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A higher level of complexity is possible by combining more than one idea as long as the order of the elements is readable in each built condition.

Order is possible at any level of complexity. The more complex the greater the need of order.
conditions
Founded in the first decades of the 19th century, Roanoke's characteristic is a typical American middle-size city, with a population of 240,000.

The first floors in downtown Roanoke are inhabited by commercial functions, whereas the 2nd and 3rd floors house mixed-use functions.
Light, open space, the neighbor, and the narrow character of the site are the determinant issues for constructing new.

SEEING THE SITE

A gap in the wall of the street with a narrow and high proportion is the site for the project.
The site measures 25’x80’x35, which are typical dimensions for rowhouses in this location.
Rather difficult conditions for building mark the site. The perimeter of this place is defined by three existing brick buildings, two of them having openings facing into the site. The forth edge is open to the north, facing the street and a large bank building. The site proportions (width to height to length 1:1.4:3.6) contribute towards a strong vertical character of the place.
Although the site is a narrow gap, the design must involve the neighbors on both sides. The empty lot at the present is their source of light and open space.
The ground level provides for public movement, stemming from the surrounding functions, such as the bar, the shop, a large bank, and its relative location to the town center. Confronted with issues of public and private in one site, the building has to make a transformation from public to private, from front to back, and from down to up.

UNDERSTANDING THE SITE

Light, open space, the neighbor, and the narrow character of the site are the determinant issues for constructing new.
Despite the narrowness and the limited site area, the architecture’s built form does not meet its volumetric potential. An independent building with its own life will share the place offering interaction and integration to all surrounding buildings. The people living here will have the opportunity to know their neighbor through visual and spatial contacts. Row houses are ordinarily oriented along the longitudinal axis of a site. The transverse orientation of this building is generated from the stronger relation to the neighbors and the sharing of open space and light. The appearance and character of the building is open and playful in the short axis and closed to the street.

Four concrete walls slice the volume transverse and occupy the place, touching the environment on a minimum. These four concrete walls are major elements. All are vertically continuous, and have strong spatial and architectural presence.

The visual experience of the building and site is dependent on movement. It cannot be understood simply through the plan nor through the elevation. Seeing and approaching the building in its whole only happens by including the dynamics of a three-dimensional movement.

Following the sequence of places, path, and stops multiple views are formed and one’s mind is able to encounter the whole building. As one moves slowly through the spaces, one makes dynamic transitions from public to private, from outside to inside, from light to dark, while experiencing guided views. These actions create a path enabling one to see the house from multiple directions before entering. The path places the person in touch with the surroundings. Changes in direction of motion offer places to rest and places to observe. These moments establish a reconnection between one’s apprehension of the site and the site’s entirety.

**THE WALLS**

**THE PATH**

**LIGHT NEIGHBOR**

Light is important, because of the narrowness of the site and its use for housing. The rooms in a rowhouse in downtown Roanoke typically have a one-sided lighting condition resulting in a dark middle core of the house. The apartments of this project are made of two shifted volumes to overcome the lighting condition of a typical rowhouse.

The elements forming the enclosure between the four concrete walls, exist in three degrees of transparency and can offer different geometries and positions that allow light to penetrate. Because of the intermittently receding and advancing of the side surfaces, in accordance with the regular spacing of the walls, direct top and side light and reflected indirect light is possible. The design responding to the difficult light condition accommodates the neighbors need for light and provides a sufficient light for the interior.
Making architecture with four planes.

In the hierarchy of elements, the four concrete walls are primary. Being walls these elements are vertical, massive and mature in their presence.

The four vertical concrete planes are parallel to one another and perpendicular to the adjacent buildings. The rhythm and the distance between them is based on the rhythm given by the facades of the neighbors. The four planes gain a complex configuration after the introduction of secondary ideas, such as the light, the path and the usage. The result is individual shapes where the outlines for each wall relate to the human activities and the daily use as well as to the visual experience (transparency) and the way one passes through them.

The walls are poured on site in pieces, and these parts are assembled in a tilt up method. The resulting joint becomes the opportunity to celebrate the complexity. At controlled points, when directly exposed to the eye the joint is performed as an event and becomes a place for light, objects, and openings.

The daily life in the apartments will take place always between or around the four walls. The presence of the walls provides a rhythmic structure for the activities.
The major walls are poured on site and assembled in a tilt up method.

Generated based on human activities, use, and visuality, every wall has an individual line, which forms its character.
The floor slabs stay within the boundaries of the concrete walls and make places that let the vertical continuity become visible.

The floor plane is placed in pieces between the primary element on different levels. The design of not penetrating the concrete walls in one piece supports the hierarchy and the verticality of the concrete walls.
Each wall is shaped through the influences of the human, its use, and the defined level of transparency between them.
When directly exposed to the eye, the joint is makes a place for light and openings.
Integration and interaction with everybody is possible since one is spatially close to the neighbors. The person living here knows his neighbor.
The adjacent buildings and their existing openings have a great impact on the design of the infill elements that form the enclosure of the apartments. The decision to maintain the access to light and air for the neighbors influenced the infill in its geometry and in the choice of material.

The issue of privacy for each apartment is challenged in such a narrow space. In the row house, separations between privacy and community are usually made by the longitudinal party wall.

The orientation of the four walls manipulates this traditional boundary. A semi-public area along the brick wall of the neighbors will serve for light. This area is generated by the receding and advancing of the infill elements, that will serve for the visual privacy.

The simultaneous response to both issues of light and visual privacy, in permitting or preventing transparency is a rather confronting one, but the pattern forming the infill, allows a dialog between both issues. This developed pattern, whose dimensions and appearance is derived from the human usage, creates lines throughout the space that the eye can follow easily.

Lines occur of the heights where a person would sit, would work, stand under and the heights a person could reach. The constant shape of a rectangular pattern 2’ by 3’ forming the infill, give the opportunity to each element to react in its geometry, and in its material choice to light and privacy.

Depending on the desired level of privacy and light, elements are transparent, translucent or opaque. Corresponding to the dialog between light and privacy, decisions are made, that allow the openings of the adjacent buildings a controlled view inside the new building only on very few occasions. Generally the existing openings face an opaque or translucent material, but the infill is placed at a farther distance in order to have light and the view into the site.

The moments of un-privacy are important for an interaction of all the inhabitants. This moment is where a controlled view through all the buildings is possible, or where people of the adjacent building step into the site onto the first landing, to have direct contact to the site.
...moments of un-privacy, where a controlled view through all the buildings is possible.
An intermittently receding and advancing of the side surfaces is a condition generated by the important neighbor - light rotation.
A rowhouse is typically seen as a facade and not as a volume. Even though this building faces one by entering the site, it is not the way one will see and understand it after stepping into it.

one has to move to see
one has to see to know

A sequence of spaces throughout the site creates the path leading from the first steps through the building into the apartments. Following the path and a rhythm of repeating conditions the building and the site can be seen and experienced in a three dimensional way.

After stepping through the series of thresholds and reaching the apartment one will know about the site (its dimensions and character), the neighbors (the materials) and the building (its character and position to the site).

While moving in between the brick walls of the neighbors and the enclosure of the first apartment a contact, in form of talk or view is intended.
The sequence forming the path starts with the public outdoor space, which leads from the street into the site. From here, one steps onto the first element, which is a covered outdoor space. This is a place in between public and private as well as inside and outside.

The following dark and enclosed building core on the ground level holds utility functions and leads to the garden. The garden in the back is another outdoor room and the location of the main entrance to the apartments. At this point the long axis of the site is experienced.

After reaching the first set of stairs to the second floor, one crosses the whole dimension of the site in the short axis. Landing on a plane that touches both neighbors, an awareness of the narrowness of the site is present. A visual re-connection to all sides of the lot is possible from this point. From here one enters the first apartment...

...or walks up the stairs facing the street and partly sheltered by the floor above. A contact, in form of talk or view at some points is intended while moving inbetween the brick walls of the neighbors and the enclosure of the first apartment.

At this point of entering the second apartment, one has visually surveyed the building in its totality.

The top floor landing, similar to the previous one, is the highest outdoor room of the complex. This place faces the street and public life but still offers privacy. It enables a overlooking view.
The building contains two apartments split into three levels. The small apartments made for a single person measure 33m² and 36m². Each of the apartments has three private interior rooms and several outside places within the spatial sequence of the whole building.

The functional concepts for the apartments are very similar. The first dwelling consists of three inseparable rooms, forming a living space. The space is differentiated but not strictly divided into rooms. The design of the rooms is not directly related to their later functions. Although they provide places for kitchen, bathroom, storage and for living, the design and the use of the rooms itself is dependent and related to the way the walls are shaped, used and experienced.

To approach each apartment, one has to walk through the whole first floor, which holds the utility rooms and places for storage and the mailbox. The applied functions make the first level to a shared space.

Even though each of the room has a different sensory quality, based on its geometry, the way it is lit, and the visual connection to the site, all of them are united through the pattern of the infill and their belonging to a larger space within the spatial sequence.
The pattern is derived from its human usage. It creates lines throughout the whole space that the eye can follow easily.
The room that hosts kitchen, bathroom and storage space
the enclosure in between the four concrete walls, exist in three opacities and can offer different arrangements that allow light to come in
The decision not to fill the volume of the gap creates a small outdoor space in the back of the site. Throughout time the site was left without a use. A playful interaction between the surrounding tall and massive walls and nature took place. Without human assistance plants started to discover the walls, to climb up, to touch and to cover them. This place seems to be asking for a “no touch”, it developed over time and should be left alone. For this reason the old walls surrounding the garden are elements of the garden architecture, but unchanged and untouched.

Looking at the garden as a volume, the surfaces are made out of the sky, the fourth concrete wall, a plane of simple grass to walk on and the three old brick walls, partly covered by wild plants.

The element that will continue the idea of the built architecture into the grown architecture is the 5th wall. Concrete and plants, working together, create this vertical element beside the four new walls. Like the other concrete walls it will offer places to pass through, to rest, to play and places for the single plant, the smallest garden as such. It will be fixed in its position and its materials; stones, water, concrete and nature, but it will change in its heights, depending on years - change in its transparency, depending on the season - change in its elevation depending on the inhabitants.

By experiencing this wall and its offerings, one will experience the place with its sheltered character, the silence, the green, and the garden.
A higher level of complexity is possible by combining more than one idea as long as the order of the elements is readable in each built condition.

Order is possible at any level of complexity. The more complex the greater the need of order.

Order can be the relationship of a limited set of elements that inform and reform each other.

Ideas about the wall, the path and the relation to the adjacent buildings generate the elements of the type wall, path and infill that combine elemental characteristics as well as additional primary and secondary characteristics.

Every element has some independence and completeness of its own, but at the same time it is part of the larger context. The elements may acknowledge different degrees of the dependence but they can never be wholly self-contained.

A constant dialog between the ideas and elements takes place until a complex condition is articulated and every single decision is confirmed prior to inform the primary element which is baseline for the secondary.

When the primary is informed by the secondary a complexity can be made. When the secondary concerns individual generate autonomous parts complication is the likely result.

Through a cycle of informing and reforming of the wall, path and relation to adjacent buildings a complexity can be achieved.

Every informing and reforming within the given order incorporates a shift to a higher level of complexity.

Wall a vertical independent member that is used to define and divide space
Infil a dependent element between others
Path a course with a starting point through a sequence of spaces to a destination
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to be continued

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