

Creating Life in an Urban Space

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By
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A design thesis submitted to the Graduate Faculty of Virginia
Polytechnic Institute and State University in partial fulfillment of
the degree of
Master of Architecture
May 7, 1999

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Acknowledgements

To my Family

for their endless time and support

To Chris

I couldn't have done it without you

To my Committee

for questioning every design aspect and driving me forward

To my Friends and Classmates

for their advice and commitment to our education in architecture

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Abstract

Towns contain spaces defined by human interaction with their surroundings. In any town, certain places seem inviting while others seem cold and unfriendly. This is the result of subtle design decisions that directly effect the character of a place. This investigation focuses on the interaction of architecture in our daily lives and how it affects us in ways that we often overlook. The life of a town is in its relationship between the architecture and the people which inhabit that architecture.

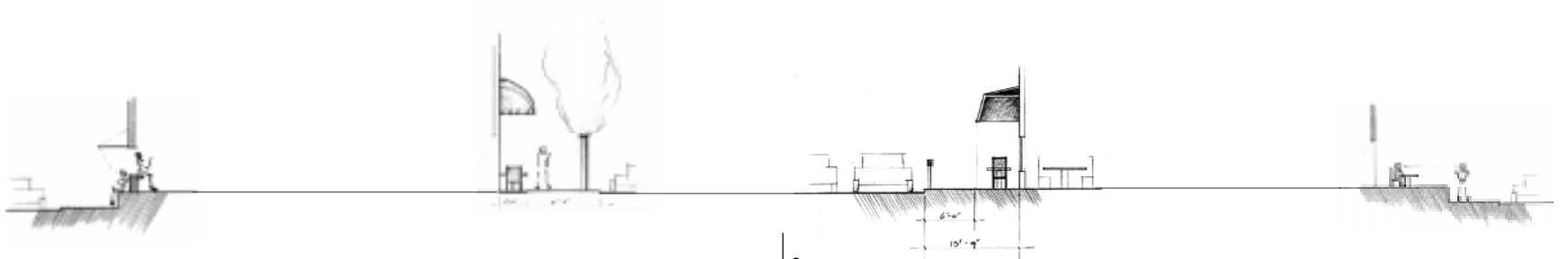


Analysis of a town

Analyzing the town of Blacksburg with photographs and sketches reveals the relationship between the town and its elements. Photography is able to capture a moment in time and permit further study of what makes an architectural condition successful. Sketching allows you to see with your hands and begin to understand what it is that makes that place; material, location, people, light, etc... These photographs present the complexity and simplicity of a place. The gesture of a stair becoming a seat and a recessed doorway creating a threshold, the simple layering of the street edge and attention to materials; conditions like these are critical to making livable spaces within a town.

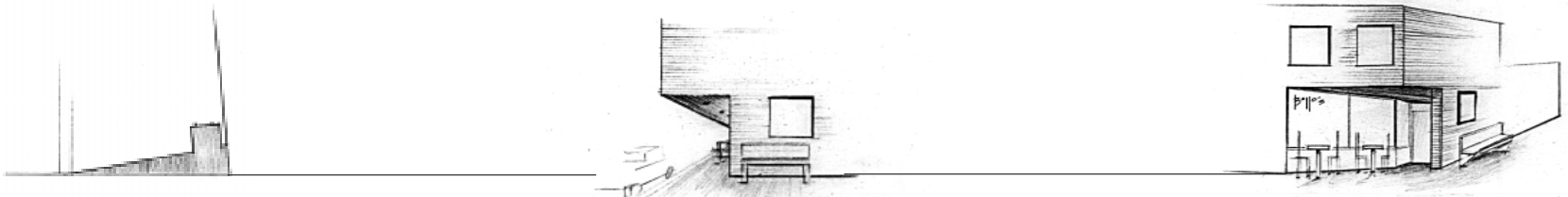


The sidewalk is by nature a place of activity. Its main purpose is as a pedestrian walkway and initial threshold, but by the careful articulation of the building facade, the architect can create places for talking, sitting, reading, eating, watching or just thinking. The parked cars and trees help delineate the pedestrian zone and separate it from the realm of the street.





A small coffee shop illustrates the layering of the street, with the large window blurring the distinction between inside and outside. The angled storefront emphasizes its corner location and also allows for an overhang and a place for people to sit. Pedestrian traffic and coffee drinkers are able to coincide because of this corner gesture.



“It is the utmost importance to realize that there is a lot to be learned from how occupants respond individually to the potential of the suggestions contained in the design.”

-Herman Hertzberger



Downtown Blacksburg, Virginia



Minerva Temple, Assisi, Italy



Downtown Genoa, Italy

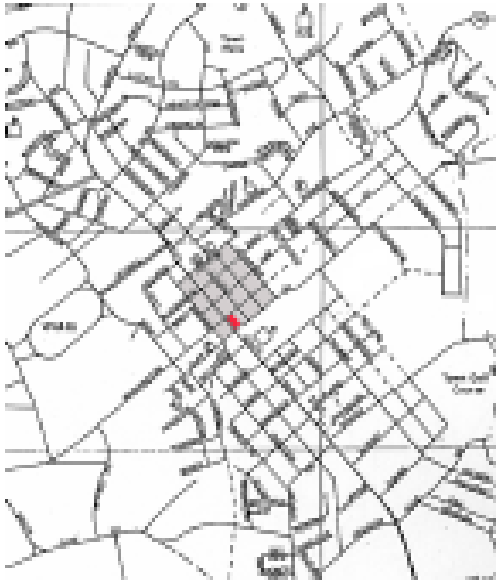


Siena, Italy *Piazza del Campo*

European towns present a complexity beyond comparison. These photographs convey many qualities about how life is possible in an urban setting. The man looking out his window has a direct connection of the street. This interaction builds a sense of community between the pedestrians and the inhabitant. The facade can be read in relation to what is going on inside and has been altered over time in response to changes in these conditions. Just as the walls articulate the vertical, the pavers add a sense of identity and character to the public space.



San Gimignano, Italy



Blacksburg, Virginia and surrounding area

Site

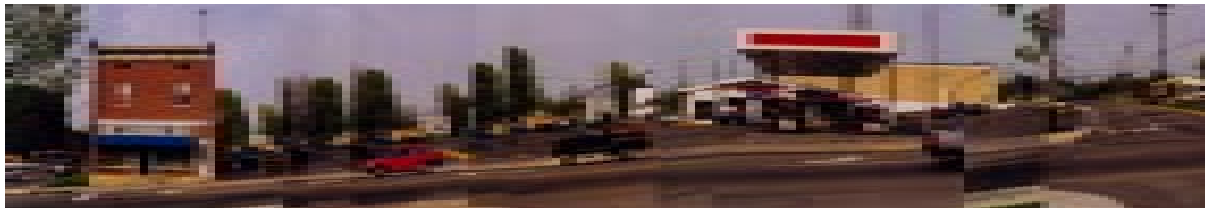
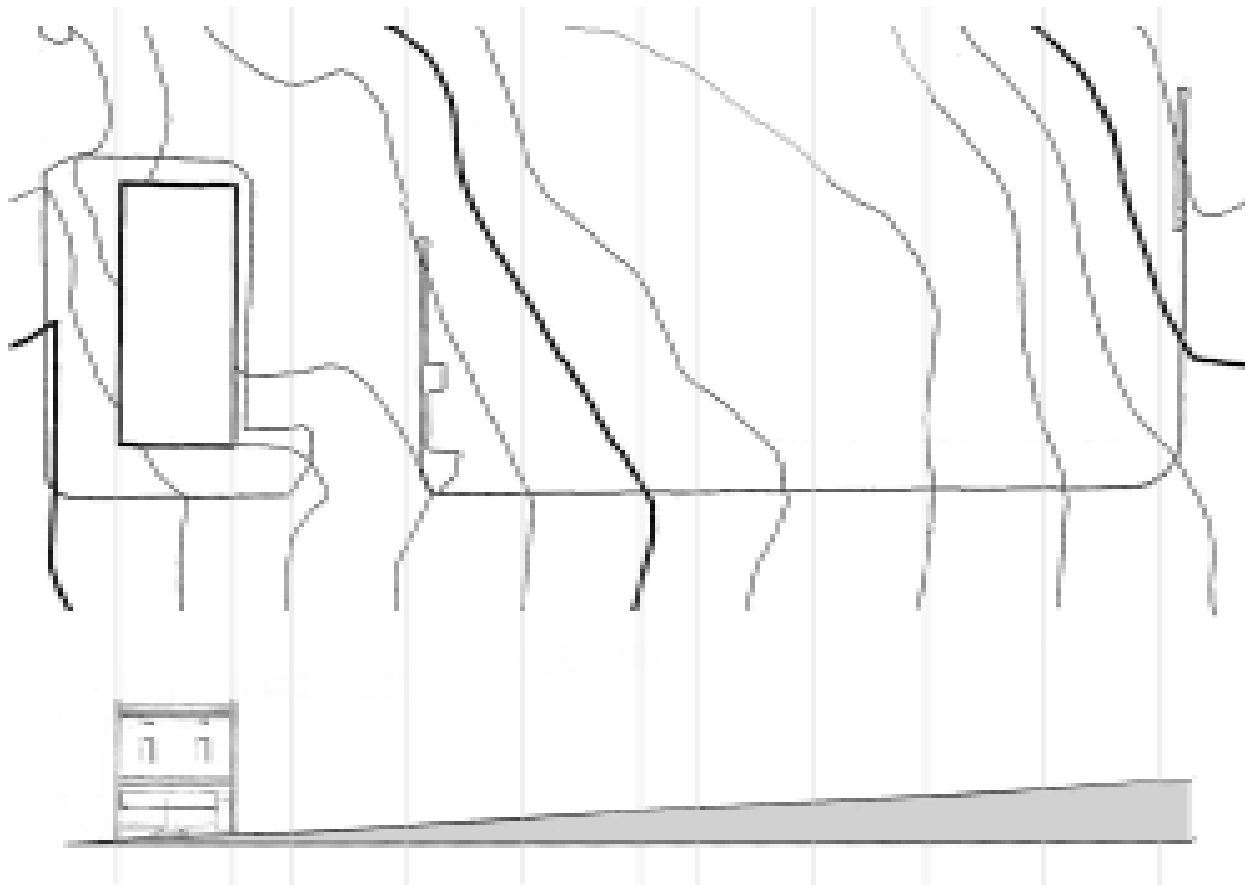
Blacksburg, Virginia is a small town in the Blue Ridge Mountains originally consisting of sixteen blocks. Over time the town has grown and is now the home of Virginia Tech and over 25,000 students. Despite the expansion, the original sixteen blocks remain the heart of Blacksburg. Main Street passes through the grid and acts as the prominent entrance to the town and then to the University. The site is located along Main Street on the first square of the original townsite.



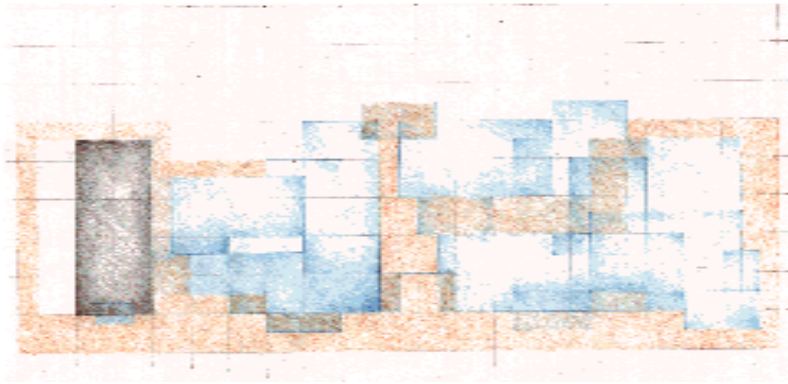
The existing building, “Annie Kay’s”, acts as a scale for the project. The basic structural unit is taken from the thirty foot spacing of its bearing walls and creates a rhythm for the street that allows for the individual buildings to be grouped as a whole. The grade slopes twenty feet from end to end permitting the integration of retail space at street level with apartments above, and parking below.



Annie Kay's: building on site.



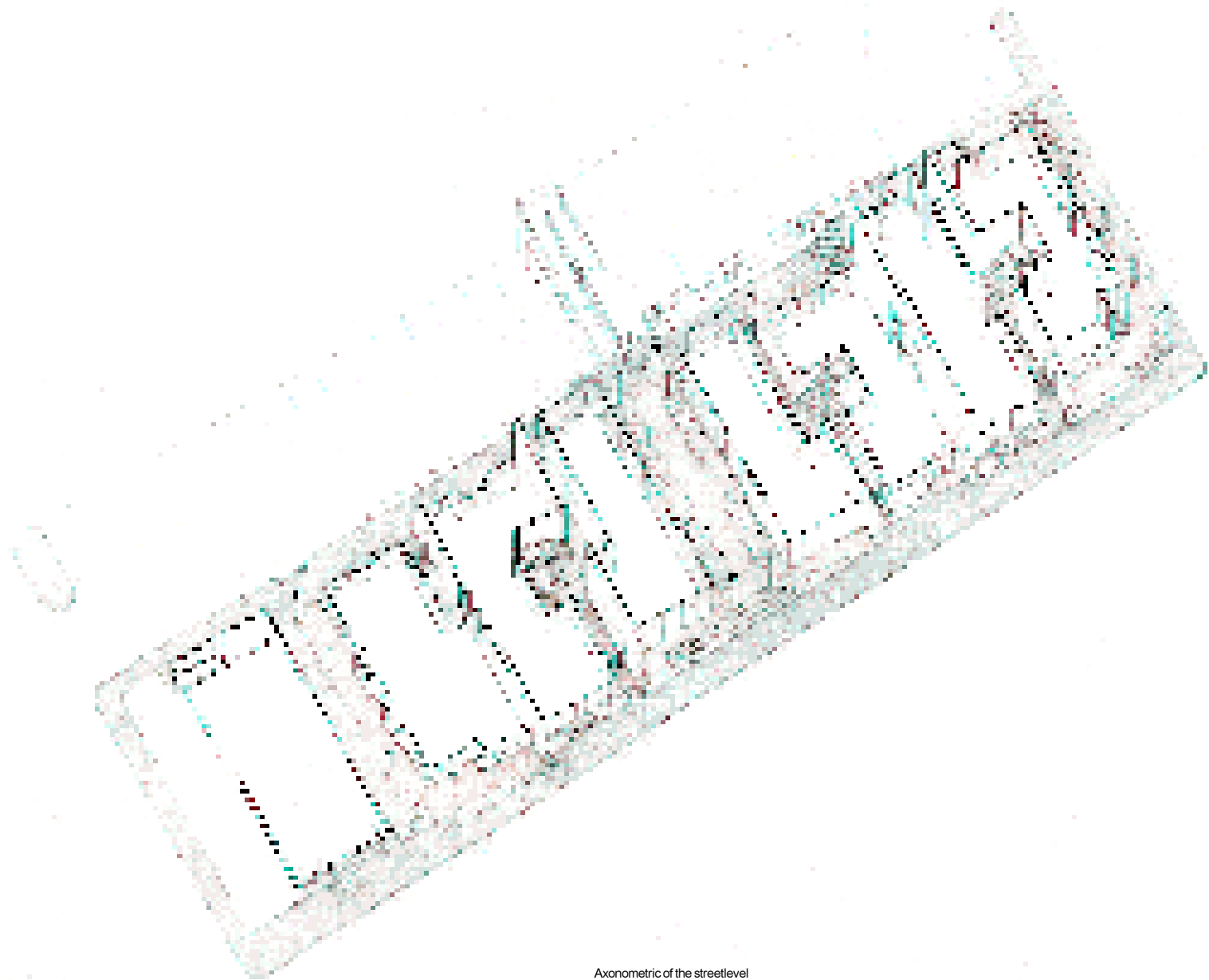
Panoramic view of existing site



Project

When starting, the critical concerns of an architect are to transform the ordinary act of building by proposing an object with substantive qualities. On the exterior, the building serves the street, conforms to its typology, and reinforces the pattern of streets and squares. Inside, however, the building contains a quality of life all its own which corresponds to the street and the courtyards.

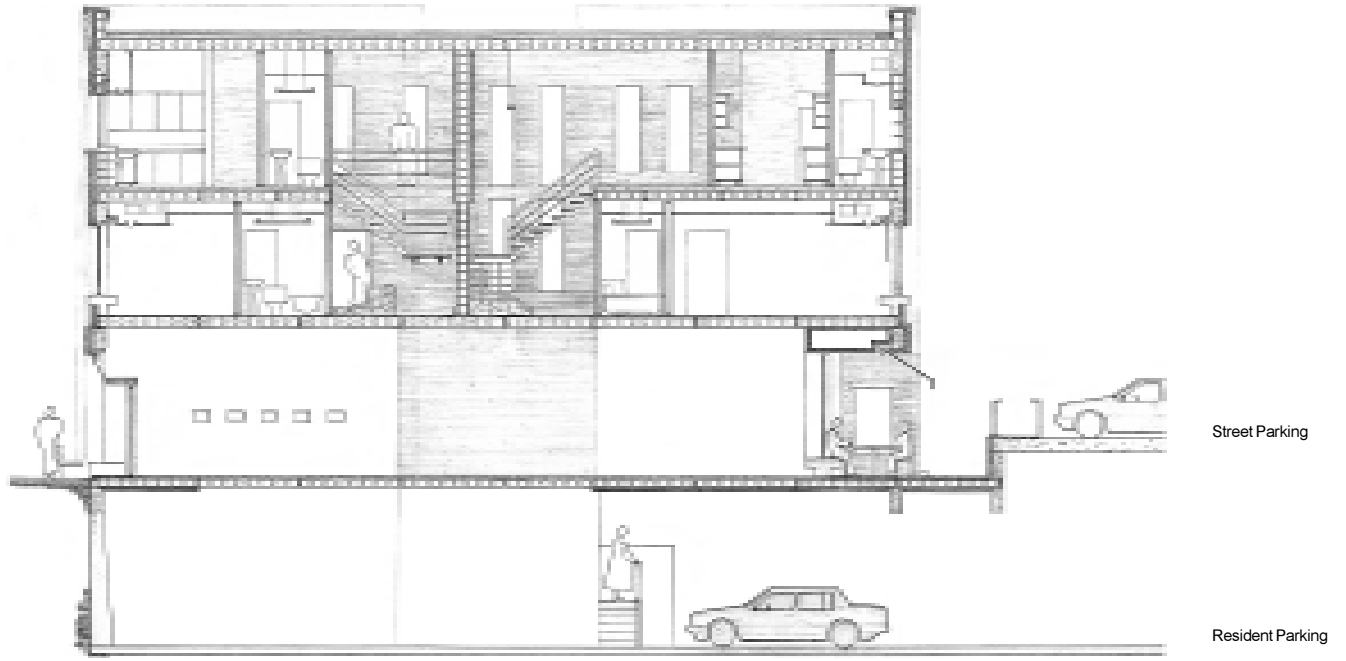
The project started by analyzing Annie Kay's, an existing commercial/residential building and being sensitive to it. Utilizing it as a starting point, a rhythm of seven buildings is formed with interlocking courtyards. The buildings break at mid-block to allow for the passage of pedestrians and to permit the infiltration of light into the space. The bearing/party walls are structural elements which also project and mark the street. These heavy masonry walls convey a sense of permanence, while the facade in-between them is able to change over time. To emphasize the corner condition, the end buildings are carved away leaving columns to create an environment which is both inside and outside.



Axonometric of the streetlevel

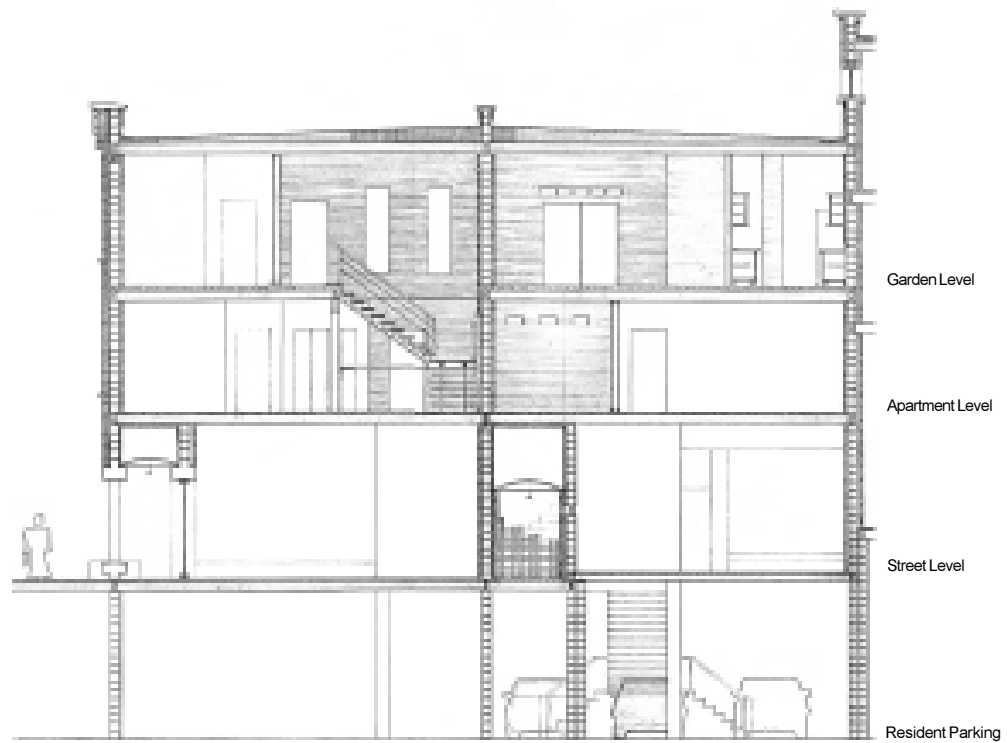


Axonometric of the two story apartments

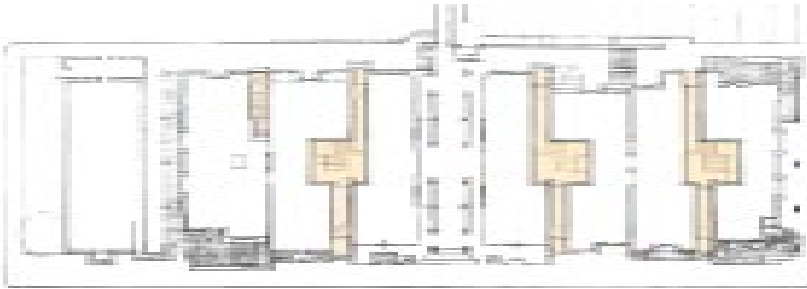


Section 'A'

The section reveals the layering of parking/street/apartment levels with public-to-private layering existing both horizontally and vertically. The idea of a base is repeated throughout the design. It is expressed in the stair with the last three steps resolving in a concrete base which is translated into a place to sit. The window sill and column base are similarly resolved to create a language that unifies the parts to the whole.



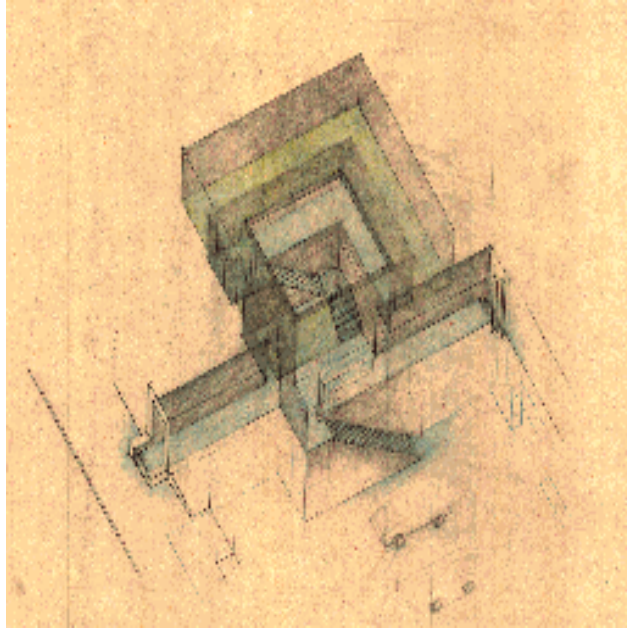
Section 'B'



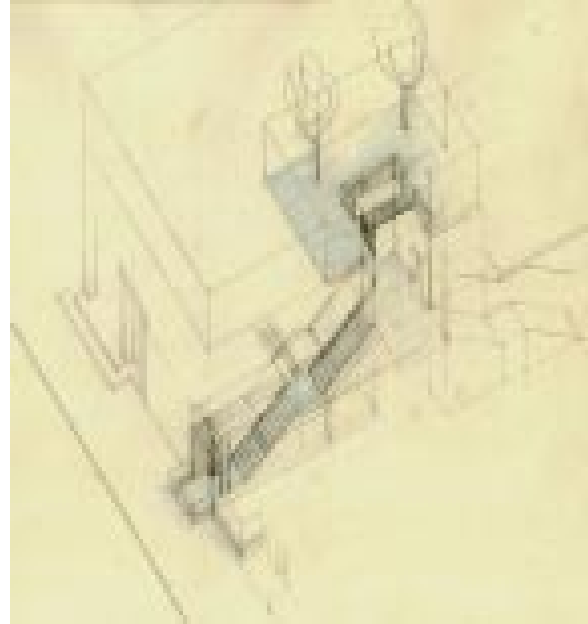
Elements

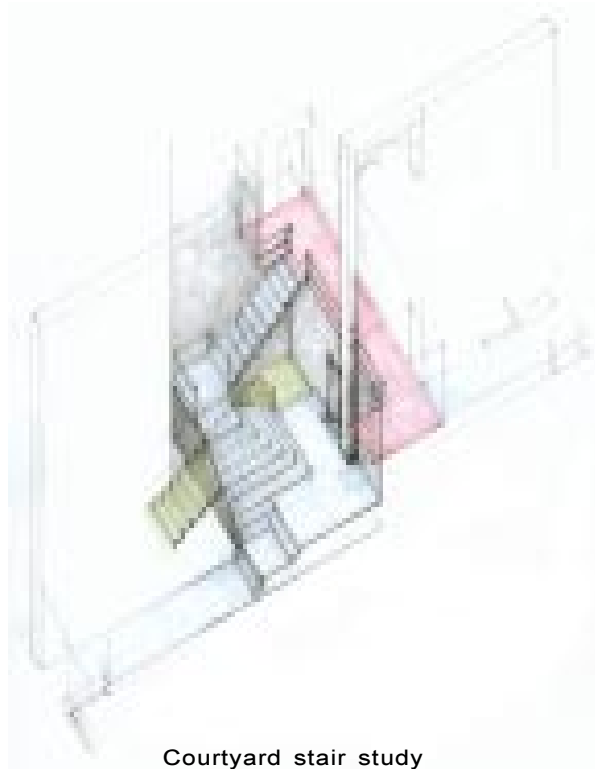
Courtyard

The courtyard serves as both an entry from and a connection to the outdoors. It is a place both social and private activities and intended to be the center of domestic life. The wall is the structural element which formally identifies the enclosed space and marks it as such by externally projecting the wall into the space of the sidewalk. The entrance to the courtyard is for residents of the apartment and is marked as private by a change of floor material and a gate. The courtyard opens up to a larger garden space on the top level which creates a place of seclusion in the town setting.

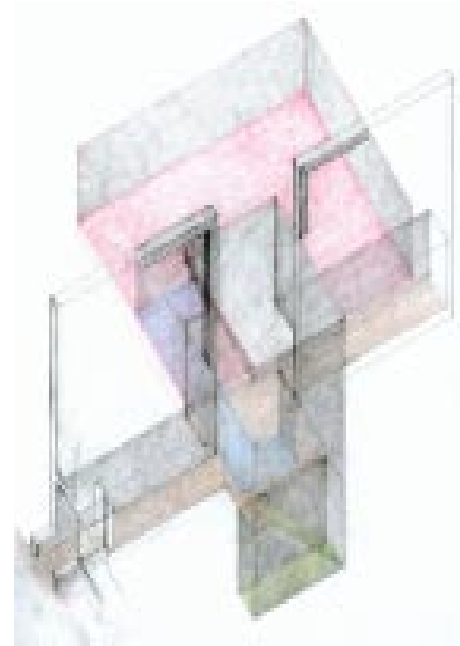


Development of the courtyard space.



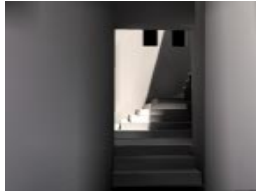


Courtyard stair study

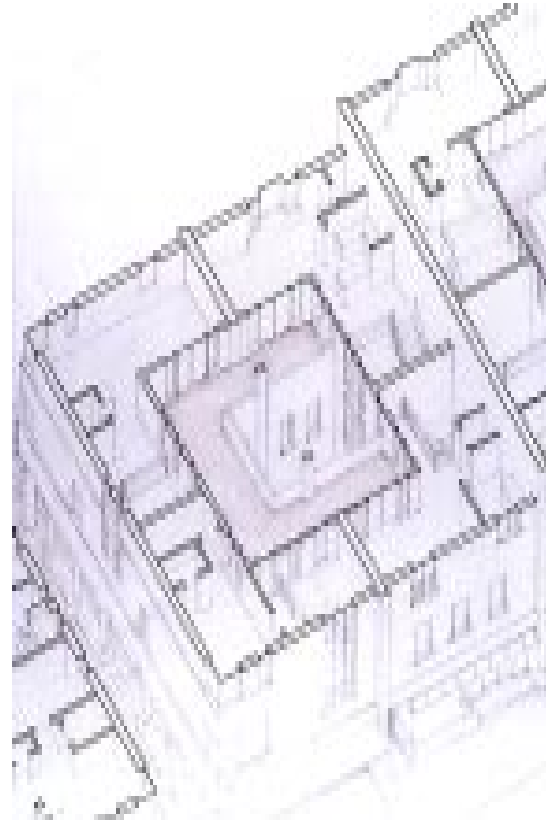
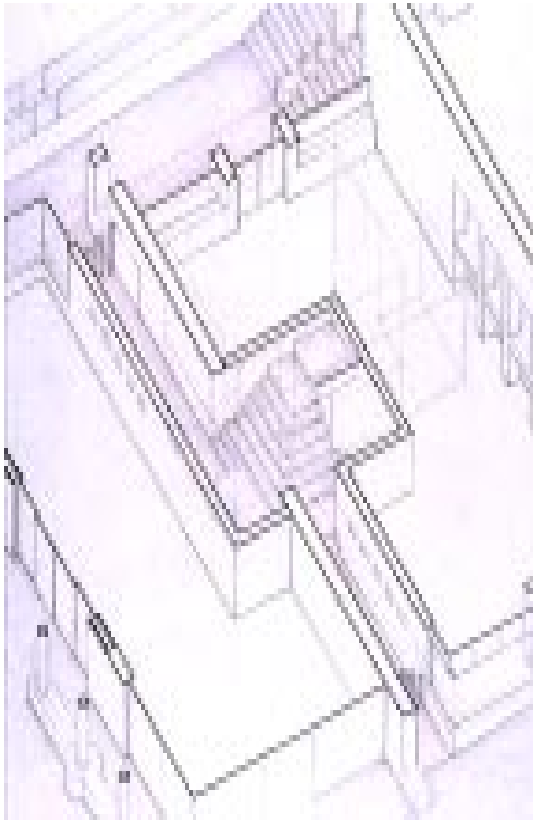


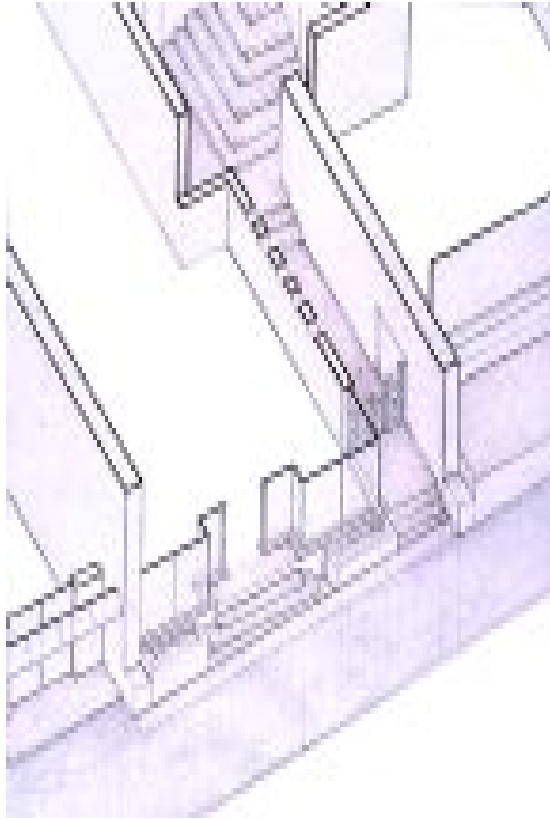
Levels of the courtyard area

- Threshold/Entry
- Second Floor Apartment Entry
- Garage Entry
- Garden



The courtyard is reached by walking through a dark alley and up a stair which fills the courtyard and spills out to greet you. By filling the space, the stair makes a gesture to become one with the courtyard. At the top level the courtyard is transformed into a garden area for the residents. Pieces of the bearing wall hold the volume together and delineate the garden creating a space that can be seen as a collection of parts or a unified whole.





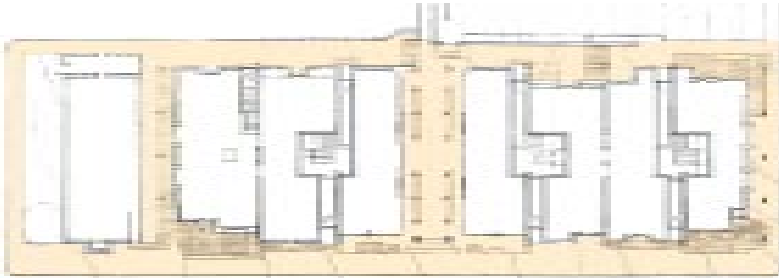
An alley cuts between the retail space and the bearing wall. The bearing and partition walls sit in contrast, revealing qualities of permanence and temporality. The bearing wall extends into the street becoming a seat while the glass curtain wall wraps the corner allowing light to penetrate deeper into the alley. A course of glass block also marks the wall as temporary as it permits light from the retail space to illuminate the courtyard path at night.



Riva San Vitale, Switzerland



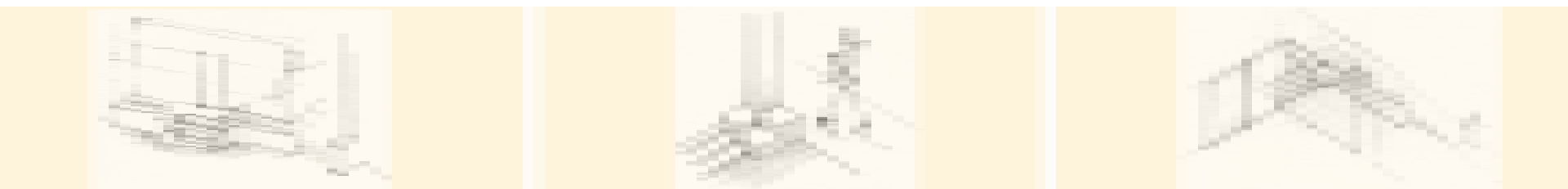
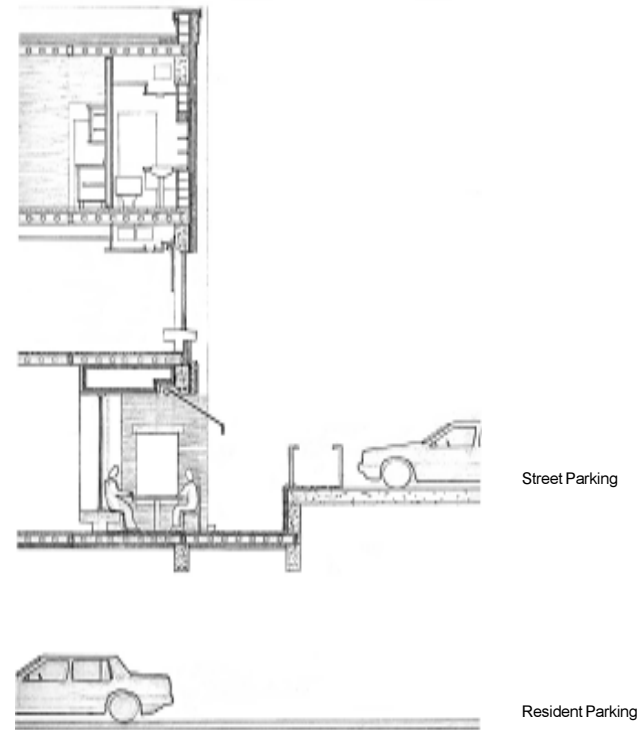
Riva San Vitale, Switzerland



Street

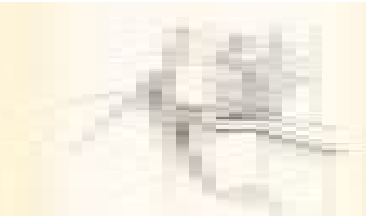
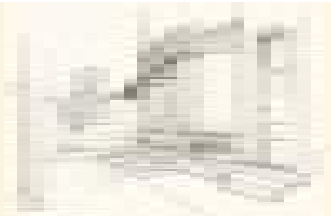
Urban life unfolds in many ways. Layering, entrance, and accessibility all play central roles which determine whether a urban space works or not. At street level both the front and back of the buildings serve as entrances into the retail spaces and respond to the twenty foot grade change. This allowed the original grade to remain intact along Main Street while the grade along the rear adapted to form accessible routes. The idea of the temporary and permanent can be seen within all urban spaces. Knowing that the retail spaces will change over time the masonry bearing walls are designed to permit this change between them while they maintain a sense of permanence. The masonry walls also contain regular breaks that allow courtyard access for the residents and many different expansion and circulation options for the retail owners. The breaks also allow light to spill into the middle of the retail space from the courtyards. The courtyards grant access to the two story apartments as well as to the lower parking area. The sharp grade change allows for a split level parking garage below the last four buildings which is accessible from Washington Street.

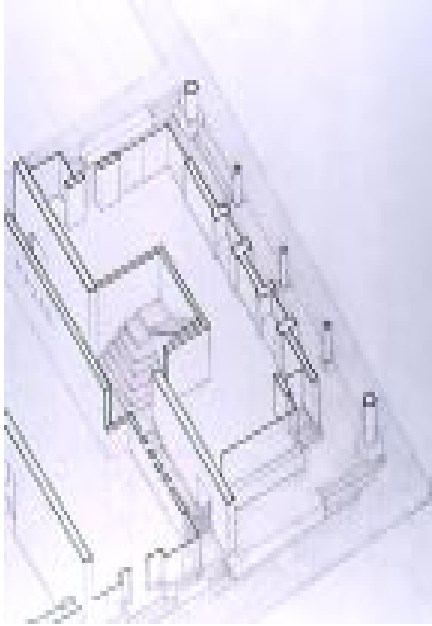
The relationship and layering of space with the street is shown in this section. It reveals part of the rear facade with a recessed storefront creating a place for people to sit. The awning is tucked away beside the beam and becomes a secondary element held within the structure. The layering of all three floors is expressed through the ceiling heights and the placement of the cars on the upper parking level in relation to the building creates a secondary layering of the urban environment.



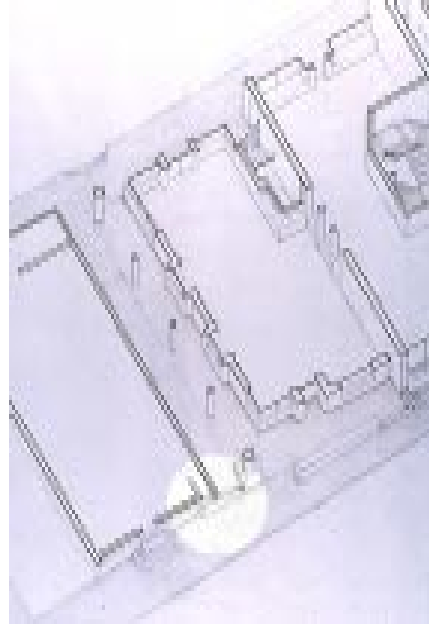


Como, Italy

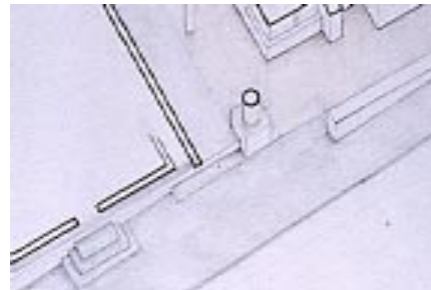




Clay Street end condition.

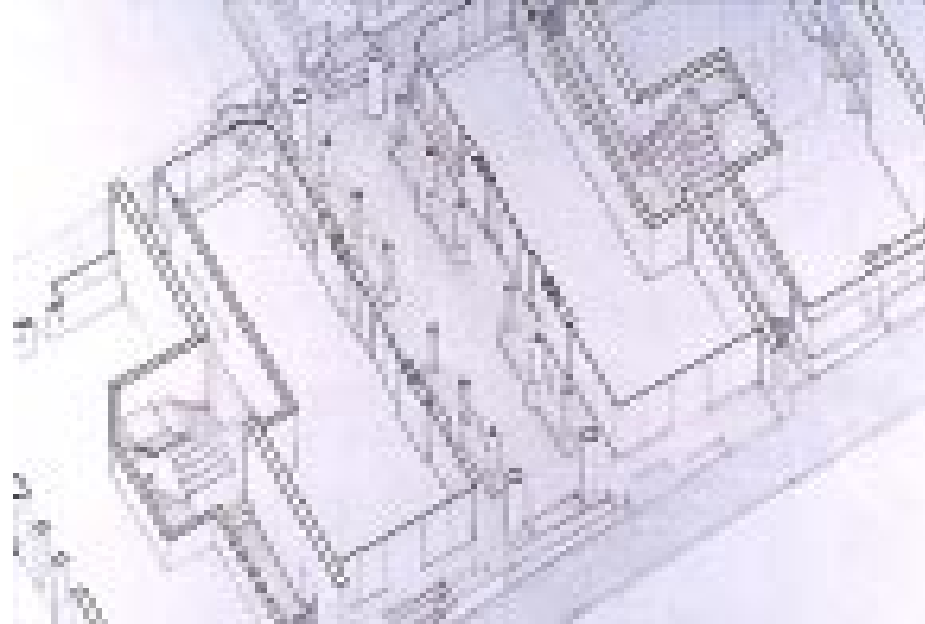


Shared stair between Annie Kay's and new buildings

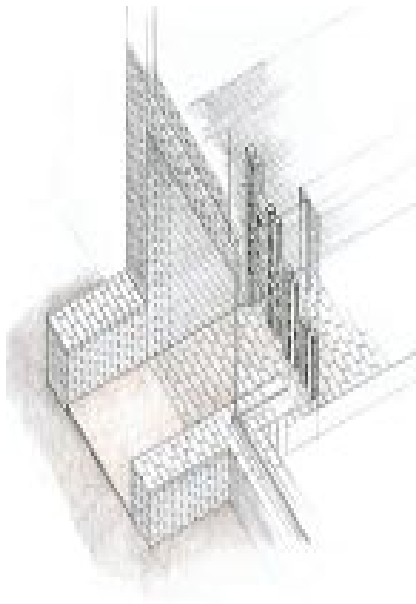


Annie Kay's marks the corner and by simply sharing a stair the old and new start to become one. At both end conditions the building corner is carved away and the bearing wall resolves into a colonnade. The amount carved away is based on the comfort level of four-two person tables and the ease of pedestrian traffic. Column bases, steps and window sills become livable architecture, available as seats.

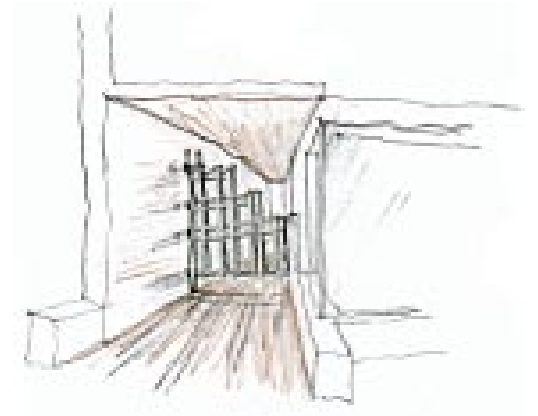
The middle passage from Main Street to the rear parking area is also lined with columns where the bases become seats. This passage appears much bigger than it is because of the columns and the storefronts create an inside-outside relationship. This additional layer allows the storefronts in this passage to slide open and make an outdoor room for different events.



Middle passage

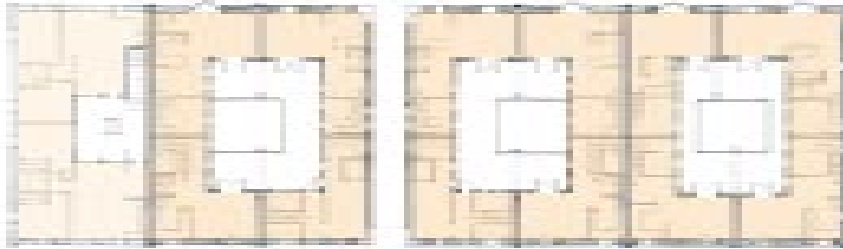


The gate from the street to the courtyard is critical. Instead of using a solid door, this space becomes an extension of the street to courtyard experience. The gate is a gesture of the public and private separation.



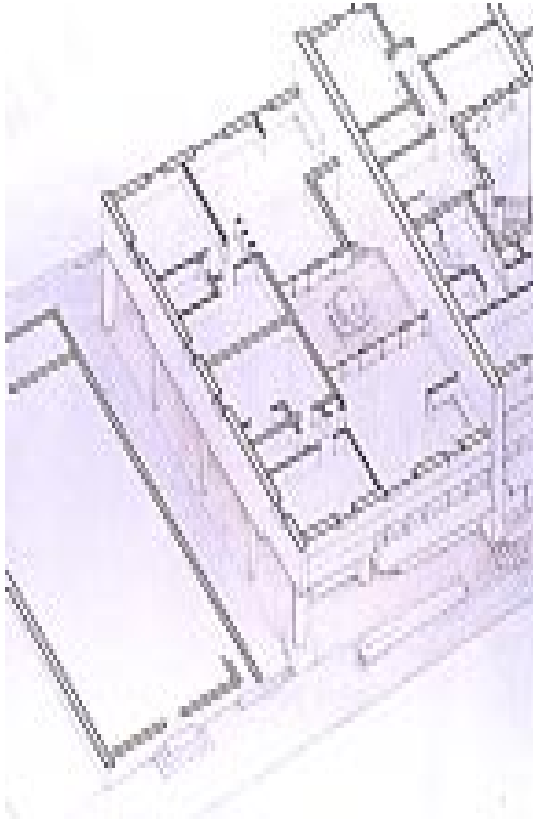


Riva San Vitale, Switzerland

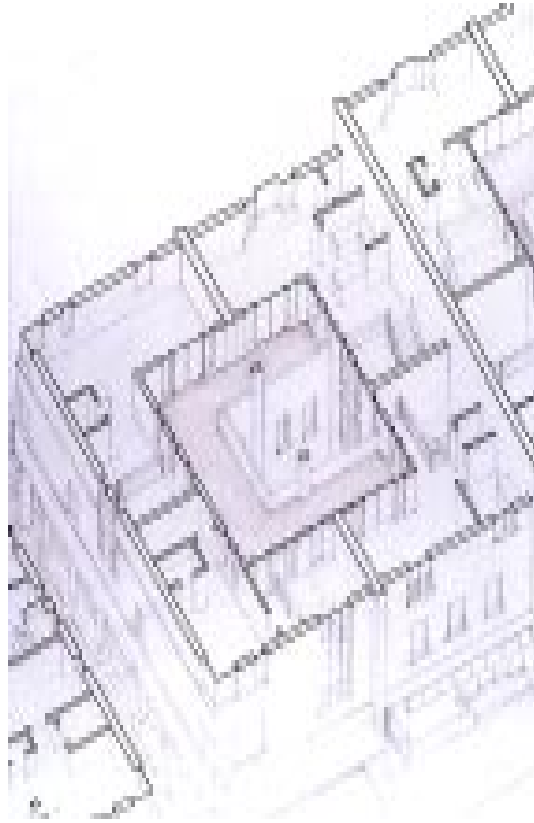


Apartments

The apartments are accessed by using the courtyard stair and entering on the second floor. Four apartment units front on each courtyard which creates a small community within the larger whole. The two story apartments are set up with the living space on the top floor to induce interaction with the upper garden area. The garden is delineated by the bearing walls stretching out to the edge of the courtyard. These pieces of the bearing wall suggest which part of the garden belongs to each apartment but do not destroy the unity of the place.

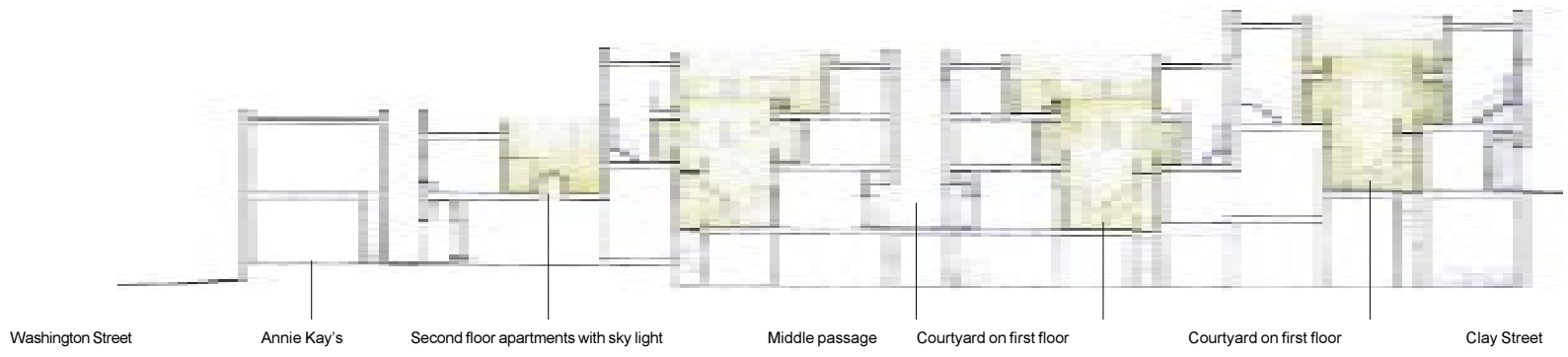


First building with courtyard on second floor.

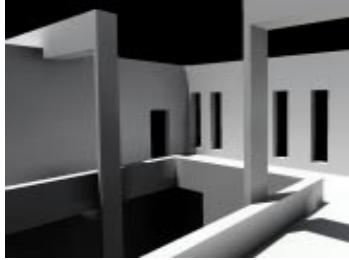


Third floor living and garden area.

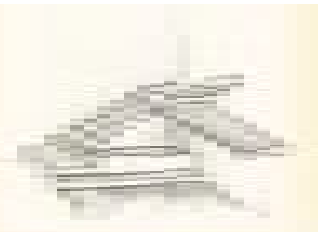
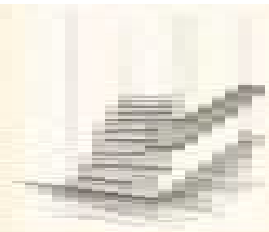
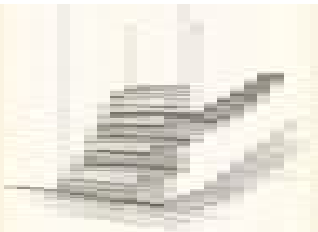
Each courtyard has subtle differences depending on the particulars of the rooms surrounding it. The first building contains a courtyard only on the second floor with a skylight which brings light to the retail space below. The two apartments that share this courtyard are just one story while the remaining apartments have a courtyard on the first floor and rise two levels. The french doors that open onto Main Street connect the public zone with the living space. The second floor windows adapt for the more private zone of the bedrooms.



Full section through courtyards

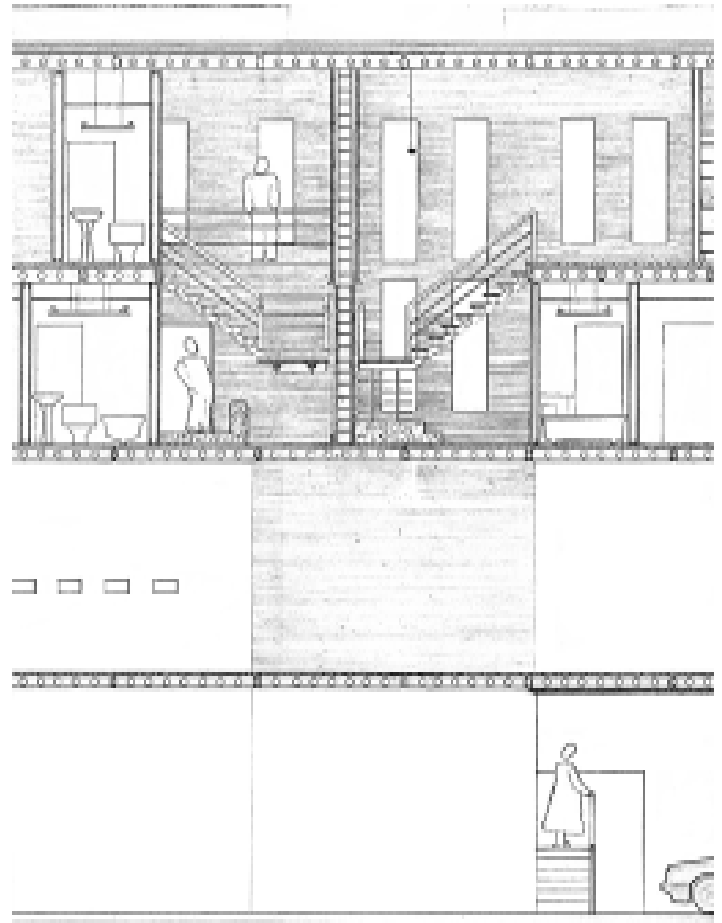


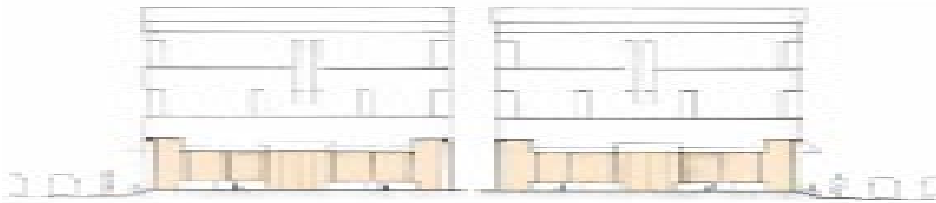
Upper garden portion of courtyard at living level of apartments





Section showing lower (entry) level of courtyard and upper (garden) level.

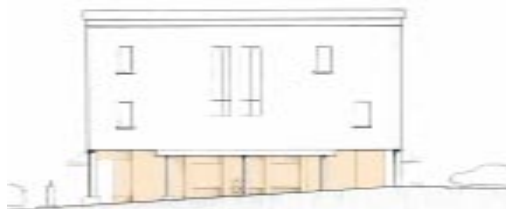




Elevations along the middle passage



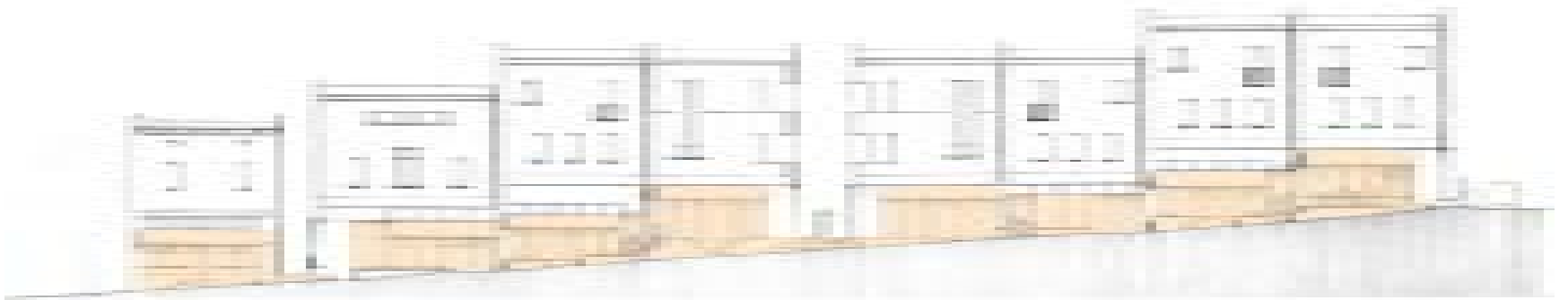
Washington Street Elevation (Next to Annie Kay's)



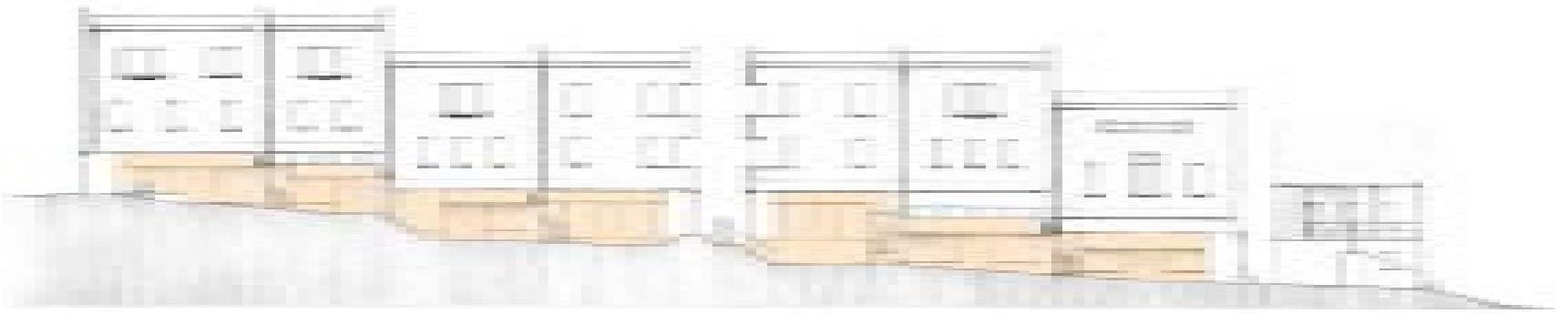
Clay Street Elevation

Elevations

The elevations create a rhythm along Main Street which can be broken down into two levels, street/retail and apartment. The street level represents the public realm and caters to the everyday functions of life. The niches designed for the storefront create a rhythm all their own. They provide a place where the sidewalk and store become one and create a place for the pedestrian to be engaged by the displays. It is in this zone that the life of an urban space exists. Designing the architecture so that it is livable on this street/retail level is crucial to the street's survival. Above the street level the windows allow light and air into the apartments. At the mid-block passage the windows dissolve the corner to express the break in the buildings. These windows wrap the corner to permit the inhabitant a full view of the street. The top floor contains the residential living space and garden area. This space is complemented by the french doors similar to the doors to the garden and allow cross ventilation to occur. The rear elevation contains bay windows for a wider panoramic view.



Main Street Facade



Rear Facade



Savannah, Georgia

Findings

The making of a good urban space begins with responding to the urban environment already existing in the town. The design considerations between the building and the street are essential to a project's success. The buildings introduced to the site have to form 'interiors' on the street level which are perceived as outdoor living space for the street to survive. "Together, wall, floor, and ceiling define the character of urban space and invite man to identify and dwell." (Norberg-Schulz)

A layering of public and private zones creates a more desirable place. Carving away the end conditions creates a communal meeting place which slows down the movement on the corner and allows for many different activities to take place. The distance from the store to the street becomes critical to allow room for these activities to occur and to determine how much contact to permit. An urban space must be general as well as defined to serve the public and private needs required within the buildings.

In loving memory of Rob Kovack, we are moving on but will never forget you.

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Computer models on pages 30 and 46.

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