as a point of reference to measure the experiences one encounters in the world. The movement of center to center implies path. "Paths are present on all environmental levels, and in general represent a possibility of movement, in contrast to the experience of getting 'lost'." The connecting of centers by paths creates a structuring of space, tangible and implied. This structure defines spatial areas called domains. Domains are the in-between spaces that have definition but are defined only through their relationship of centers and paths.

A physical example in this cohousing community has the dwellings as centers with pedestrian paths and visual paths to connect them. The domains created are the courtyards in between that begin to have a form of their own but are defined by the centers and paths around them.

Poetic Image

The poetic image is derived from that which is poetic. And imagined. Language can be used to create a poetic image. In poetry, words conjure images that generate a sense of time, of place, of sound, of touch, of smell, of emotion.
Long did I build you, oh house!
With each memory I carried stones

From the bank to your topmost wall
And I saw your roof mellowed by time
Changing as the sea
Dancing against a background of clouds
With which it mingled its smoke.

Wind house, abode that a breath effaced.¹¹

Poetry is a measure.¹² It is the measuring of the image that is poetic, and this measuring makes the experience of the image meaningful.
Language becomes a tool in the design process as a means of sensing the place and the people that dwell there. During the first part of this thesis, I created a series of writings to start to image the people and the place and to get a sense of how they would experience cohousing. The writings then were interpreted in an analytical sense for programming needs and site analysis.
Sliding my eye along the edge
I follow the grain of this
piece of wood.

Shaping with tools and
the scent of a fresh cut,
with this piece of wood
I make a chair.

Sunlight, slumbering in the sawdust
of my workbench, erupts
in the laughter
of shadows, my children with snow games
dance past,
beyond the touch of my hand.

Streams of melting snow
bring images of casting,
feather barbed actors performing
their false drama,
enticing trout.

The shriek of saw on wood
brings me back to
my task,
and I shape my chair.
I sit
in the corner
with my papers, filled with
words of children.

Kitchen banter rides to me
on the breath of
baked chicken.

The call for dinner
sends children,
who moments before were
creating worlds from
wooden toys,
racing to fill their stomachs.

The adults,
friends, emerge from all sides.

tables surround,
ladened with tonight's meal.

I leave the calm intensity and
focused light,
to join in the embrace of
children, food and talk of the day.

The winter dark pounds
against snow crystal windows,
turned away by the taunting of
life-giving hearthstone
and illuminance of
content faces.
From my windowed chair
I feel the sun’s creeping light
snail its path
out of my grasp.

I read Thomas Wolfe
and think of this morning’s question:
“What is it for?” the child had asked,
touching my watch.
“To keep time with,” I had answered.
“What is time?”

How do I explain time to a child?
Do I even know what time is?

My musing sends my eyes
tracing the time worn edge
of woven cloth
that is the rug at my feet,
its weariness reinvigorated
by the smile of polished wood,
supporting,
beaming youthful energy
in the reflections of all
it can gather.

Books on shelf whisper
thoughts,
telling of time gone, and
time not yet.
The honey thick glow of a lamp
pushes at the approaching twilight,
crowding darkness
under desk and chair, chasing
into corners where only
darkness bends.

And I know another day
has nearly passed.

I leave Thomas Wolfe and
my thoughts in the
niche of waning daylight.
For time has sent a messenger;
the muttering of my innards
announce the arrival of dinnertime!

Following the steps out of
the study,
my path is guided by a
wall of wisened stone,
where once the sun
drenched its breath of golden dew,
only the stain of shadows remain.
maybe they won't find me hiding
in this bush i can see clear
across the field their gonna walk
right past don't laugh they'll hear
wait till they get
ta the old station now
run ta the those trees they
didn't even
see me
if i can make it ta the top
of the hill i'll make it back
and they can't catch me i can
see everybody from here
even mom and dad and everybody
wow if i could get over in
those stacks of wood and stuff
that would be a
great place
but mom said ta just play in
lindley i'll bet she wouldn't mind
if i went over ta
bogert though cause its a park
i could cut down this hill and
then cut through pearson's
yard and
nobody'd even see me and even
if they did i
could cut over ta bogert
before they could catch me.
down the hill i can go really
fast, ow! skinned my
hands and my new levis mom's gonna
be mad cause their new
oops! they saw me
over the fence i'm snagged
ripped my new levis mom's gonna
really be mad
cut through pearson's yard
they won't mind cause they're
not home
between the houses stop at the tree
run across the street
oops! a car
run to the trees behind the
tennis court
catch
my
breath
they're lookin' over by the pool
stupid
they don't even know where
i am i'll just run down
curtiss and cut in to the
yard there's that old black dog
he just wants to play
i'll cut in between our
house and the professors' and then
hang out with the
grownups and pretend
i was here all the time.

hi mom.
oh nothing.
i don't know.

i fell.
Walking with groceries in bags
past houses
made for a neighborhood
decades ago,
sun on my face
through trees.

Truck grumbles
wall of metal buildings
fence
waiting lumber,
fresh park peers over
faded train
path, smooth with weeds.

Shadow of home
beneath my footprint,
concrete,
asphalt,
concrete,
brick threshold
beneath my footprint
shadow of entry,
window of sun dripping of
dated metal,
pooling on concrete,
soaking into grass blankets.

Door opens to
sharing,
hard steps give in to soft,
hands of tile and wood
take by groceries in bags;

Climbing
I find sleeping light
from framed mountains
rocking my child and
humming soft melodies.
Shadows of human
dance
swirl
wave and embrace.
Shadows of just washed
hang on sun and air
playing
like children
in the grass.
Fresh scent of clean
and cool
blows across my loom
as I weave.
The wash churns
in mechanical labor
as parents
sip tea
and follow the dance
of shadows
and children
in the grass.
Morning sun crawls into our bed like a favorite child wanting the closeness of parents.

Stairs, carved like a painted gesture carry me in half-sleep past portraits of landscapes, yawning in the infant light.

Fresh coffee mingles its breath with morning dew as I push open the glass doors that keep the kitchen from spilling into the grass.

A choir of birds sing from the tree sanctuary that pushes at the sky; but the sky slips through its grasp, caressing forests of flowered alcoves and paths of tired brick.

Sitting with coffee and breakfast, we listen to the morning light, telling us of the coming day as only a child could tell it.
The image of dwelling I am presenting expresses the elements discussed in several ways.

The concept of cohousing creates the potential for experiencing social, physical, and mind environments meaningfully. By participating in the total process of creating their own dwellings (planning, design, construction, and inhabiting) the residents experience a sense of identity not found in most housing situations.

The site for the project is on South Wallace St. between Curtiss St. and Olive St. in Bozeman, Mt. Existing on the site is a large warehouse, once the Gallatin Valley Seed Co. Because of the existence of this building, I have chosen to dismantle it and re-use as many of the materials as possible. The materials include: corrugated metal siding, brick, large timber columns and beams, and hardwood flooring. Re-using the materials, I feel, relates the new structures to the past, helps in the recycling effort, and provides interesting textures for the new buildings.

The form, space and order of the community is based on my interpretations of the concept of dwelling. I perceive the center, path, domain element as cyclical or spherical. I used this interpretation as a metaphor for circular and curvilinear forms and paths. The curvilinear forms also act to increase awareness of the identity of the community as an alternative to traditional housing. Most of our built environment is rectilinear. By creating and living in curvilinear forms, awareness of the physical environment is increased so that the measure of the experience is also increased.

Each dwelling has a circular gathering/sitting space located near its center. The circle is symbolic for the family center. Paths and other spaces wrap around the center and focus inward.

The dwellings are oriented toward the center courtyard of the community. The main entrance of each dwelling is located along paths through this center court. This orientation provides the potential for spontaneous social interaction. Vehicular parking is provided for with a carport located on the southwest corner of the site. Pedestrian paths from the carport pass the common house before reaching the individual dwellings, encouraging a person to drop in.
To conclude this thesis I need to again talk about the idea of wholeness. Each of the elements discussed are in some way expressed in the cohousing project presented. Each element has a meaning of its own but can't be fully understood without the context of the whole. The whole, as well, can't be fully understood without an understanding of each of the elements - the parts. Meaningful experience; center, path, domain; poetic image; all are parts that explain dwelling in the whole that is cohousing.

Dwelling is experiential. It is the measure of an experience that makes it meaningful. It is this measure that we use to understand how we are in the world and because we have the ability to measure, we are able to dwell.
footnotes


2. Ibid. p. 285.


6. Ibid. p. 9-10.

7. Ibid. p. 35-36.


9. Ibid. p. 23.


Sources


