

**Buddhist Society of Wonderful Enlightenment Terrace:
Observations on Functionalism**

by

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ABSTRACT

Louis Sullivan's "form ever follows function" had a profound influence on architecture. Although often confused as synonymous with modernism, functionalism is more closely related to positivism in its bias toward science and its rejection of introspective knowledge. This dismissal of the superfluous (such as aesthetic form or ornamentation) diminished the intuitive "human" in architecture by assuming universal rationality. This thesis re-examines functionalism in a contemporary setting: a vertical Buddhist temple set in between two tenement buildings within a New York City plot. Influenced by the work of Lars Lerup and the early work of Diller and Scofidio, the design explores the poetic tensions and obsessions between the profane world of the inhabitants and the sacred world of the temple through abstraction without any attempt to resolve them.

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CHAPTER 1: INTRODUCTION

Framing the Thesis

This thesis was originally conceived as a framework for understanding the general built environment within our multicultural landscape. The tensions of the inhabitants and their space are explored through the creation of a narrative based upon observations of the tenants (of Buddhist Society of Wonderful Enlightenment as well as other residents) in a tenement on 99 Madison Street in New York City. The daily interactions of two fictional characters, the monk (representing the sacred) and a voyeur (representing the profane)¹, were created as a parallel to the confrontations of the two within the North American urban context. The process of drawing and modeling specific moments from the two characters' perspectives allowed an abstraction and investigation into the essence of this confrontation. The friction of diverse people living as neighbors challenges the context of architecture as it mediates the two.

The drawings and models presented do not attempt to document spaces or describe the relationship between space and program. As such, they attempt to abstract and document the precise moments of interactions and the transformation at the boundary between the two worlds. Along with the narrative, the drawings and models are an attempt to highlight the contradictions and paradoxes within the function of the spaces. This is explored through different scales ranging from the city to the haptic.

The narrative focuses on four main moments within the temple in a tenement as interpretation opportunities unfold. The meaning of each moment is projected from the perspective of the inhabitant and thus, the interpretation of the space lies within the mind of the inhabitant. This act of interpretation challenges the functionalists' point of view and suggests a truth grounded in human experience.

1. The definition of the sacred and the profane is as per Mircea Eliade's book *The Sacred and the Profane: The Nature of Religion*.

Theoretical Supplement

In The Search for Truth, Functionalism Favored Program over Man

In Louis Sullivan's essay *The Tall Office Building Artistically Considered*, he famously coined the phrase "form ever follows function," emphasizing and prioritizing function as a determinant in design over form (Sullivan 1896, 409). However, the first use of function in architecture and design started to gain importance much earlier when in the 1740s Carlo Lodoli declared, "Unite building with reason and let function be the representation" (Forty 2000, 174). One could argue that this is the origin of a bias towards the "truth" in architecture and universal rationality, displacing the experiences of man. This association with positivism has crowded out a humanist approach to architecture, which traditionally saw man at the centre of his world. Our contemporary pursuit of form and space, primarily viewed through a utility-focused lens, has resulted in prioritizing program over man, tipping the balance in favor of idealism (Eisenman 1973, 11).

Functionalism's Contradictions in a Multi-Inhabitant Landscape

This oversimplified definition of functionalism as form-follows-function is often mistaken as the search for "universal true forms." However, functionalism is a subjective approach rather than an objective approach to form, as Eisenman points out. He illustrates that the architect's tools of functionalism, including abstraction, atonality and atemporality, were only stylistic preferences and not to be confused as modernist which was a rejection of classicism (Eisenman 1973, 11). Ironically some, such as Lodoli, have taken to functionalism as a critique on ornamentation which used simplified forms to invoke recollection and memories of basic human activity (Forty 2000, 174-175). However, functionalism is also using form to associate universal meaning. This suggests that functionalism is also culturally based and fails to deliver universal truth as promised.

The presence of man is necessary to complete the interpretation of space. To make matters more complicated, in the contemporary urban environment (such as in North American cities) cultural boundaries overlap within the same space. This is evident in the infamous grid of New York City and the diasporic culture of tenants in Manhattan. With respect to multiple inhabitants in the same space, typical of a modern office building or tenement, the paradox and difficulties of attaining functionalism become apparent. Functionalism as

generator of form begins to fail when certain limitations in the environment or the conflicting interests of inhabitants do not allow form to simply follow function. This situation is illustrated by the temple as a tenant in a tenement at 99 Madison Street.

Restoring the Balance Towards Man

French philosopher Henri Lefebvre warns, "it would be inexact and reductionist to define use solely in terms of function, as functionalism recommends. Functionalism stresses function to the point where, because each function has a specially assigned place within dominated space, the very possibility of multi-functionality is eliminated" (Lefebvre 1991, 368-369). As the above suggests, the oversimplified definition of form-follows-function negates the contemporary multicultural and melting pot ideologies of North America where cultures commonly coexist within the spatial limitations of the city. The creation of unbending physical thresholds to separate and dedicate space does not reflect the temporal demands of contemporary man. If functionalism is to dictate these complex landscapes by separating them into dedicated spaces, then diaspora results as program and people (and place) fail to align.

To go beyond functionalism would mean to restore balance between the human and program in architecture. The immaterial threshold between one generic space and the next resides within the mind of man. Through this balance, design can allow spaces to continually be adapted by human inhabitation and cognition, ever changing rather than a fixed projection of life.

CHAPTER 2: THREE PERSPECTIVES

The Narrative

99 Madison Street has six tenants, some argue seven. It is more or less a regular New York tenement located on a typical plot, a hundred feet wide by twenty-five feet deep. Much like its neighbors, this tenement happily reinforces the street except in two instances. First, its fire escape permanently touches the ground, allowing for alternate access to the apartment units. Second, above the main street entrance, the building cantilevers three feet beyond its property line encroaching on the space above the sidewalk. Neighbors question the function of this move but its *raison d'être* remains unknown.

The tenement is adapted from the 1887 tenement plans, where tightly packed plots negotiate for sunlight and air. 99 Madison is an exception to the rule where a single building footprint has been divided into three smaller buildings, two that flank the short edges of the lot and a third building centered in the interior courtyard. The typical central stair core in the middle of the complex has been replaced by two hundred and seventy-two linear feet of ramp. Although some say the design is forward thinking for wheelchair accessibility and grocery carts, most residents think the landlord, a frugal man, chose this option over the expensive installation and maintenance of an elevator. Although there is no concrete evidence, most residents suspect that the lack of a walkable surface on the last leg of the ramp is a further attempt at pinching pennies on finishing materials. As such, the maintenance man must bring his own walking surface to access the roof when he services the water tower.

The Bell Chime Tower

The four other residents live on the upper floors and have two ways to get to their units; either by use of the fire escapes located at the front and back of the buildings or the ramps. The ramps start on the first floor and end just shy of the rear building. Some residents consider the beginning of the ramps to be the “lobby” of the building as it is also where the services (the doorbell, mailboxes and recycling room) are located. Curiously there have always only been five mailboxes, yet six “door chimes”. Most assume the memorabilia store has its own mailbox elsewhere but this has never been confirmed. The door chimes

are literally bells, each with its distinct tone. When residents move in, they are assigned a bell and expected to recognize its tone when it is rung by their guests. By the tone, this unusual arrangement allows the residents the opportunity to keep track of the visitors to the tenement. From time to time, they hear the sixth bell ring. At first, the residents thought it was an ill-considered system and there were constant mix-ups with whose bell it was. But over the years, the residents were eventually conditioned to only listen to their chime's tone and naturally ignore the rest. Peace was restored.

The Voyeur's Courtyard

On the first floor, there are two tenants, the store, located in the front currently selling flowers/memorabilia and a man who lives in the rear of the building. The upper residents call him "the voyeur". This alias is not the result of his character or personal behavior, but is due to the unit in which he resides and its proximity to the street and the store. The voyeur's unit has a small peephole as a window onto the courtyard. It serves to reduce the noise from the street and the chimes of the doorbells while allowing some light to penetrate his residence. Although it is debatable how much sound and light the peephole can filter, it does provide him with the perfect view of the "statue" that one of the residents placed in the courtyard. From his dining table, the voyeur enjoys watching the attention given to the statue by the building's visitors. This spectacle is, unfortunately, interrupted on laundry day when the neighbour above hangs her clothes out to dry on the railing of the ramp, blocking the voyeur's view. As interesting as he finds the vision beyond the peephole, the voyeur has never conjured up the justification to explore the rest of the building in order to see the statue up close.

The Statue Fire Escape

New York City Fire Code mandates that a room cannot be further than ninety feet from a public exit. As such, around the one hundred and eighty foot mark of the ramp is another large statue. It marks the ramp's fire exit. At first glance, this opening is often mistaken as a window by the manner in which the ramp and the ceiling meet giving the illusion that the opening is above walkable ground. If one were to look closely, they would notice a protruding step behind the statue, verifying the fire exit beyond. This step also reveals how the last apartment unit is accessed here, at the top of the rear building. This resident must use

the fire escape as no ramp reaches his unit directly. This lack of direct access also adds to the landlord's reputation for cutting corners.

The Maintenance Gap

At the end of the ramp is a place where residents can look out over the roof tops of the neighboring buildings and a decent place to light one up. This is also happens to be the edge where the walkable ramp ends and the maintenance man temporarily sets down a plank in order to cross over to the roof to service the water tower.

The Sacred's Narrative

On the boundary between the precinct of Twin Bridges and Chinatown, the Buddhist Society of Wonderful Enlightenment occupies, on the north-south axis, a vertical concrete shaft placed in between two residential blocks. It is also in between two other tenements. Within this diasporic space, in the world's greatest grid (NYC), no one seems to be lost. As unlikely as it is, this in-between of an in-between space happens to be the center of the world. Not many people are aware of this gem even though the people that acknowledge it often evangelize about it. Of all the tenants' speculations that go unverified, this one seems to have a plausible explanation. The space that the vertical temple resides in becomes the universal pillar (*axis mundi*) – the critical element of a sacred place. Eliade defines the *axis mundi* as the following.

- a) A sacred place constitutes a break in the homogeneity of space;
- b) This break is symbolized by an opening by which passage from one cosmic region to another is made possible (from heaven to earth and vice versa; from earth to the underworld);
- c) Communication with heaven is expressed by one or another of certain images, all of which refer to the *axis mundi*: pillar (cf. the *universalis columna*), ladder (cf. Jacob's ladder), mountain, tree, vine, etc.
- d) Around this cosmic axis lies the world (=our world), hence the axis is located "in the middle," at the navel of the earth", it is the Center of the World. (Eliade 1959, 37)

To experience the *axis mundi*, the Buddhist visitor travels up the vertical temple (through the ramps) as they would a traditional temple, crossing its thresholds, passing sacred point to point as intended: a pilgrimage. They experience the temple and tenement simultaneously, flipping back and forth between the profane spaces of the tenement sky and the sacred sky framed within a vertical box (page 16). As the openings to the sky within

the complex are similar in size, even a resident familiar with the space, such as the monk, would forget which space he is in. As one encounters the thick concrete walls of the “temple”, the volume partially blocks out the sound and light of the urban environment just long enough to break the homogeneity of the space and provide an escape from Manhattan. Structured like a smoke stack, the smoke from the incense burner filters the light as it rises towards the heavens.²

“There dwells the gods; there a few privileged mortals make their way by rites of ascent; there, in the conception of certain religions, mount the souls of the dead. The “most high” is a dimension inaccessible to man as man; it belongs to superhuman forces and beings. He who ascends by mounting the steps of a sanctuary or the ritual ladder that leads to the sky ceases to be a man; in one way or another, he shares in the divine condition.” (Eliade 1959, 118-119)

Essential to this experience are rituals and thresholds. These experiences transform the interpretation of space into a place by imposing secondary meaning. Eliade states, “The threshold is the limit, the boundary, the frontier that distinguishes and opposes two worlds and at the same time the paradoxical place where those worlds communicate where passage from the profane to the sacred world becomes possible” (Eliade 1959, 25).

The Bell (Chime) Tower

To the monk, the sound of the bell signals the beginning of the pilgrimage. He strikes and proceeds along the path as it rises above the ground and exits the tenement (which acts as the first threshold). On certain days, when the wind blows the wrong way, or when a resident enters the recycling room at the same moment as the monk begins his journey, the odorous smell of garbage instantly fills the air and situates him in Manhattan.

The Voyeur’s Courtyard

Within the voyeur’s courtyard is a pair of prying eyes. To the monk, the voyeur’s peephole is a constant reminder that the space is shared. This spectacle is, unfortunately, interrupted on laundry day when the neighbour above hangs her clothes out to dry on the

2. An indexical section is included on page 14.

railing of the ramp. At that moment, the voyeur's gaze is deflected, allowing the monk a moment of uninterrupted peace with the bronze statue of Maitreya (Laughing Buddha), as he personifies this deity and deepens their relationship over time.

The Buddhist Fire Escape

As the pilgrim approaches the backlit Bodhisattva (main Buddha), in this second to last sacred moment, he experiences a physiological compression. The ceiling appears to close in as the ramp rises reducing the space from twelve to six feet evoking imagery of approaching the heavens. Although the monk and the Buddhist visitor frequent this space, this illusion along with a larger than life bronze statue provokes the monk and the visitor to revisit their human form. As much as believers wish to attain ever-lasting life, this opening (that doubles as a fire escape) allows them to prolong their current life.

The Maintenance Gap Memorial Wall

As mentioned above, the maintenance man can freely travel between the ramp and the roof top. However to the visitor venerating their ancestors, this gap is symbolic of the barrier between the living and the dead. The sacred cannot go where the profane travels freely, a paradox the monk reflects on frequently.

The Maintenance Man's Perspective

The maintenance job of this space comes with its perks, the main one being the ability to travel between the sacred and the profane, as desired. However, this perk is overrated as the maintenance man is unaware of this perk and requires a third person to interpret the space he dwells in. In a sense, he is the neutral eye in this narrative. In contrast to the voyeur's lens (page 15) which interprets and subjectively acknowledges the image, the maintenance man sees the space for what it is and how it performs, not for what it means (page 14).

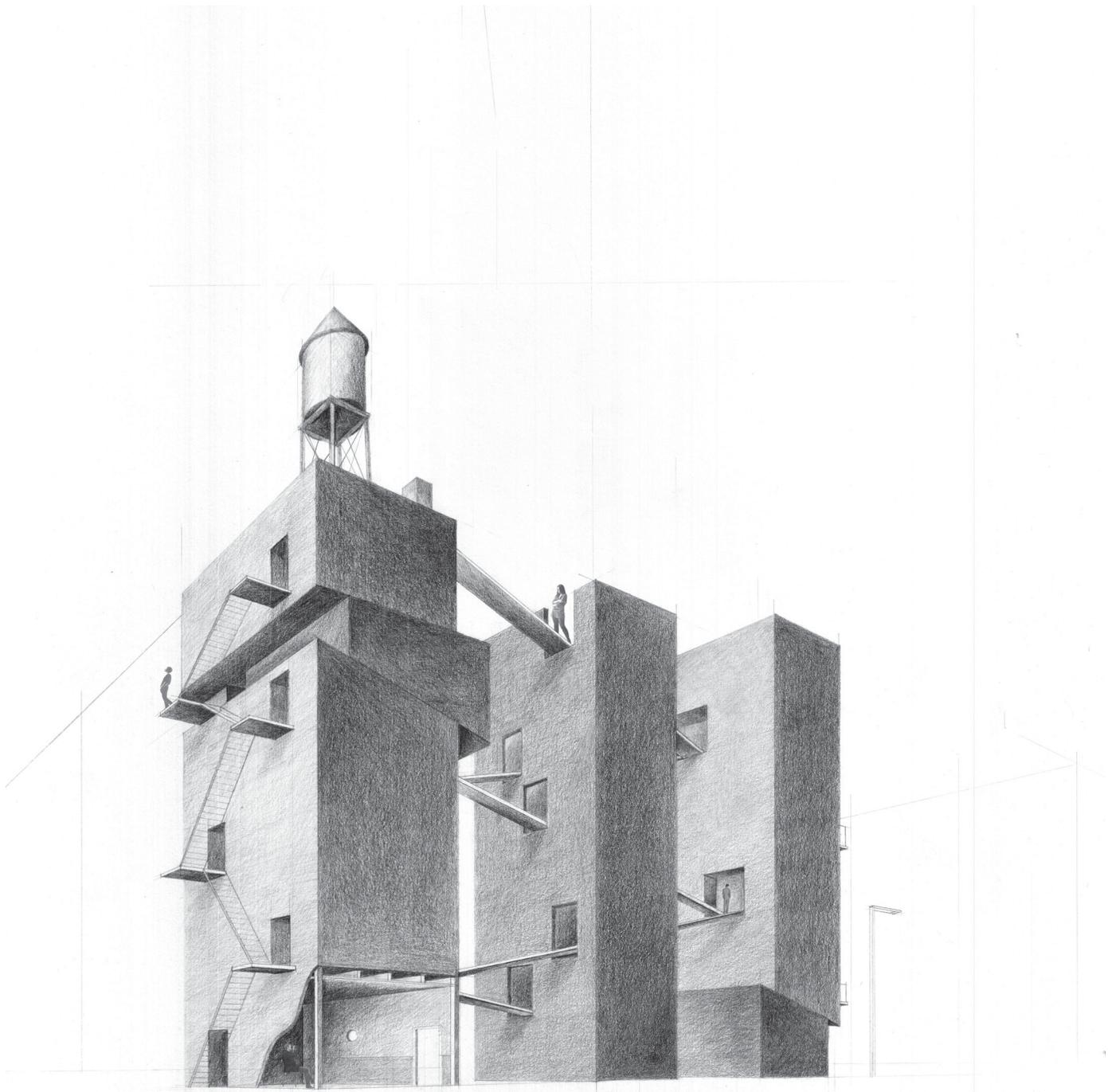
Since the purpose of the maintenance man is to ensure that a space functions, seldom does his path cross with that of the inhabitants. But on one rare occasion, he was the center of an interesting discussion the sacred and the profane once had regarding who should bear the cost of maintaining the ramps.

Due to the all-encompassing nature of Buddhist doctrine, the residents believe the temple is more than a vertical concrete tube but also encompasses the circulation ramps. They often refer to the ramp's temporary connection (page 17) as proof that the ramps belong to the temple and are not of the tenement. The Buddhist counters that the structural drainage pipes are proof that they were designed to support the ramps. Even the maintenance man, who has a neutral stance, has a problem drawing the line on this one.

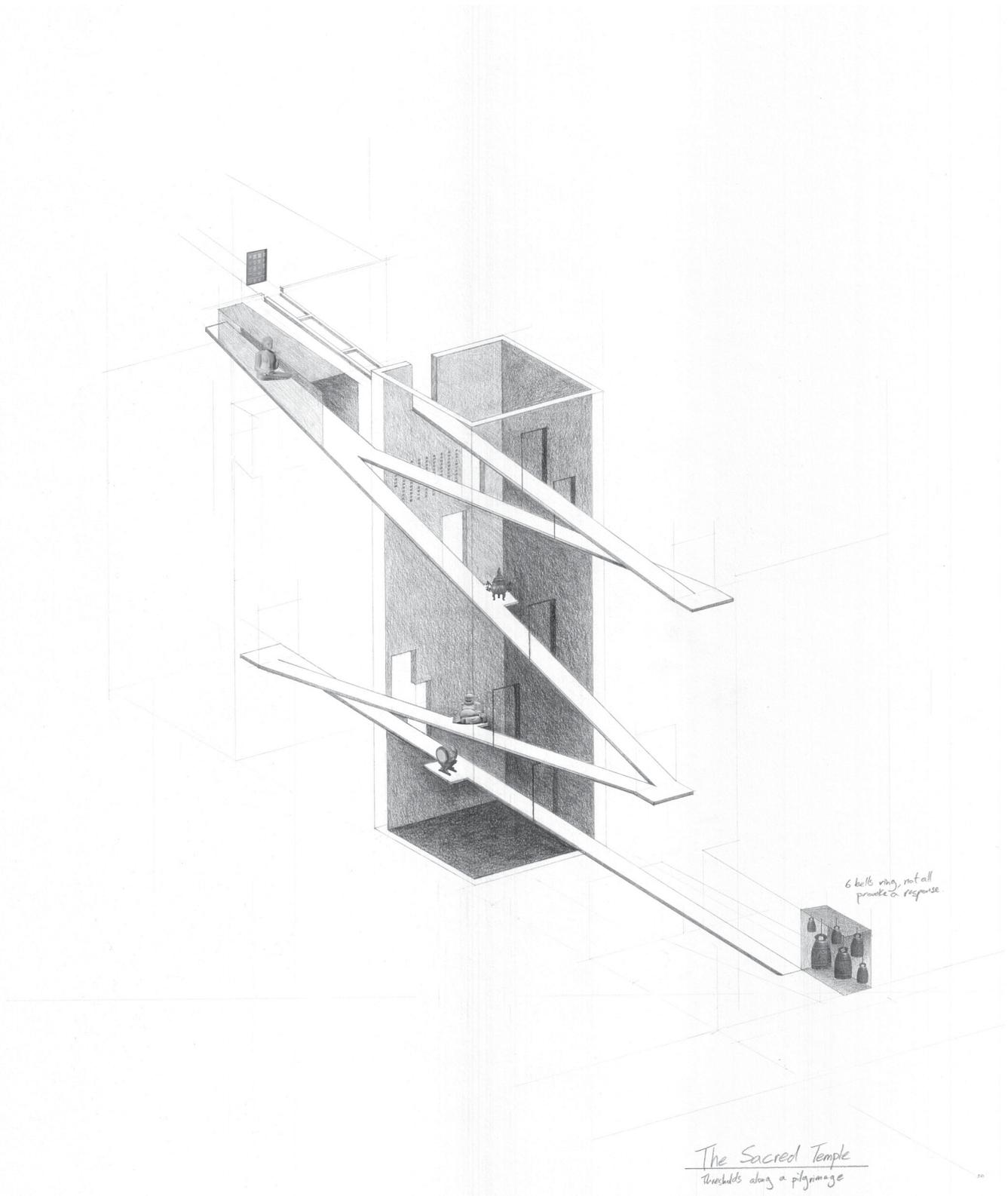
In reality (if the ramps were personified), the ramps themselves would not care whether they were sacred or profane. What they would be concerned with, is playing a cruel joke on the Buddhist. The ramps span fifty-six feet from the north apartment to the south, floating a few centimetres above the doorways of the temple. However, at the precise moment when the monk crosses the threshold of the axis mundi, the ramps reach their maximum deflection point, thereby grounding the monk (page 16).

The Diasporic Tenant
Lost within the city grid, the tenants
find themselves between the ideal and reality.

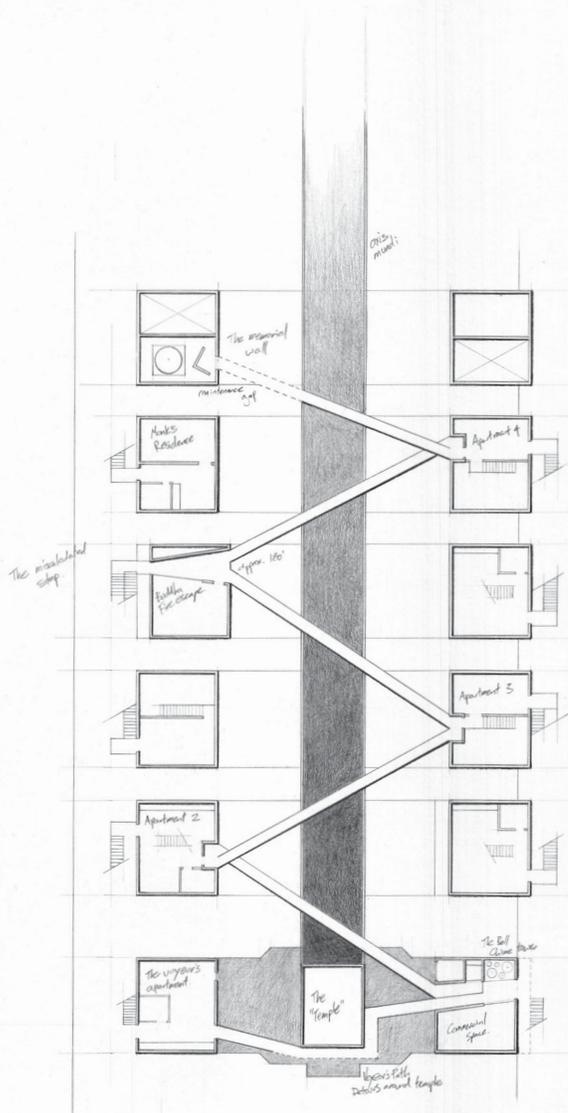
The Diasporic Tenant - Lost within the city grid, tenants find themselves between the ideal and reality



The Profane's Tenement - Closed to the outside, he only understands what he can sense



The Sacred Temple - Thresholds along a pilgrimage



The Landlord's Log

- Apartment 1 - The voyeur - Moves in April 1st (Profane)
 - Apartment 2 - The gypsy cart lady - Oct 26 (Profane)
 - Apartment 3 - Likes to air dry laundry - July 25 (Profane)
 - Apartment 4 - Smoker - July 27 (Profane)
 - Apartment 5 - Lives a monk - Moves out May 1st (Sacred)
 (your also moves out May 1st)
- Commercial space leased to a Buddhist memorabilia store.

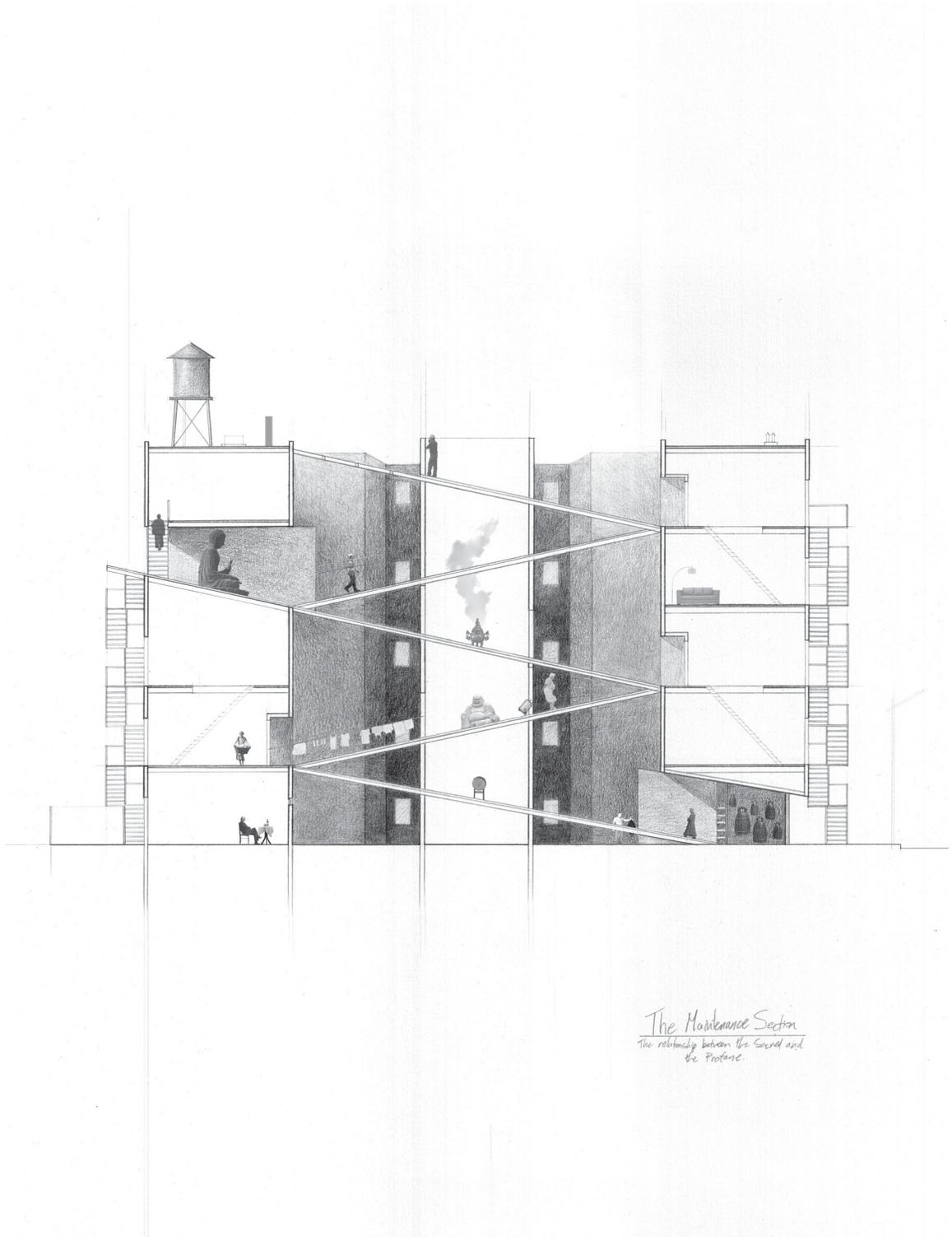
Notes:

The maps to bridge the gap is located in the recycling room.
 The water tower requires yearly maintenance.
 Handmaps also cleans off the silties and water drains
 and registers up collective railings
 Building is open to the public

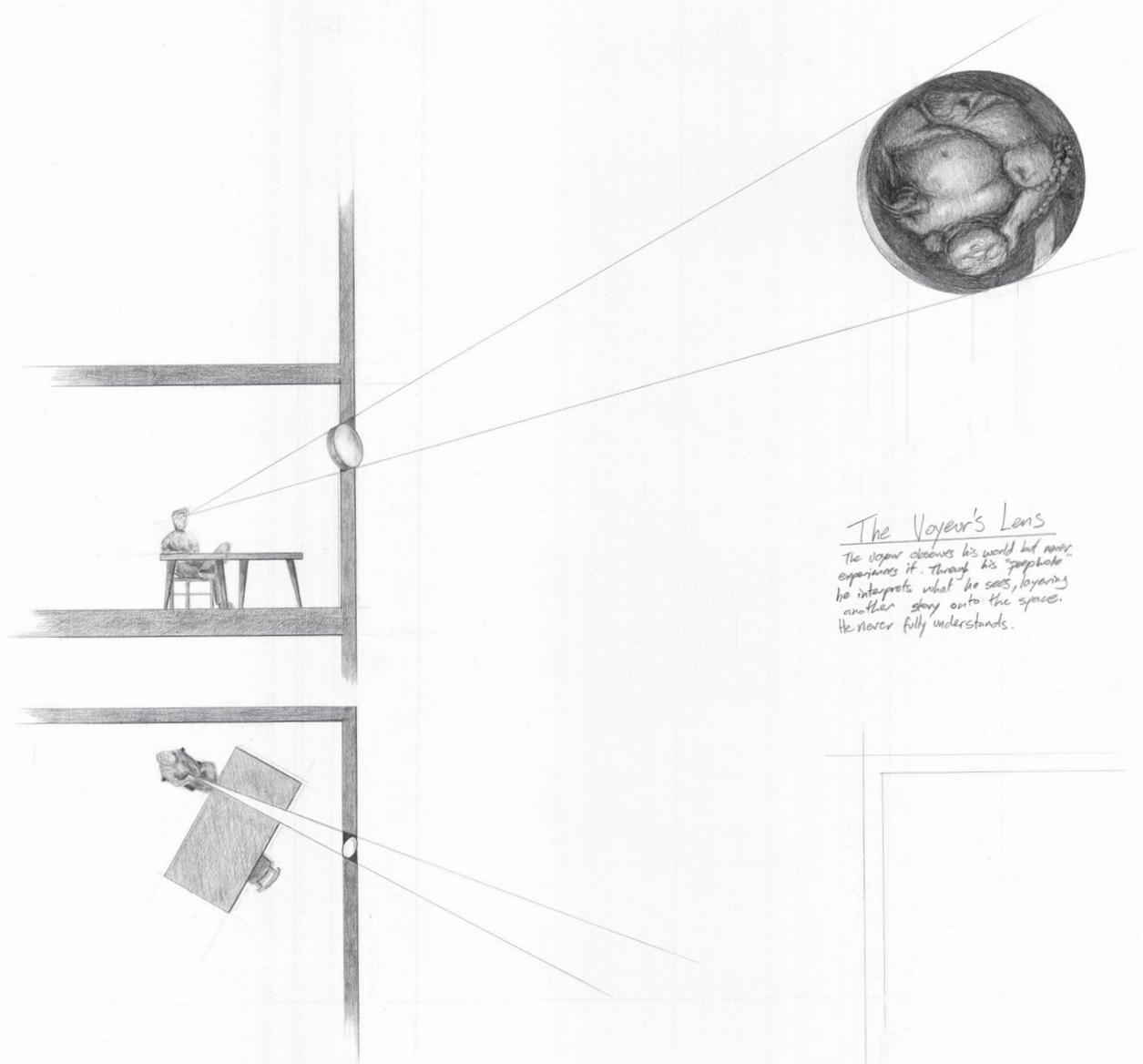
Temple in a Tenement

Buddhist Society of Wonderful Enlightenment Terrace

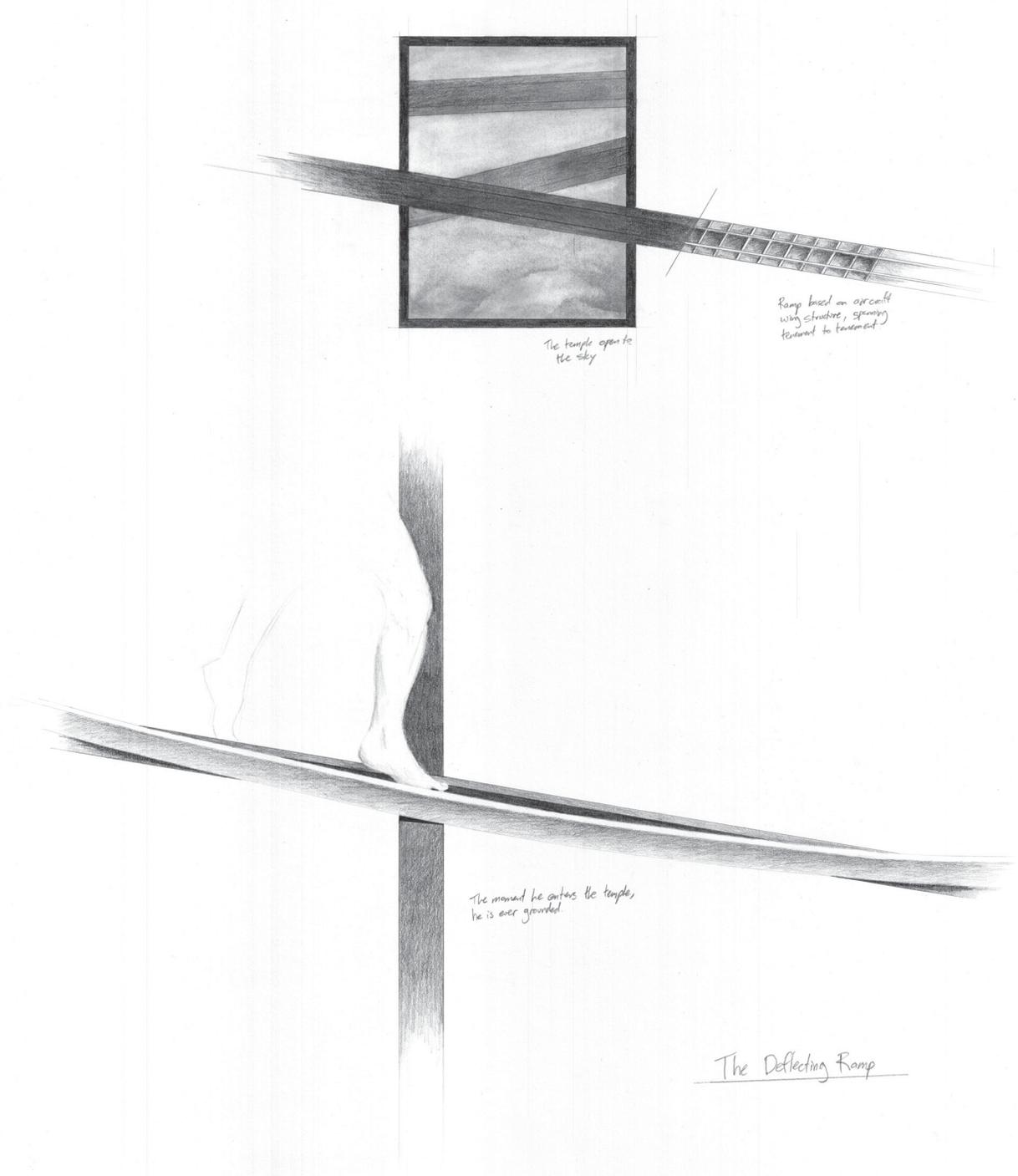
Temple in a Tenement - Buddhist Society of Wonderful Enlightenment Terrace



The Maintenance Section - The relationship between the sacred and the profane



The Voyeur's Lens - The voyeur observes his world but never experiences it. Through his "peephole" he interprets what he sees, layering another story onto the space. He never fully understands.



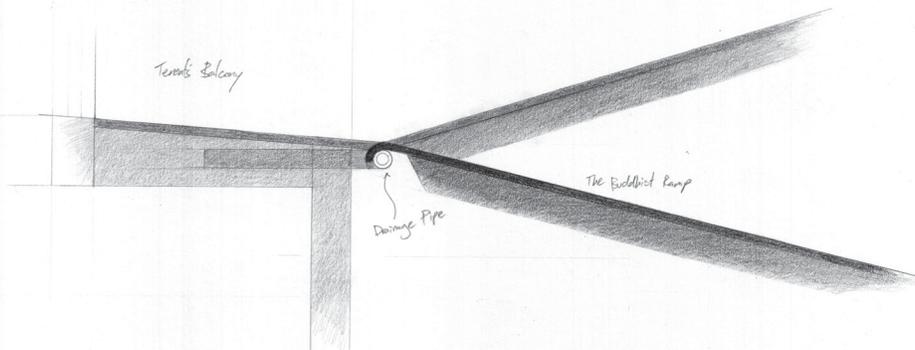
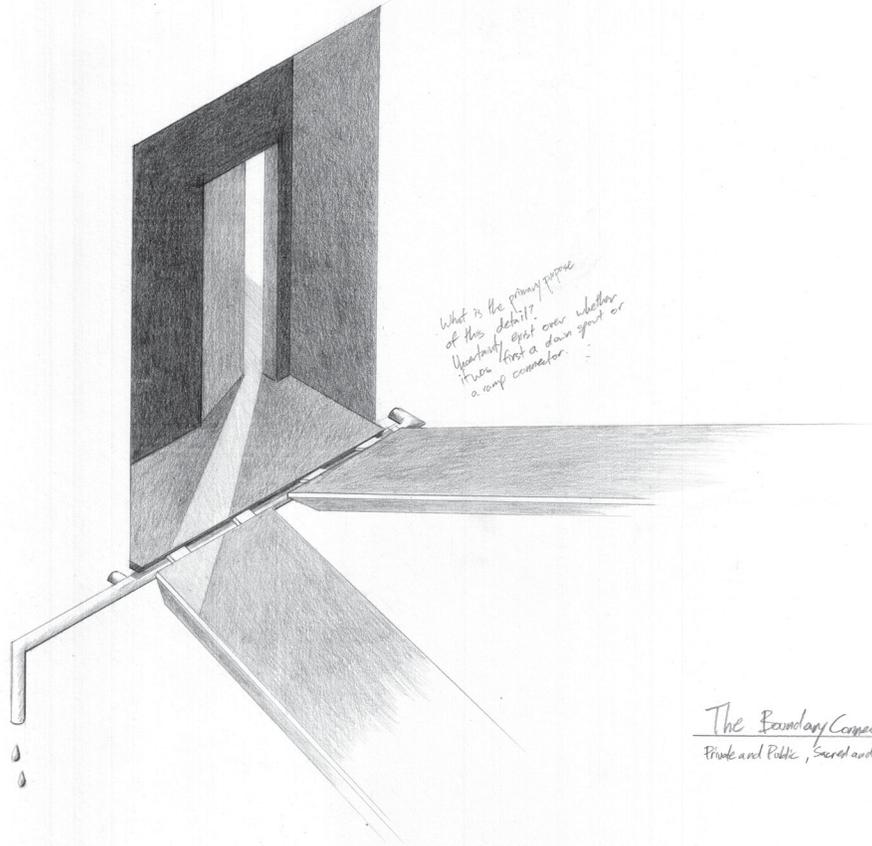
The temple open to
the sky

Ramp based on aircraft
wing structure, spanning
temple to basement

The moment he enters the temple,
he is ever grounded

The Deflecting Ramp

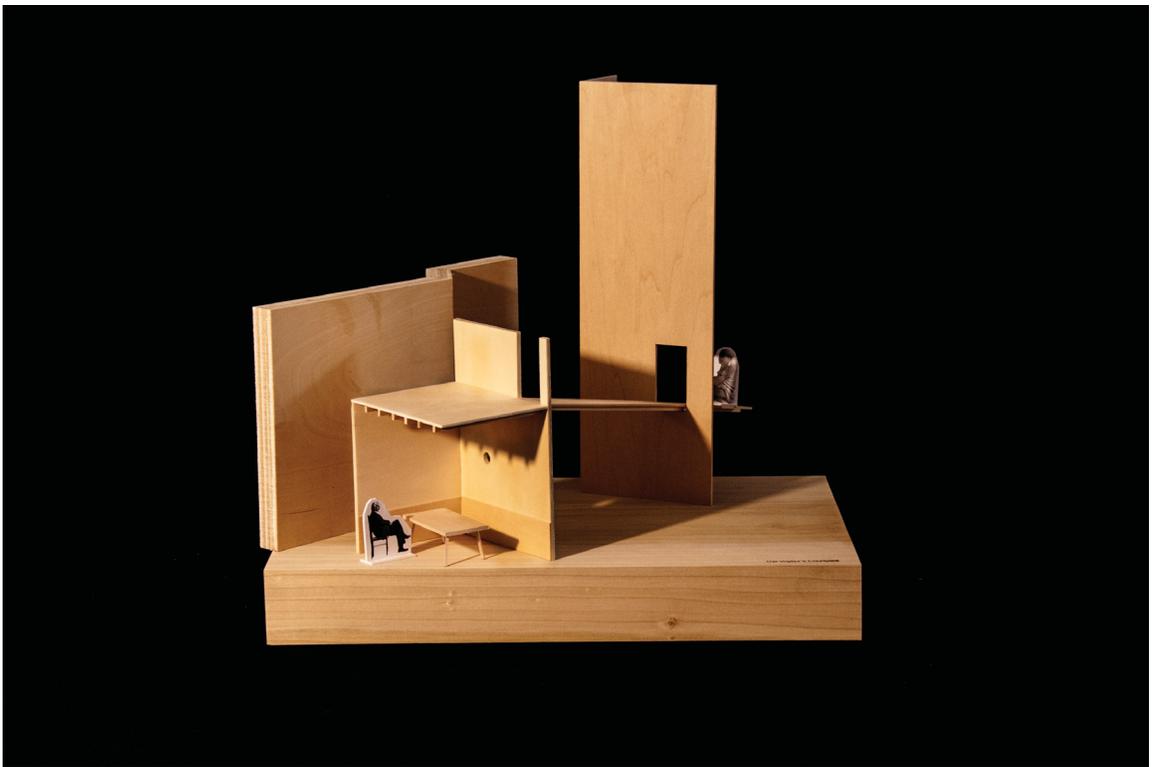
The Deflecting Ramp



The Boundary Connection - Private and Public, Sacred and Profane



The Bell Chime Tower



The Voyeur's Courtyard



The Buddhist Fire Escape



The Maintenance Gap

CHAPTER 3: RECONTEMPLATING THE SCENES

The Bell Chime Tower metaphorically represents the extent to which our urban environment interacts with the individual. The bells ring, but only one signals your response. This is an innate response to our environment as we have become numb to the constant bombardment of communication that fills our daily lives. To curate these experiences is almost deemed unrealistic or unnecessary. This is the joy of the city, the chaos of clashes of culture and people, and the foundation of a market place in the same spirit Aldo Rossi captures in *Architecture in the City* (Rossi 1982). The bells point to the contradiction within functionalism, the need to single out the purpose of each space. One might extrapolate that at its extreme, this would divide all space according to function. This absurdity might entail six separate spaces for six different bells.

The voyeur's courtyard presents a space without perfect information. His position within the tenement (the only apartment unit that can be accessed without the ramp) questions what one understands about an environment without direct experience. With asymmetrical information, he interprets his space and lives contentedly without a need to verify the truth.

The importance of the threshold is illustrated in the scene of the Buddhist fire escape. Narrowed down to the separation between the fire escape and the main Bodhisattva, the threshold ironically transforms the sacred into the profane depending on the purpose of the traveller. Regardless of the irony, this inanimate threshold illustrates how the function can change and be interpreted differently.

Lastly, the maintenance gap in the ramp shows how the interpretation of the space transforms and adds meaning over time. The sacred and the profane view the space differently although the boundary of the space remains constant.

These four scenes do not attempt to provide an all-encompassing perspective on functionalism but are used to provoke further thought on our personal interaction with the functional aspect of spaces. I view these scenes much like a photograph, an attempt to capture a moment in time and document my architectural explorations. Rather than a blind trust in seeking the truth of a space, I see space as ephemeral, as it flows with time and requires interaction to complete each image.

CHAPTER 4: CONCLUSION

Functionalism implies a priority for organization. The presumptuous dedication of space into specific program contrasts greatly with our frenetic environment. The zoning of space by re-grouping and separating rooms does not reflect the human nature of constant change and adaptation. It is the overlap that makes our spaces unique and exciting - a personalization - shifting from physical functionalism to an immaterial one. Much like in Robert Venturi's *Complexity and Contradiction in Architecture*, the layering of additional information and ambiguity adds interest to the project. Venturi writes, "I prefer 'both-and' to 'either-or,' black and white, and sometimes gray, to black or white. A valid architecture evokes many levels of meaning and combinations of focus; its space and its elements become readable and workable in several ways at once" (Venturi 1966, 16).

In the vertical temple, the transformation between the sacred and the profane is non-permanent. Based on the layout of the space, each space has multiple functions and meanings. The Buddhist visitor and the monk view the space differently than the residents and the voyeur. As such, the threshold of each space is made at the moment each character passes through it. These spaces become the stage/setting for their personal narrative. In this case, architecture assists in the experience rather than attempting to actively narrate it.



Buddhist Society of Wonderful Enlightenment at 99 Madison Street, New York City, New York

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