

# **Choreographing Urban Habitation**

Strategies for Enhancing Public Space in the City

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Abstract

## **Choreographing Urban Habitation**

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Architecture

The basis of this thesis is the perceived need for more spaces that generate human scale and facilitate opportunities for individual reflection and social interaction in the public realm of the city. It proposes the design of places that facilitate a change of pace, revitalization of personal energy and nurturing of embodied states of presence within urban settings. It proposes using the language of physical theater to view architectural installations as theatrical sets for the urban stage. This metaphor is beneficial since the built environment serves as the background for our behavior, plays a significant role in defining the range of our choices, and creates a context for self-consciousness about our perceptions and responses. The thesis further proposes using contemporary tools of choreographic analysis to analyze the spatial choices that pedestrians make while navigating social situations - with the intention of informing design interventions that positively transform urban public space.



## Defining Public Space

“One of the basic human requirements is the need to dwell, and one of the central human acts is the act of inhabiting, of connecting ourselves, however temporarily, with a place on the planet....”<sup>1</sup>

Forward to *In Praise of Shadows*  
Charles Moore, 1977



Figure 1 - Pari, Italy. Pathways and niches.

I lived most of my adult life in Europe, and have always been fascinated by the way small traditional townscapes offer alcoves and perches for dwelling – the way distinctions between private and public realms intermingle.

The hilltop village of Pari in the Toscana region of Italy is approached by ascending past terraced tiers of fields while passing rustic tables under ancient olive trees and rough benches set into retaining walls. Upon entering the village itself, one is greeted by a small square which also serves as a market. As one ventures further into the small town, there are innumerable niches carved into the walls of the town for outdoor



Figure 2 - Pari, Italy. Multiple Levels, Multiple Orientations. Overlapping public and private spheres. The inviting nature of public space of medieval cities evolved over time in response to the desire to inhabit public outdoor space with others.

seating and conversation, balconies overlook small public spaces inviting conversation between more private and public realms, retaining walls are formed with a width and surface that invite a lingering perch. The entire village exudes a feeling of human scale and invites not only passage, but opportunities for chance encounters and contemplative dwelling.

These villages exude a sense of human scale -- inviting occupation and encounter. We are drawn to them today not only for their beauty, but because they offer us a particular sense of place.

As European cities became larger, public spaces scaled up in size.



Figure 3 - Athens, Greece. Overlapping public and private spheres. The inviting nature of public space of medieval cities evolved over time in response to the desire to inhabit public outdoor space with others.



Figure 4 - Berlin, Germany. Pedestrian zone that accommodates a range of social activities.

Because of the traditions of an approach to urban design in which the function of city space was seen as a meeting place and social forum, an abundance of spaces can be found that continue to offer qualities of overlapping multiple uses and ambiguous function.

Today, the tradition of valuing human scale and an attentiveness to



Figure 5 - Berlin, Germany. Public spaces offering a variety of embedded gathering and seating opportunities.

designing for what Jan Gehl describes as “the pedestrian landscape” is returning after years of modernist planning ideologies which put a low priority on public space<sup>2</sup> (Gehl, 3).

In American cities we can see also successful public spaces that are well used and appreciated. Nevertheless, perhaps due to the lack of a heritage of cities based on pedestrian movement and dwelling, the design of cities in North America is dominated by automobile traffic and the urban planning ideologies of modernism that separates the uses of the city and emphasizes free-standing buildings<sup>3</sup> (Jacobs, 23). Jane Jacobs speaks about this condition as producing a gradual breakdown of the opportunities for city space to function as a place for people to dwell and interact.



Figure 6 - Granada, Spain. Rehabilitation of Paseo de la Bomba. By Arias Recalde and Luis Gonzalo. <https://www.pinterest.com/pin/400187116872636311/>



Figure 7 - Seattle, Washington, USA. In American cities we can see successful public spaces that are well used and appreciated.



Figure 8 - Seattle, Washington, USA. Although European cities are struggling with growth, perhaps American cities face even more challenges in creating places that are welcoming for pedestrians to dwell in the urban environment.

Contemporary American cities provide pathways that efficiently move numbers of people past commercial enterprises - but offer a dearth of ‘furnishings’ that contribute a sense of human scale to the surrounding tall buildings or provide opportunities for occupying the public realm. Gehl relates that for many years pedestrian movement was treated as a form of “traffic planning”, applying such terms as “sidewalk capacity” and ignoring the nuances of contemplative or interactive human life in the public ways. He insists that, “at its core, walking is a special form of communion between people who share public space as a platform and framework.”<sup>4</sup>

(Gehl, 19)

This study of urban public space with the intent of increasing a sense of human scale and habitability has been a subject of increasing interest since the middle of the twentieth century. Among notable theorists are: Jane Jacobs, who published the influential *Death and Life of Great American Cities* in 1961 and introduced such concepts as ‘social capital’ and ‘human scale’ into the discussion of urban planning; William Whyte, who began using direct observation and objective analysis to observe human behavior in public space during his tenure with the New York City Planning Commission in the 1960’s and published the book and film, *The Social Life of Small Urban Spaces* in 1980; and Danish architect and planner, Jan Gehl, who published *Life Between Buildings* in 1971, in which he attempted to classify ways in which the built environment affects human activity in the public realm. Henri Lefebvre and Christopher Alexander also make reference to the inviting nature of public space of medieval towns



Figures 9-10 - Seattle, Washington, USA. We see public spaces which, although designed with good intentions in places with fine affordances, do not seem to engage people or invite dwelling.

and cities which evolved over time in response to the desire to inhabit public outdoor space with others. “For Lefebvre, as for Alexander, the reductionism of functionalist urbanism stems not from a scientific analysis but rather from the tendency of the designers to give up the more complex structures of traditional cities, characterized by the experience of overlap, ambiguity, [and] multiplicity [of function]”<sup>5</sup> (Stanek, 105). These are among the theorists who have been responsible for considerable positive change in how cities are being conceived and transformed over the past decades as their ideas increasingly influence design practice.

It may be contended that contemporary trends towards re-valuing human scale and pedestrian space in cities acknowledges a measure of the organic logic and beauty of traditional villages, with an increasing emphasis on supporting social interaction - and a de-valuing of the prioritization of the automobile.



## Movement in Urban Spaces

*“However, there is a shift ... in what constitutes a valuable resource for a researcher seeking insights in the interstices between knowledge disciplines.”<sup>6</sup>*

*Constructing Memories: Creation of the choreographic resource*  
Scott deLahunta, 2006



## Physical Theater and Installation Art: Navigating Spatial and Social Conditions

During my extended residency in Europe I worked as a professional dancer and choreographer. I had a committed ongoing interest in exploring movement in urban locations, and in using objects to create particular qualities of place. These experiments were sometime done directly in urban settings and sometimes in theaters using objects to create places with particular qualities. Influences derived from the theories of Jan Gehl, Christopher Alexander and Francis Ching interacted with processes originating from the practice of improvisational dance and physical theater. The concepts interacted in a smooth and synergistic way to produce evocative theater works.



Figure 12-13 - Taipei, Taiwan. Physical theater performance which explores how simple elements can be arranged to create various types of place, and nurture different degrees of personal and interactive space.

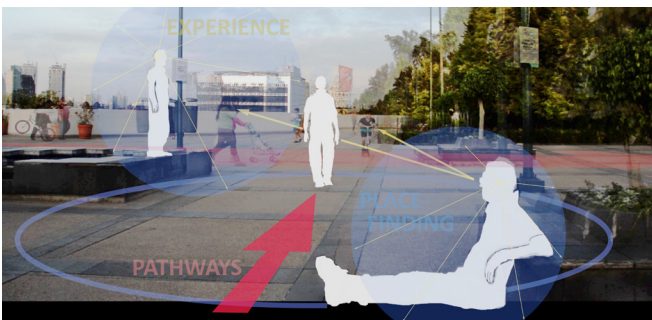


Figure 14 - Explorations in site specific work can provide a rich field of data for the design of public space. This type of work provides abundant metaphors for the comparison of choreographic and urban space. It can generate insights and tangible, embodied examples of concepts such as acitvated space, intimacy gradient, degree of proximity, field condition, negative space, approaching and exiting encounter, and personal space.



Figure 15 - St. Petersburg, Russia. Physical theater explorations with working group.



Figure 16 - Trisha Brown Dance Company. Modern and Postmodern Dance, corollary to its architectural counterpart, emphasizes a concern with abstract forms in an undifferentiated field.

The practice of Physical Theater can be a compelling frame of reference for the examination of public space. Physical Theater, which may be understood as a subset of dance and theater, has its roots in the movements of abstract expressionism, postmodernism and minimalism that arose as part of the cultural revolutions in the 1960's<sup>7</sup> (Bogart and Landau, 3). Of specific interest is a specific branch of physical theater called 'The Viewpoints Method', developed by Anne Bogart at the Experimental Theater Wing of New York University. One of the differences between dance created at this time and this form of physical theater, is that the latter tends toward breaking down the blank, open, indeterminate field of the stage into a network of smaller defined places, each with its own particular shape and character. It is also more likely to use architectural elements and lighting to define spatial conditions - creating specific places that promote conditions for movement and relationship. This makes the work a particularly interesting metaphor for the study of how pedestrians inhabit public space. In the real world, people do not dwell in undifferentiated space; society is comprised of smaller subsets of interactions, relationships and encounters - and physical theater is more concerned with portraying the intricacies of human communication and relationship than most other forms of dance.

This philosophy of physical theater stems from the Judson Church Movement in New York during the same period that saw increasing interest in humanizing the urban environment as discussed above. Bogart and Landau describe this movement, which spanned across many art



Figure 17-19 - Physical Theater uses architectural elements and lighting to define spatial conditions - creating specific places that promote conditions for movement and relationship.

fields, as an expression of fundamental agreements about “nonhierarchical art and the use of ‘real time’ activities which were arrived at through game-like structures or task-oriented activities”<sup>8</sup> (4). This approach rejected modern tenets of absolute meaning and virtuosic aesthetics with a process-based approach derived from internal decisions, structures, rules or problems to be solved.<sup>9</sup> (Bogart and Landau, 4). In contrast to an artwork that stems from one point of vision, the resultant work proceeds from choices made by interacting performers, “generating action based on awareness of time and space in addition to or instead of psychology”<sup>10</sup> (Bogart and Landau, 17).

We can also positively compare the scenic design component of theater design with architectural installation work. The relationship between this form of theater and the performative aspect of architectural installations in public space is highlighted when we consider persons who investigate or inhabit these sites as ‘perceiver/actors’ who are creating their own individual movement inventions in response to changing spatial and social circumstances. Art theorist Anne Peterson stresses not only the relationship between installation work and performance art, but the emphasis on the viewer’s participation, when she states, “the dialogue with experimental performance theater and dance has primarily been a catalyst for the development of a type of installation art with an extreme focus on the experience of the viewer as the work’s motive and rationale”<sup>11</sup> (220).

In this way, the public architectural installation is functioning in the



Figure 20 - Physical Theater: Sasha Waltz and Dancers.

a manner similar to the director in a work of physical theater: it is encouraging an active identifying of one's internal response to spatial and social circumstances – and promoting active self-agency and choice-making as a creative response to these conditions. The work itself is providing the context and cues for the active participation of the perceiver/actor, as well as providing the defined place or setting for the engagement.

In other words, the process of negotiating spatial and social conditions in the work of physical theater is relevant to the question of understanding how the built environment serves to reveal new impulses for interaction with, movement through, and dwelling in public space.

The built environment not only serves as a background and frame for our behavior and perception, it also plays a significant role in generating, and limiting, the range of our choices and behaviors. One of the contributions that the field of architectural installation is offering today is that of expanding our conception of what is possible in terms of action and interaction, dwelling and moving through, the realm of urban public space.

Another important theme of physical theater that may be applied as a lens to installation work and architectural interventions in public space, is that creation is process-based. Interactions and connections result from decisions of the participants in real time, improvised studies. The



Figure 21 - How might interventions encourage “visitor/actors” to see other possibilities for moving through and occupying these conditions.

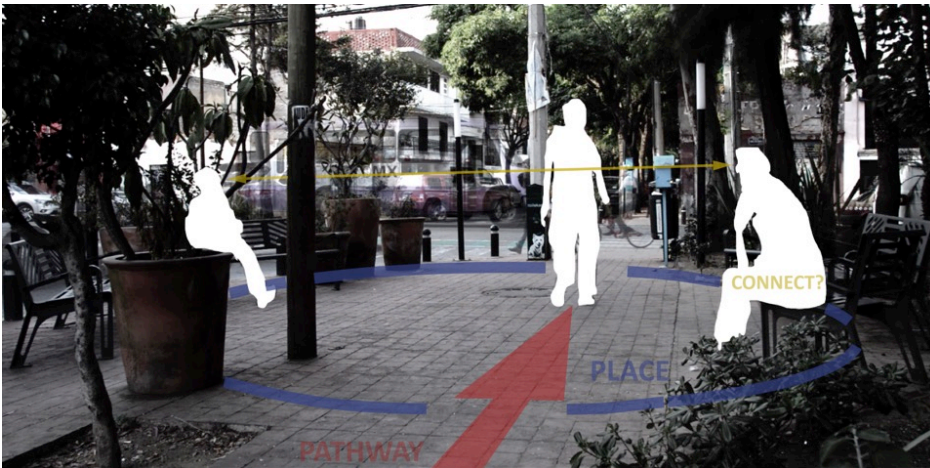


Figure 22 - Pathway / Place / Connection

arrangement of the set and the problems of the scene guide the choice-making in space.

As I move through contemporary cities, I’m drawn to see opportunities for transforming public space as stage - and - imagining how scaled architectural components might transform underutilized spaces into more habitable places. I speculate how such interventions might encourage “perceiver/actors” to see other possibilities for moving through and occupying these conditions.

The method for designing such an intervention will be to identify the affordances of a given site, then based upon these circumstances, make proposals that generate human scale and facilitate opportunities for individual reflection and social interaction in the public realm. The aim is to furnish the site with desirable opportunities for dwelling. This method proposes using the craft of physical theater and choreographic analysis to generate suggestions for designing these installations - and then analyzing actual patterns of occupancy to transform a modular set of design components.



Figure 23 - Weighted diagram of research themes

Scenography:

skēnē ('stage or scene building') +  
graphos ('to describe or draw')

This thesis stems from the belief that perceiving the city as place of participatory theater can provide a unique perspective for designing with human scale in mind - so as to create more favorable conditions for dwelling and interaction.

This project uses a choreographic lens to view urban space as an occasion for **urban scenography** intending to provide attractive circumstances for participation with the **affordances** of a site and with others. Let us define these two terms. In Europe, Set Design is referred to as “scenography”. This term refers to the writing or designing of the set - which informs the writing of the movement. McKinney describes it as concern with audience reception and engagement - and explains that it is sensory as well as an intellectual experience, emotional as well as rational.<sup>12</sup>

The second term, “affordance”, was coined by psychologist James J. Gibson to mean: “an action possibility available in the environment to an individual, independent of the individual’s ability to perceive this possibility”.<sup>13</sup> In the urban design and architectural contexts we might also conceive of affordances referring to ‘environmental impulses to design’.

Before examining methodology further, what conditions and qualities of place do precedents of architectural installation offer the ‘perceiver/actor’?



Figure 24 - Architectural Installation Project: numen / for use. Title: Tuft.

## Creating of a Sense of Place

“Dwelling must locate itself within a space that is legitimized, marked, measured by ground-laying events”<sup>14</sup>

Gianni Vattimo

Creating a sense of place has as much to do with the nature of what transpires in the individual as the physical nature of the site.

The concept of place is inextricably connected to human perception and action. Without the feeling of ‘place-ness’, the spaces of our built environment are devoid of meaning and fail to engage our active perception, incite our curiosity or provide us with a sense of identification.

In *Architecture: Meaning and Place*, Norberg-Schulz discusses his concept

of place by referring to the developmental psychologist Piaget’s concept that “man gradually constructs the image of a structured world, in which the notion of existential space forms an integral part”<sup>15</sup> (Norberg-Schultz, 29). Urban planning theorist Kevin Lynch concurs with Piaget when he maintains that “a good environmental image gives its possessor an important sense of emotional security”<sup>16</sup> (Lynch, 27).

Much of what Vattimo refers to in his call for the “rediscovery of monument” - an examination of characteristics of place, the nature of dwelling and the need for an ‘ontology of actuality’ - may be well related to the characteristics of an architectural installation dedicated to nurturing a place of contemplative respite. Ontology is defined as the study of the nature of being or what is real. This is also the aim of contemplative practices: to become aware of the dominance of the thinking mind, and through self-reflective attention, obtain more clarity about ourselves and the present moment. Vattimo highlights his alignment with contemplative practice when he emphasizes the need to slow down, become present and regain a sense of our place in history<sup>17</sup> (Vattimo, 40). He alludes to places wherein one’s relationship to the environment assists in the process of “regressing to the opening events that constitute Being”<sup>18</sup> (Vattimo, 42). This might be interpreted as a call for the creation of ‘monuments to becoming present’.

Likewise, Henri Lefebvre urges a “restoration of concern for the body,” encouraging a built environment that is revealed through direct sensory



Figure 25 - Architectural Installation Project: numen / for use. Title: Tape

experience, rather than privileging the visual image. Merleau-Ponty takes this thinking further as he declares, “Far from my body’s being for me no more than a fragment of space, there would be no space at all for me if I had no body.”<sup>19</sup> (Merleau-Ponty, 12). Similarly, without the active participation of an embodied perceiver, there can be no creating of a sense of place. This interconnected relationship between the process of perception and the characteristics of the environment is necessary to create meaningful places. Edward Casey states this forcefully, and with implications for both participant and environment. He claims that without a sense of place, the spaces of our built environment are meaningless, and “without places, being-in-the-world would be merely

diffuse and disjointed -- overt and public and yet shapeless”<sup>20</sup> (Casey, 288).

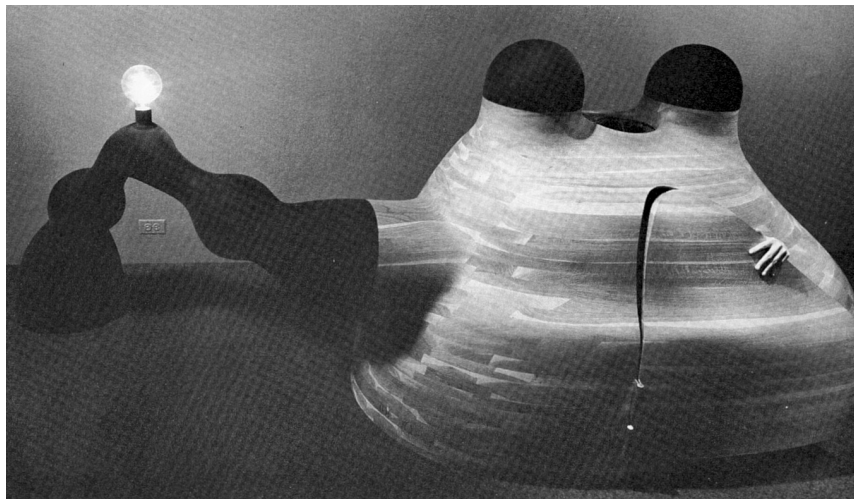
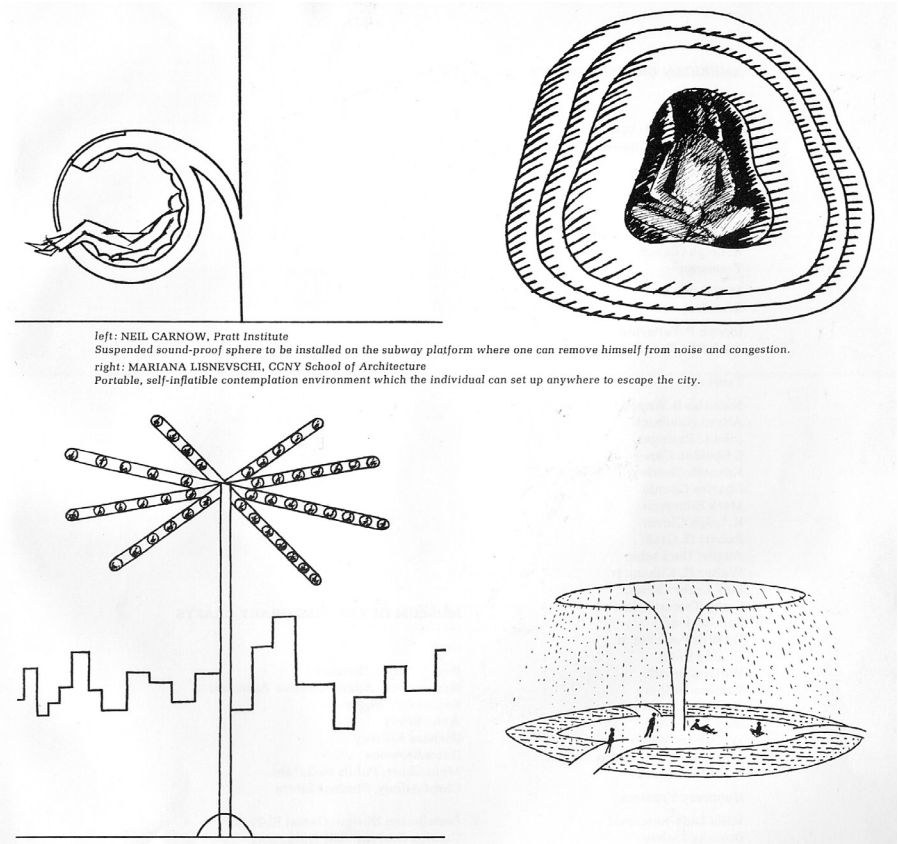
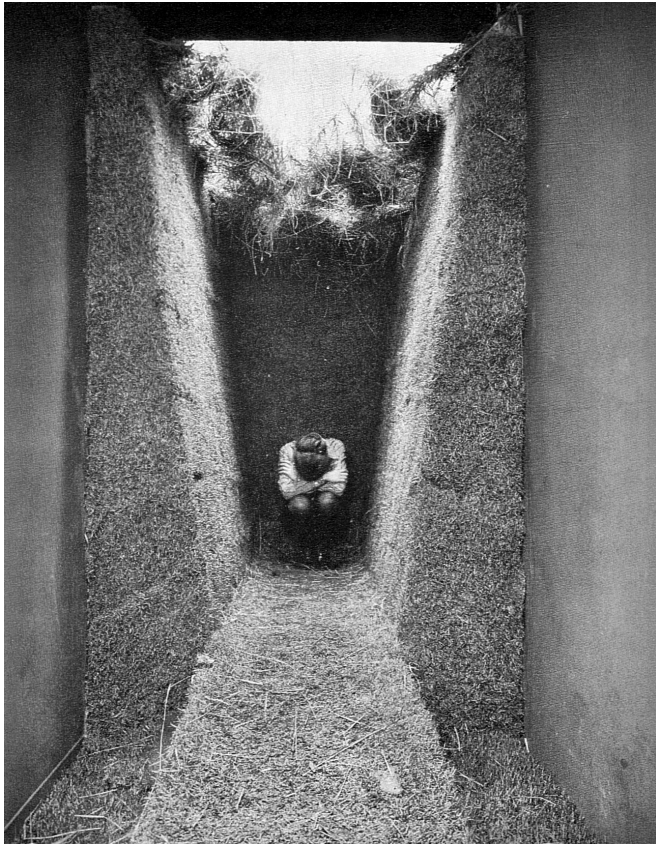
Evidenced here is a great body of theoretical literature that aligns Western philosophical thought with Eastern traditions of meditation and contemplative practice. These lines of thought also suggest that architectural spaces can be a contributing factor in assisting the self-reflective practice of becoming aware of our being and the actuality of the present moment. The introduction to the exhibit *Contemplation Environment* at the Museum of Contemporary Crafts was dedicated to examining a range of physical surroundings which elicited a ‘contemplative’ response. The exhibit presented a wide range of architectural installations that sought to create “a kind of ineffable presence in architectural space itself which exerts a quieting, peaceful influence on the mind and emotions of the individual who enters it”<sup>21</sup> (Smith, 3).

In addition to creating a sense of place, these early works of architectural installation were questioning the ways in which the scale and quality of space that we occupy effects our behavior and presence.



Figure 26 - Varieties of contemporary architectural installation work.

Installation art: “a genre of 3-dimensional work, often site-specific, and designed to transform the perception of space”.<sup>22</sup>



Figures 27-29 - Architectural Installations, Early Precedents:  
Contemplation Environments at the Museum of Contemporary Crafts, 1970.

## Design Informing Experience and Expanding Behavioral Choice

If an architectural installation shall spark a conversation about the nature and use of urban public space, what sorts of concerns shall it address?

This section surveys prevalent literature and theories that define human-scaled place, the benefits of partaking in contemplative practice, the nature of contemplative space, and attributes of successful places for social interaction. Consideration will also be given to qualities of environment and atmosphere that are associated with facilitating these activities or states



Figure 30 - Project: numen / for use. Title: Net.

Figure 31 - Henrique Oliveira. Wood Tunnels Art Installation

of being. These qualities will be analyzed by their functional place-making attributes and their performative characteristics.

Lindsay Jones describes the relationship between physical forms of architecture and personal experience as a reciprocal relationship. Even as the visitor who occupies a space activates the work with presence, the built work itself informs the occupants behavior and state of being. She describes one such possible relationship as a ‘contemplation mode’, in which “built forms serve as props for reflection”, such that the occupants engage with the qualities of space “in direct and purposeful ways as objects of sustained, often meditative, attention”<sup>23</sup> (Jones, 170-171).

Jones is specifically interested in exploring a contemporary architecture that nurtures a contemplative experience, however, the self-reflective process that she describes is also a necessary component of the process by which we ascribe a sense of place to any location. Moreover, both contemplative and more socially interactive spaces will offer cues for action and behavior. This correlation between environment and response is heightened in the work of an architectural installation since the installation is creating a context for self-consciousness about one’s perceptions and responses. Peterson contends that as the built environment prompts the perceiver/actor to actively and continually reorient their perception and bodies, it “sharpens the viewer’s consciousness of the way the body navigates in and finds its way through the work, i.e. of the phenomenological dimensions of the experience

of a work of art and the part played by subjectivity as a precondition of aesthetic experience”<sup>24</sup> (Peterson, 210).

In his discourse regarding ‘sacred space’, Pallister also examines the role of architecture in framing perception and influencing behavior. He draws comparisons between sacred spaces, such as churches or chapels, and contemporary spaces such as libraries, museums or memorials. He asserts that these sorts of spaces provide a container for a gathered community in which “there come to exist shared norms, taboos, [and] expected forms of behavior”<sup>25</sup> (Pallister 27). He and others agree that there is a positive correlation between the physical manifestations of a space and the normative behavior of that place. It is this sort of relationship that physical theater leverages in its use of scenic and architectural elements on stage. The same type of associations can be observed when architectural components or installations are placed in the public domain.

The nature of the installation will influence the behavior of those who pass by or dwell in the place. The perceiver/actor engages with the work in a manner that is not wholly random or improvisational, rather, it is informed by the nature of the design, as well as by the aura and atmosphere of the space (Peterson, 222). Peterson extends this argument by claiming that since the perceiver/actor is self-reflectively aware of their perception and embodied response, and that engaging with the work takes place in a public situation, encountering a work of installation art is

a performative act<sup>26</sup> (223). Furthermore, this cycle of participating and viewing in public not only gives us information about social norms of behavior in particular places, but also generates inspiration for choice and action<sup>27</sup> (Gehl, 21).

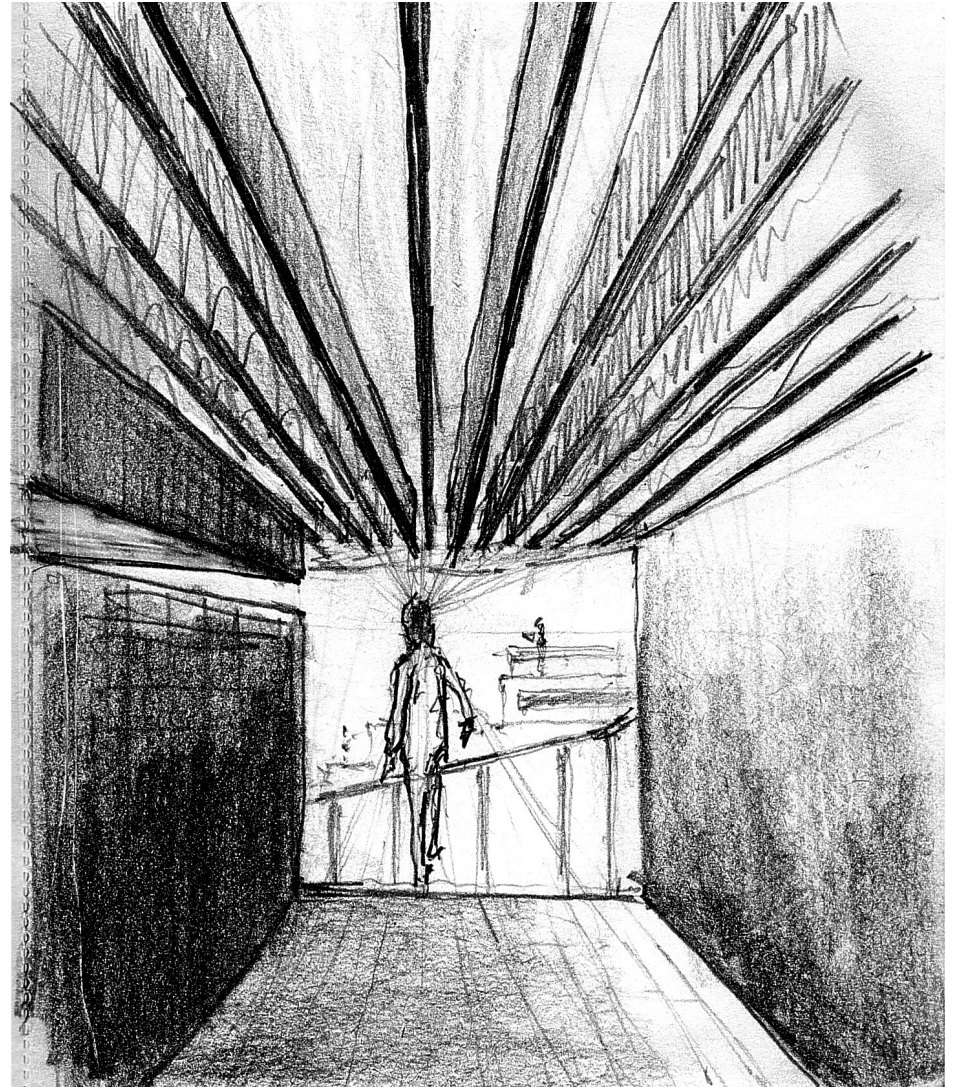
These arguments all concur that an activated public space is categorically a performative space.

## Performative Space: Embodied Perception as an Active Process

The psychologist J.J. Gibson has been instrumental in transforming the way we think about the human perceptual mechanism. Contrary to his contemporaries, Gibson argued that “perception is direct, not mediated by sensations. He rejected the view of perception as a passive process; instead he proposed that animals actively seek information through exploratory movements”<sup>28</sup> (Covarrubias, 70). Gibson also considered perception as a process that can not be understood without considering the environment of the perceiver. “No hard demarcation exists between the observer and the environment; they are interdependent and complementary”<sup>29</sup> (Robinson, 18). The term that Gibson came up with for describing this interconnected relationship was ‘nesting’. He describes this with a metaphor, “boulders and soil are nested within canyons, which in are in turn nested within mountains”<sup>30</sup> (Gibson, 9). This concept can assist us with understanding why appropriate proportions and scale are critical in determining how we will feel in a place and whether we will choose to occupy or rather pass through.

Similarly, theorist Valentina Croci in her research about interactive design installations asserts that the way we negotiate social space is through the use of a sense gathering mechanism. She contends that “humans and their sensory experiences are thus at the centre of an architectural project that is part of a new phenomenology where built space is based

on investigating sensations and relations between people”<sup>31</sup> (122). This line of theory supports the view that the fundamentals of physical theater can assist with the understanding and design of public architectural installations.



## Sensing and Responding

*“All knowledge rests on sensitivity.”*  
J.J. Gibson

Space is enhanced by movement and dwelling. Any work of performance art is fundamentally driven by fostering the skills of sense perception and the ability to turn these perceptions into compositional choices.

The same principles are active whether we are examine theatrical space, architectural space or public space. Judson School composer Robert Ellis Dunn is considered to be the teacher responsible for bringing the postmodernist and deconstructionist thinking of John Cage to the composition of dance and physical theater.<sup>32</sup> (Bogart and Landau, 4)

One of Dunn’s fundamental exercises was to use a score that breaks down the performative event into a binary combination of two basic actions: moving through space, or, being in place. The juxtaposition of these two ways of being is recognizable in every theatrical performance. Likewise, the nature of a place evoking these two states of being are the roots of its characteristic phenomenological quality.

As we look further into what sorts of environmental characteristics will inform our emotional response and choice-making, we begin to consider aspects that contribute to the atmosphere and aura of a place. Kahn, Pallasmaa and Tanizaki write evocatively about light, shadow and place. Pallasmaa asserts that the characteristic light of a place is the most

significant factor in determining the spatial atmosphere and our emotional response to place; “light defines the atmosphere ... and is the most comprehensive criteria of its emotive character”<sup>33</sup> (23).

The qualities of an environment, its atmosphere and aesthetic characteristics, are key in providing us with cues for behavior in place. The word aesthetics derives from the Greek term for sense-perception, and connotes a longing for beauty. Gibson uses the term “affordance to characterize the attractive force with which beauty binds us to our environment. An affordance describes the possibilities for action that are latent in the environment”<sup>34</sup> (Robinson, 37). It follows that as environments are created with a valuing of aesthetic characteristics, and as we as perceiver/actors sharpen our perceptual mechanism, we will continue to discover a greater sense of self-agency and be able to make a greater range of possible choices involving a more finely tuned interaction between ourselves, our social context, and our environment.

## Classifying types of architectural installations in public space

Examining relevant contemporary public space installations here, an attempt is made to classify these works into categories.

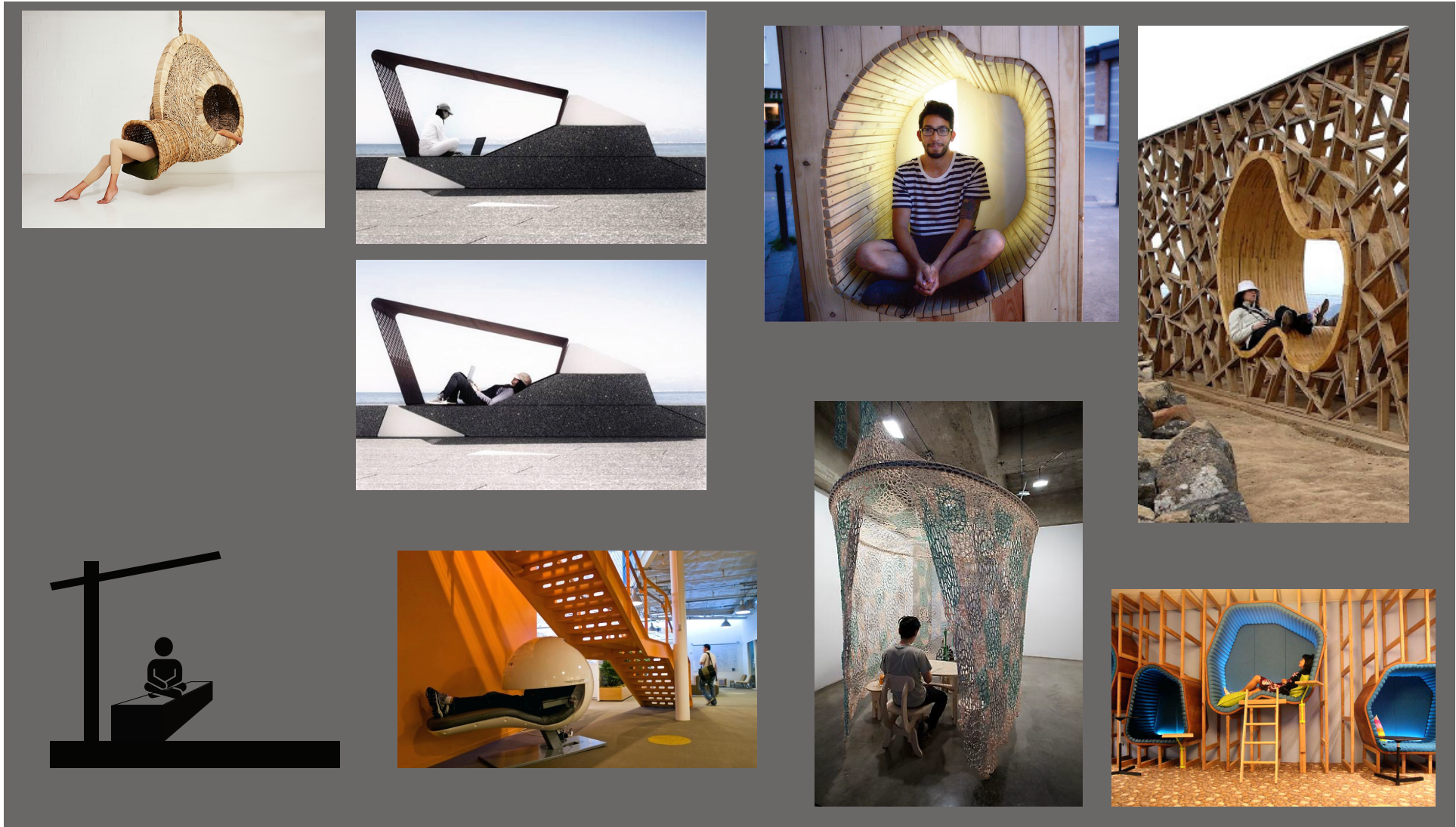


Figure 32 - Installations for Personal Refuge and Shelter

A strategy for ordering these installations began evolving: examining the relationship between the amount of shelter offered - and - the degree of social and spatial interaction encouraged by the scenography. Here we see works on one end of the spectrum: designed for one person and offering a significant sense of refuge and shelter.

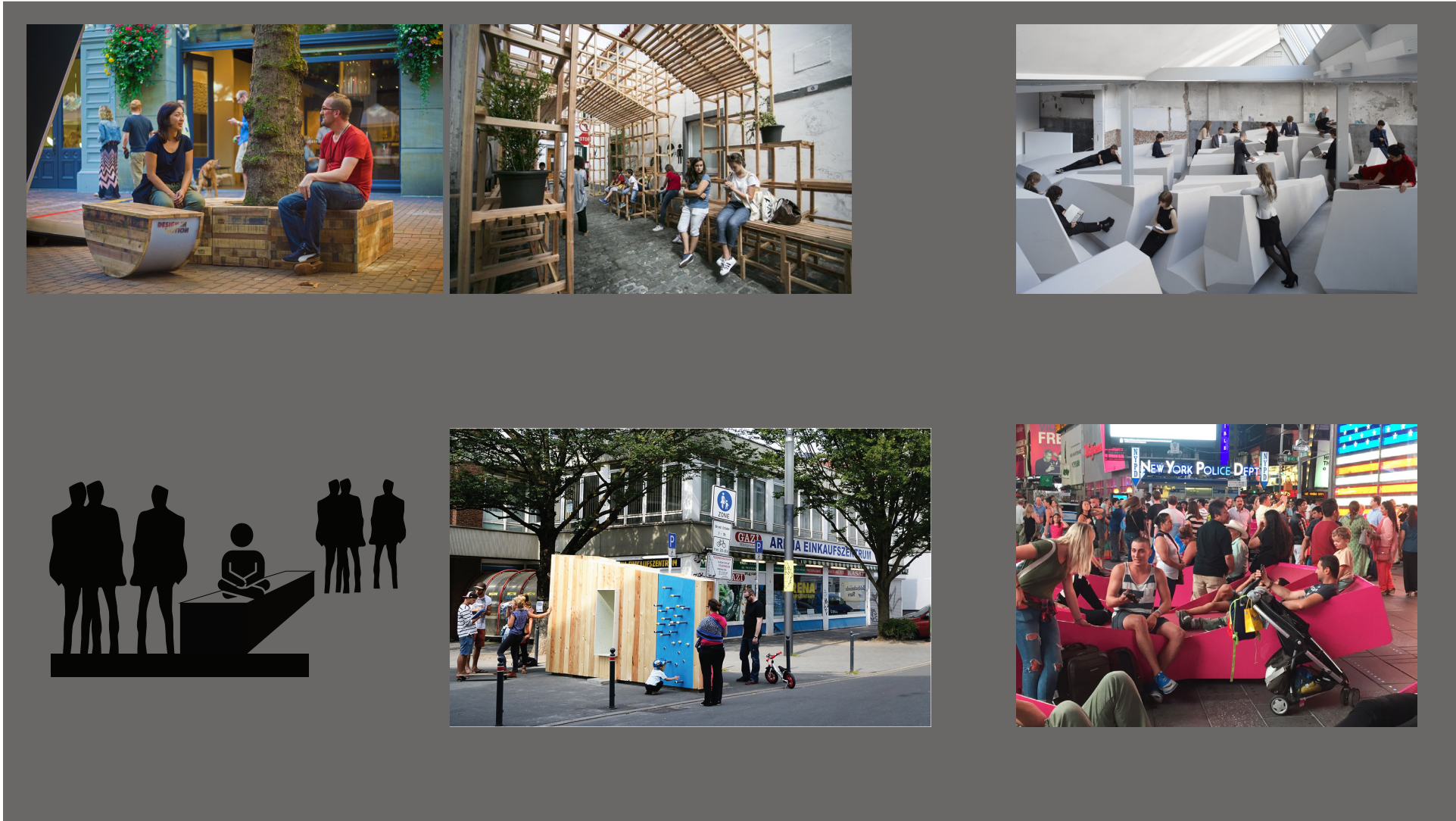


Figure 33 - Installations for Dwelling in the Midst of Others

Next we see works which offer less shelter and a high degree of engagement with the environment, and potentially with others. The works here seem to place the participant “on the stage” - to use the specific theatrical term, a “Thrust Stage”. As the name implies, the site is situated in the midst of a larger field of activity.



Figure 34 - Installations for Dwelling and Engagement with Others

Finally, here is a group of works which - although offering affordances of individual refuge - extend an attractive palette of choices for participatory engagement and propose a sense of community.















Protection	<b>PROTECTION AGAINST TRAFFIC AND ACCIDENTS — FEELING SAFE</b> <ul style="list-style-type: none"> <li>Protection for pedestrians</li> <li>Eliminating fear of traffic</li> </ul> 	<b>PROTECTION AGAINST CRIME AND VIOLENCE — FEELING SECURE</b> <ul style="list-style-type: none"> <li>Lively public realm</li> <li>Eyes on the street</li> <li>Overlapping functions day and night</li> <li>Good lighting</li> </ul> 	<b>PROTECTION AGAINST UNPLEASANT SENSORY EXPERIENCES</b> <ul style="list-style-type: none"> <li>Wind</li> <li>Rain/snow</li> <li>Cold/heat</li> <li>Pollution</li> <li>Dust, noise, glare</li> </ul> 
	<b>OPPORTUNITIES TO WALK</b> <ul style="list-style-type: none"> <li>Room for walking</li> <li>No obstacles</li> <li>Good surfaces</li> <li>Accessibility for everyone</li> <li>Interesting façades</li> </ul> 	<b>OPPORTUNITIES TO STAND/STAY</b> <ul style="list-style-type: none"> <li>Edge effect/ attractive zones for standing/staying</li> <li>Supports for standing</li> </ul> 	<b>OPPORTUNITIES TO SIT</b> <ul style="list-style-type: none"> <li>Zones for sitting</li> <li>Utilizing advantages: view, sun, people</li> <li>Good places to sit</li> <li>Benches for resting</li> </ul> 
	<b>OPPORTUNITIES TO SEE</b> <ul style="list-style-type: none"> <li>Reasonable viewing distances</li> <li>Unhindered sightlines</li> <li>Interesting views</li> <li>Lighting (when dark)</li> </ul> 	<b>OPPORTUNITIES TO TALK AND LISTEN</b> <ul style="list-style-type: none"> <li>Low noise levels</li> <li>Street furniture that provides "talkscapes"</li> </ul> 	<b>OPPORTUNITIES FOR PLAY AND EXERCISE</b> <ul style="list-style-type: none"> <li>Invitations for creativity, physical activity, exercise and play</li> <li>By day and night</li> <li>In summer and winter</li> </ul> 
Delight	<b>SCALE</b> <ul style="list-style-type: none"> <li>Buildings and spaces designed to human scale</li> </ul> 	<b>OPPORTUNITIES TO ENJOY THE POSITIVE ASPECTS OF CLIMATE</b> <ul style="list-style-type: none"> <li>Sun/shade</li> <li>Heat/coolness</li> <li>Breeze</li> </ul> 	<b>POSITIVE SENSORY EXPERIENCES</b> <ul style="list-style-type: none"> <li>Good design and detailing</li> <li>Good materials</li> <li>Fine views</li> <li>Trees, plants, water</li> </ul> 

Figure 36 - Jan Gehl: 12 Criteria Concerning the Pedestrian Landscape

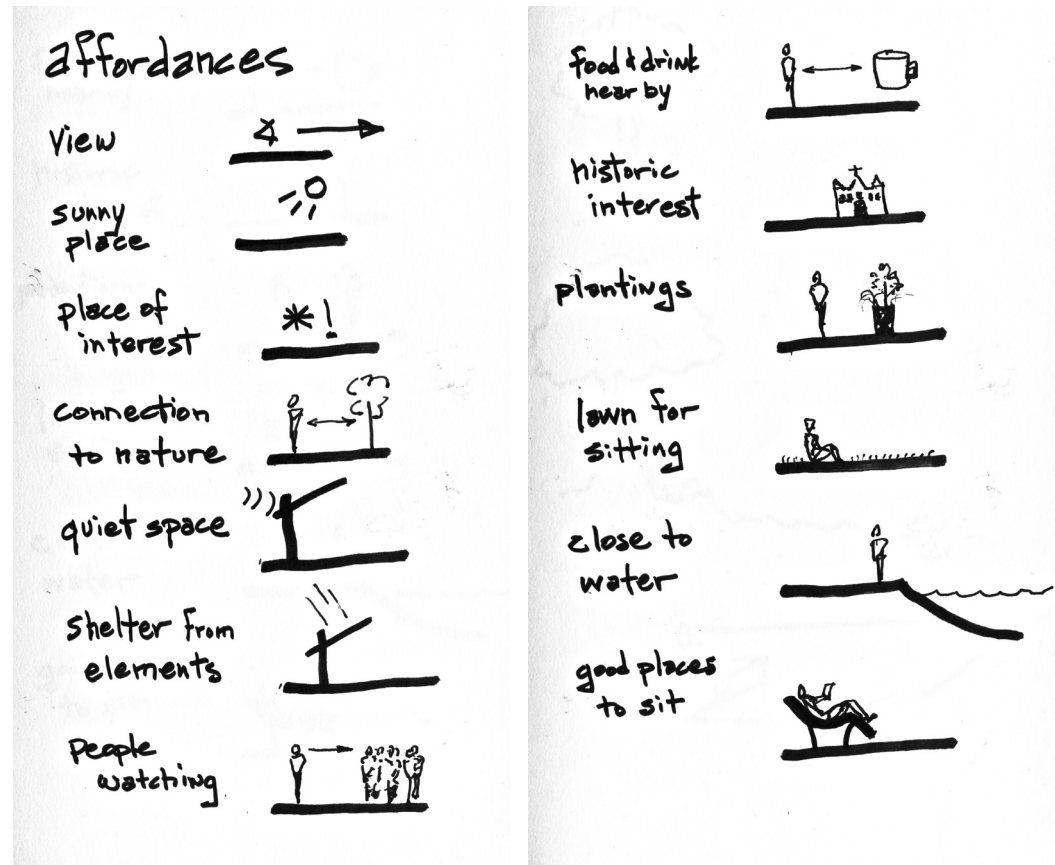


Figure 37 - From notebook: identifying affordances during site visits

## The Study of Public Space

In addition to considering built work, it is important to delve into established theories and methods for studying public life in the city. Jan Gehl asserts that, although the character of public life transforms with societal changes, “the essential principles and quality criteria to be used when working for human quality in the public realm have proven to be remarkably constant”<sup>35</sup> (Gehl, 7) In *How to Study Public Life*, Gehl offers practical tools for observing the interaction between public life and public

space. Concurring with Perce and Jacobs, he encourages awakening unfiltered perception, reflecting on sense data, and writing down fleeting impressions of unfolding public activity. Gehl encourages the activities of counting, mapping, tracing, tracking, photographing, writing and walking as one seeks to understand public space. In the spirit of these strategies, I began to categorize environmental affordances of underutilized sites in the downtown core, taking many photographs, and making various maps and diagrams of spatial conditions.

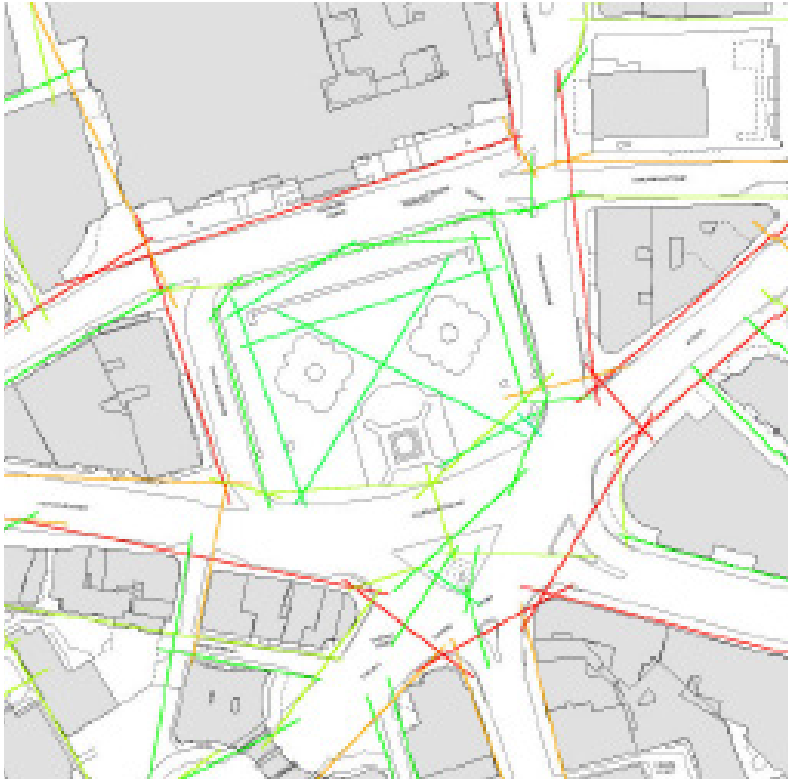


Figure 38 - Space Syntax: Study for Trafalgar Square: Pedestrian travel before addition of new grand staircase.



Figure 39 - Space Syntax: Study for Trafalgar Square: Pedestrians after intervention: red dots = dwelling / blue lines: walking.

## Technologies for Scenographic & Choreographic Analysis

Another important contemporary approach to analyzing the use of public space is the work of Space Syntax, founded by Bill Hillier and colleagues at The Bartlett in London. Space syntax is a science-based, human-focused approach that investigates relationships between spatial layout and such phenomena as patterns of movement, awareness and interaction. This approach has been used by many architects and urban designers

to analyze sites before considering design interventions. It is also used widely by universities. The work relies on manual data collection, quantitative analysis, and geospatial information technologies.

# Synchronous Objects Project

In the past years there has been highly innovative work being done in the field of choreographic analysis. The images on this page are drawn from the Synchronous Objects Project - a cooperation between Ballet Frankfurt and Ohio State University - one of the leading precedents in the field.



Figure 40 - Video Abstraction Tool. “These filters affect aspects of time and space, creating powerful visual imagery.” In this example, ‘visual noise in source video is amplified, filling screen with information. The actors movement ‘carves away’ at the volume of noise, creating a series of shifting, temporary voids.” This representation shows the dynamic boundaries of habitation.

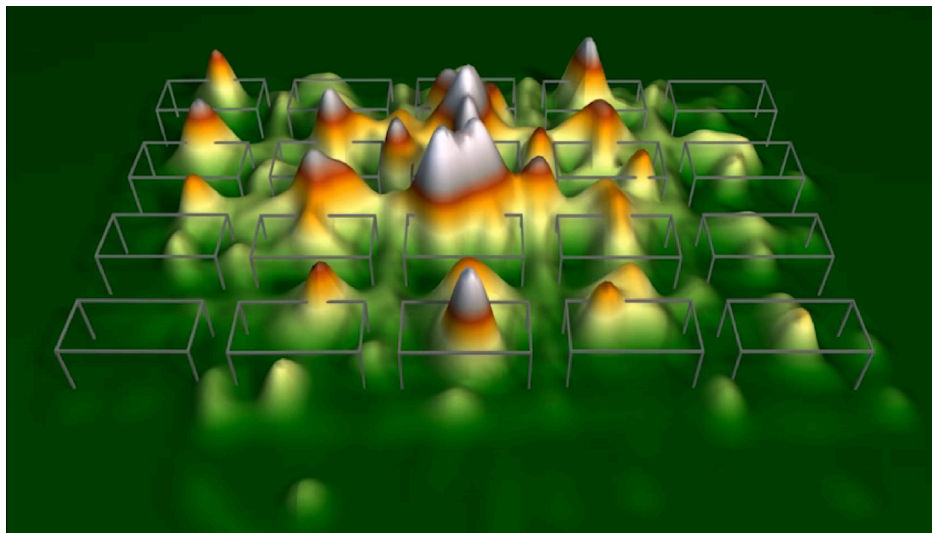


Figure 41 - Movement Density Tool. Developed in collaboration with geographers, this tool creates a landscape of duration of dwelling in place.

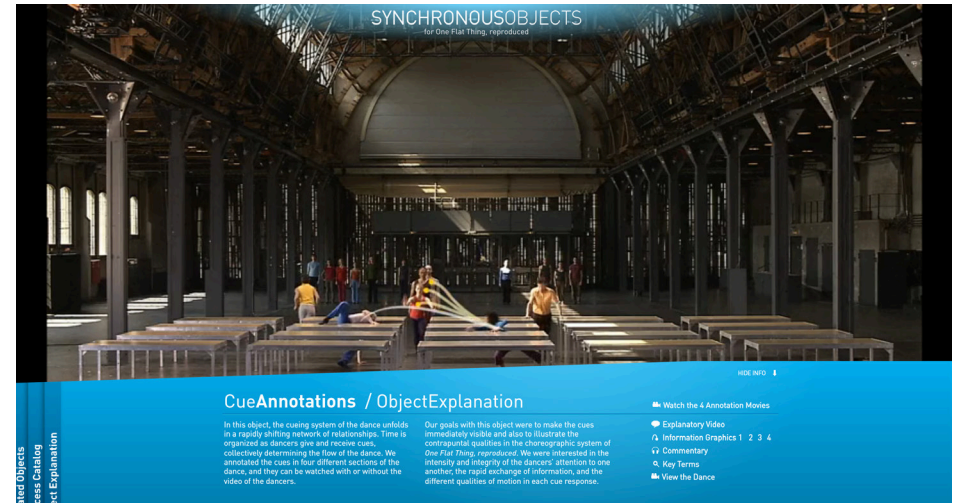


Figure 42 - Cue Annotation Tool. This tool assists in visualizing a dancers attention, communication and connection with others.

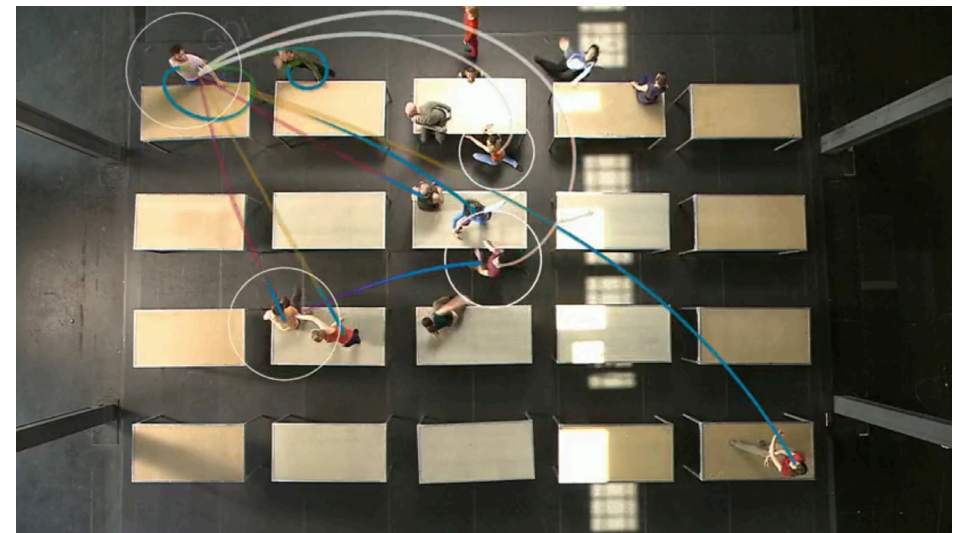


Figure 43 - Cue Annotation Tool. The same tool when used with a camera from above.

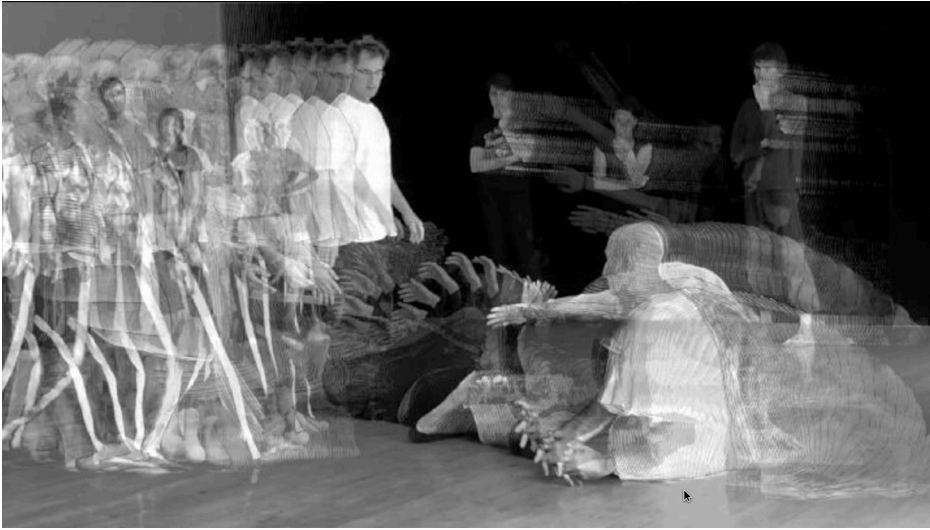


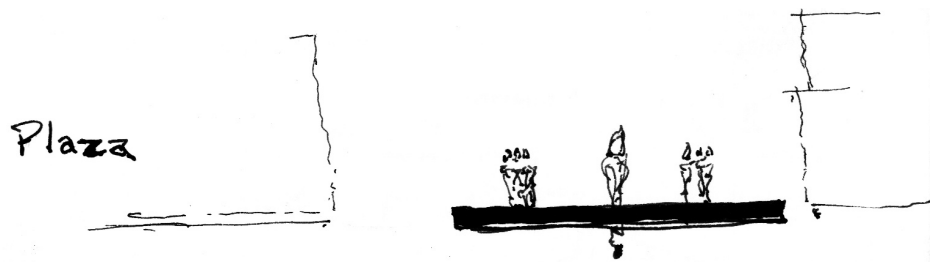
Figure 44 - Movement traces showing choice-making in response to spatial and proximity cues with others.

On the left, we see a video still created by filtering video material through the Video Abstraction Tool - a Synchronous Objects tool employed to study patterns of movement, communication and interaction. This tool is used with studio choreographic work to analyze spatial relationships and proximity choices that actors make while navigating social and movement situations. On the following page we see the tool being applied to site specific choreographic examples. This approach can make meaningful contributions to the study of public space, and the effect that ephemeral and more permanent architectural installations can have on a space.

Scott deLahunta describes how these tools are gaining value: attracting attention from other fields by becoming “a valuable resource for a researcher seeking insights in the interstices between knowledge disciplines”<sup>36</sup> (deLahunta, 54). Describing the potential of these tools, he remarks that although the dance itself ‘disappears’, what remains is more than a ‘trace’, it is compressed information, a generative resource that can be transmitted and disseminated. The aim of this field of work is to create effective graphic visualisations that can contribute to the building of knowledge and the development of methodologies not only in the field of performance, but in any knowledge discipline. There is considerable interest in what these graphic artifacts can reveal about “human perception in complex environments and complex systems of interaction”<sup>37</sup> (Shaw, 60).

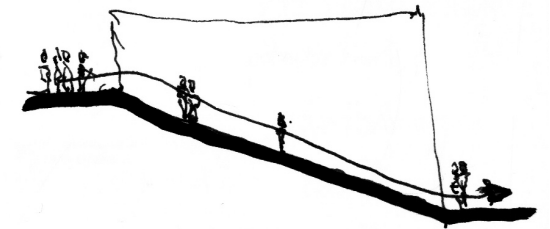


Figures 45-46 - Exploring site specific work at the Mercer Slough in Seattle.

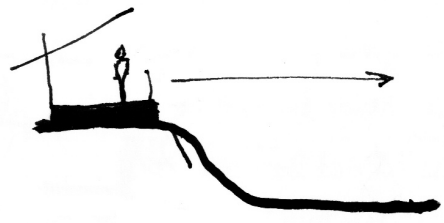


Plaza

THROUGHWAY



VIEWPOINT



COURTYARD

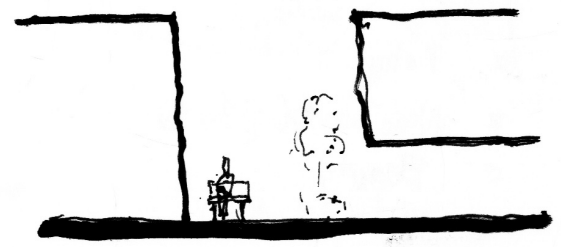


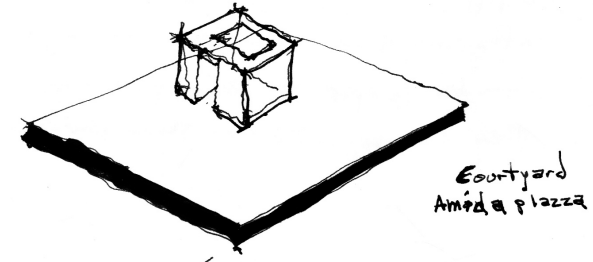
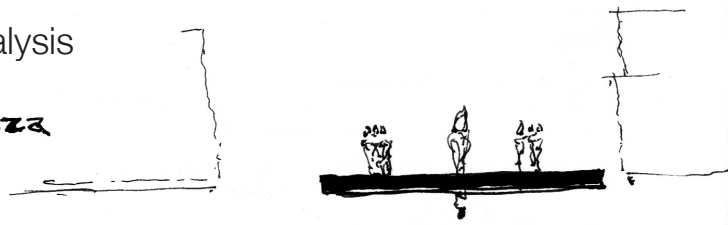
Figure 47 - Four types of public space.

### Spatial and Site Analysis

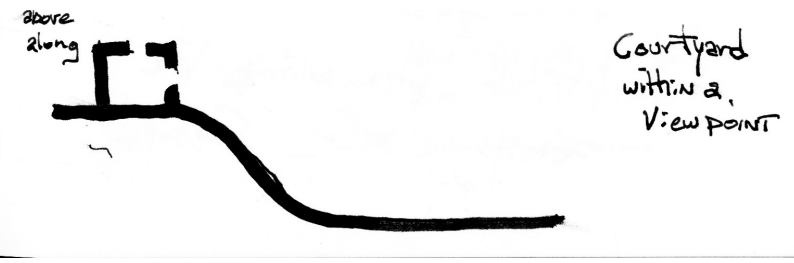
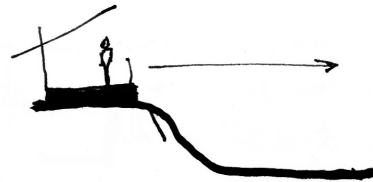
During my initial site visits and analysis I began to focus more specifically on Privately Owned Public Spaces, looking for a simple ways to categorize the sorts of spatial conditions I was finding. These four simple categories provided a manageable and productive way of speculating about possible interventions.

Site Analysis

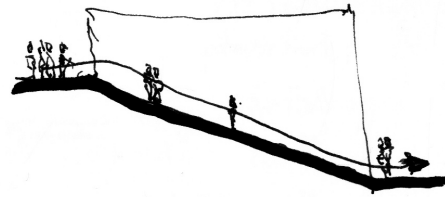
Plaza



VIEWPOINT



THROUGHWAY



COURTYARD

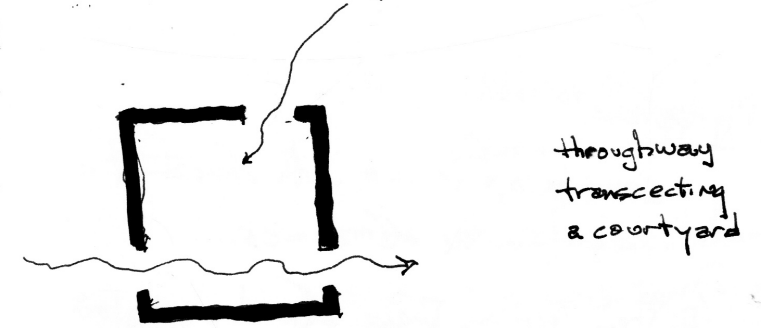
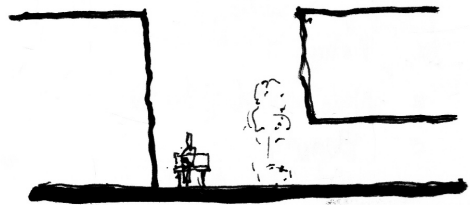


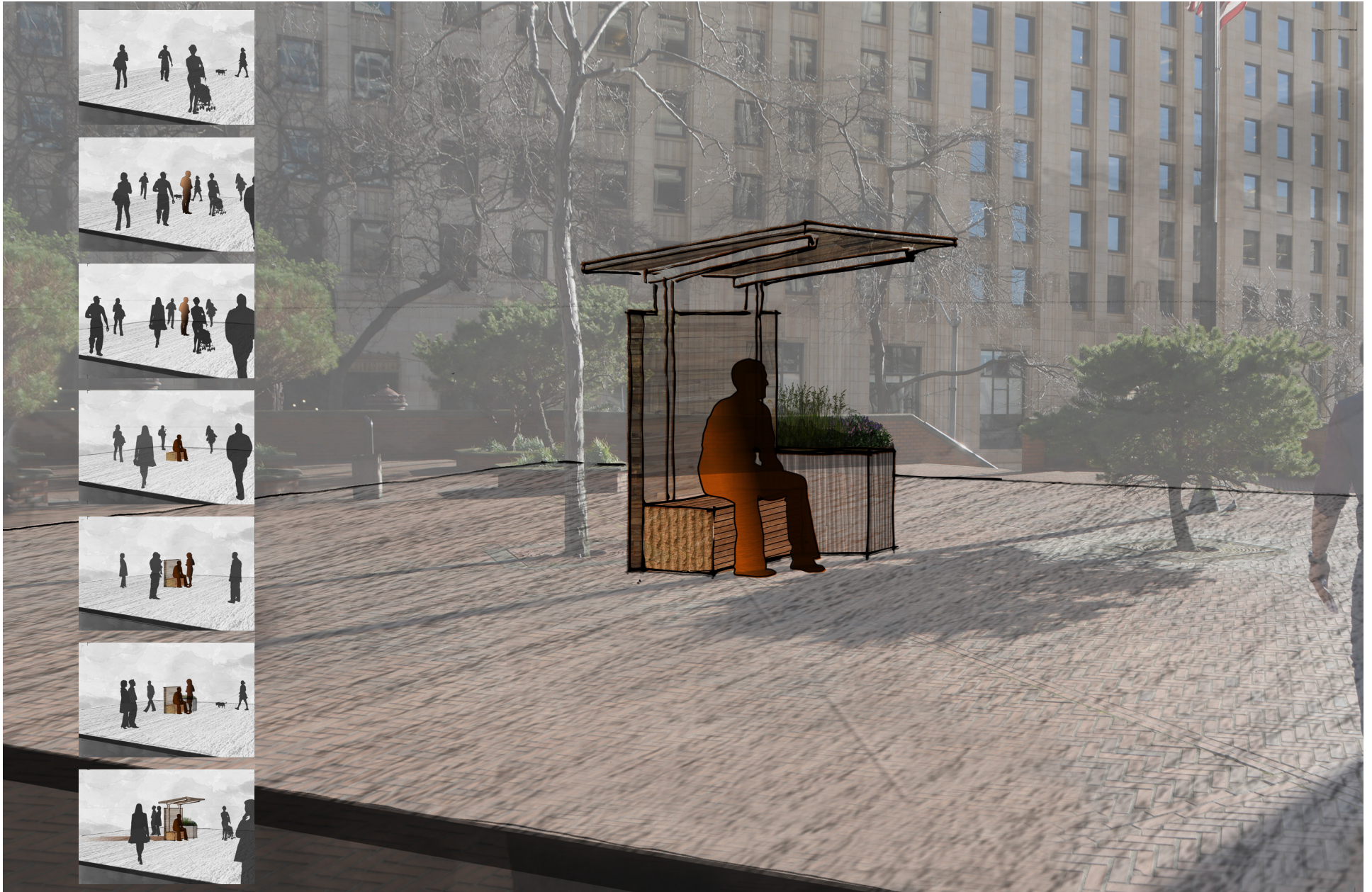
Figure 48

One such speculation was to consider the results of combining types in one site. This simple typing helped to clarify certain conditions. For example, a viewpoint already affords a sense of place. The question there might then be: how to offer more choice and add human-scaled elements. In a throughway, the issue may be more about creating niches or 'eddys' for pause and dwelling.



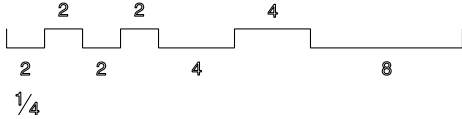
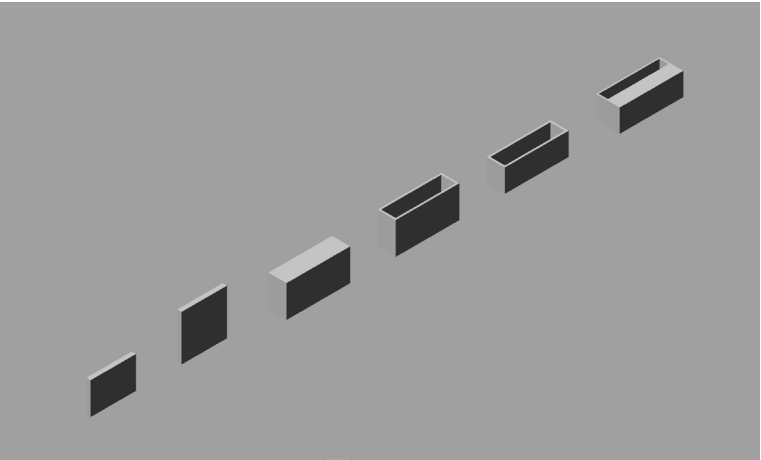
Figure 49: A privately owned public space in Seattle

This Seattle site is indicative of an underutilized place with abundant environmental affordances. In this case, an open plaza with a minimal set of objects for creating human scale. This thesis proceeds into the design phase by asking: what strategies might be employed here with the aim of activating the space - scaling and furnishing this largely undifferentiated space - to create a scenography for dwelling?



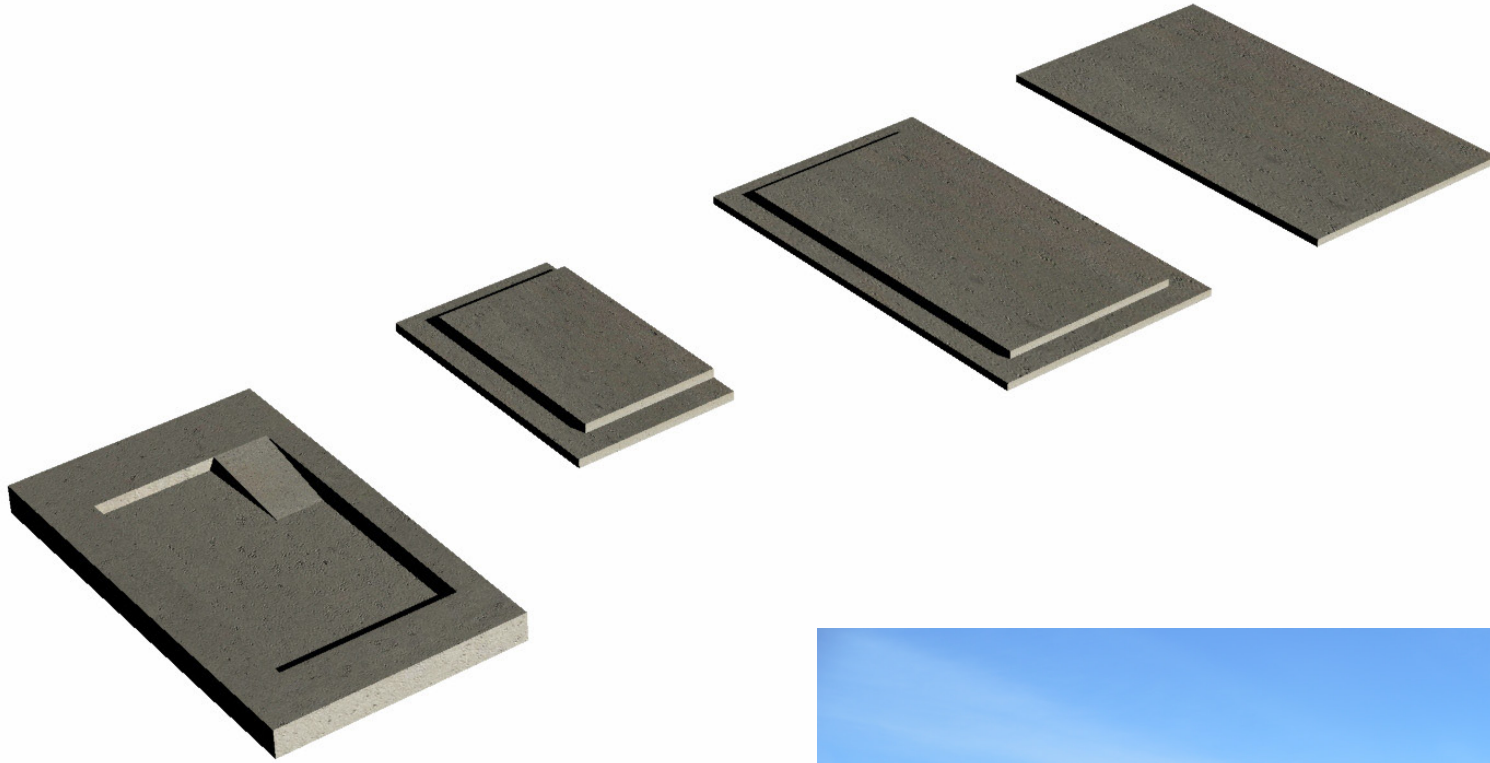
I began to ask, “what might a basic set of architectural components for creating interventions in Seattle’s public spaces look like? This led to an examination of typologies for basic base planes, vertical planes, overhead planes and seating elements with the question of human scale and modularity in mind.

# Typologies for Urban Scenographic Intervention



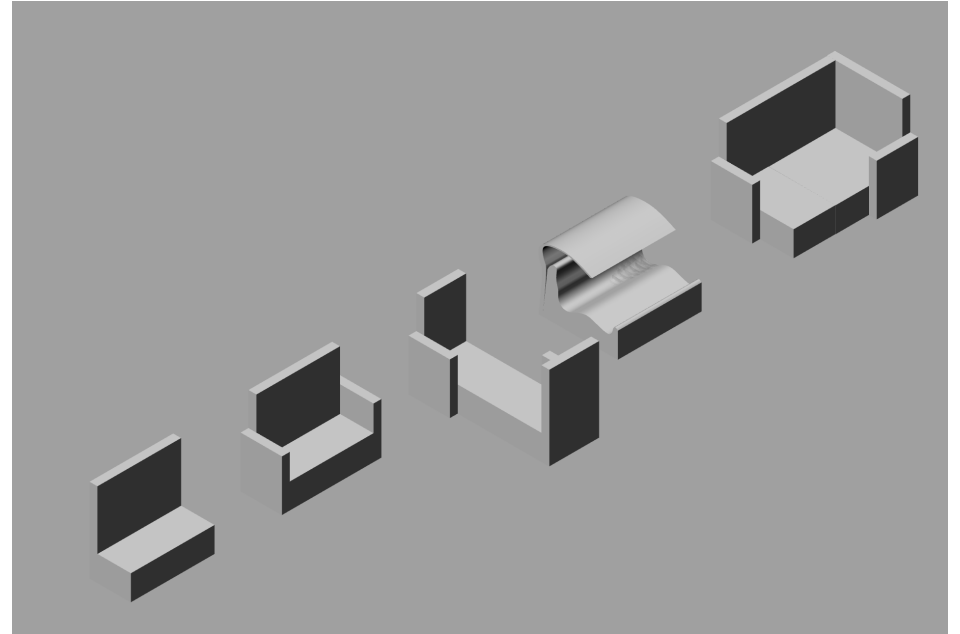
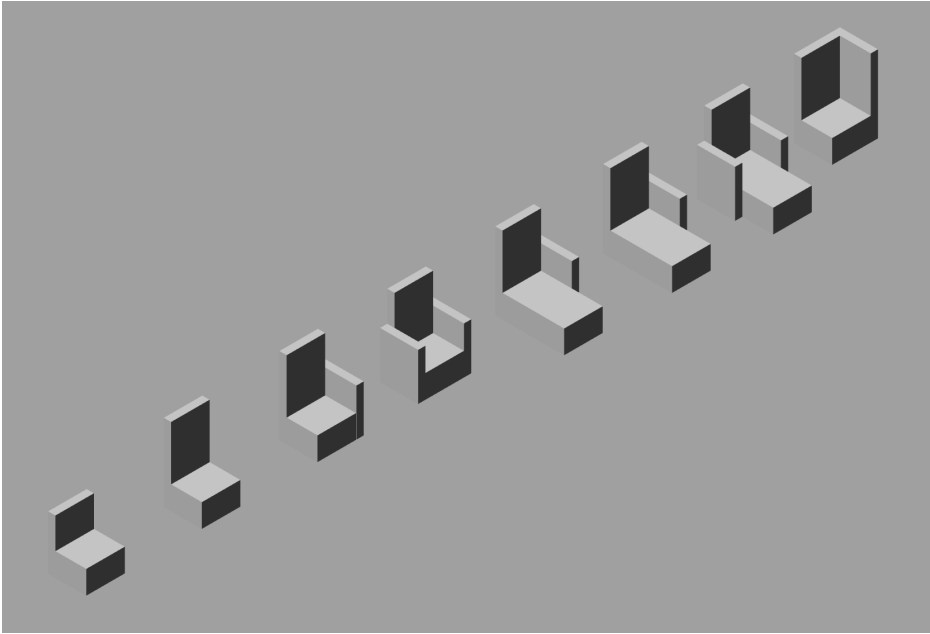
Simple Wall Typologies  
 Variations based on human scale, opportunities for seating and vegetation

## Places within Places

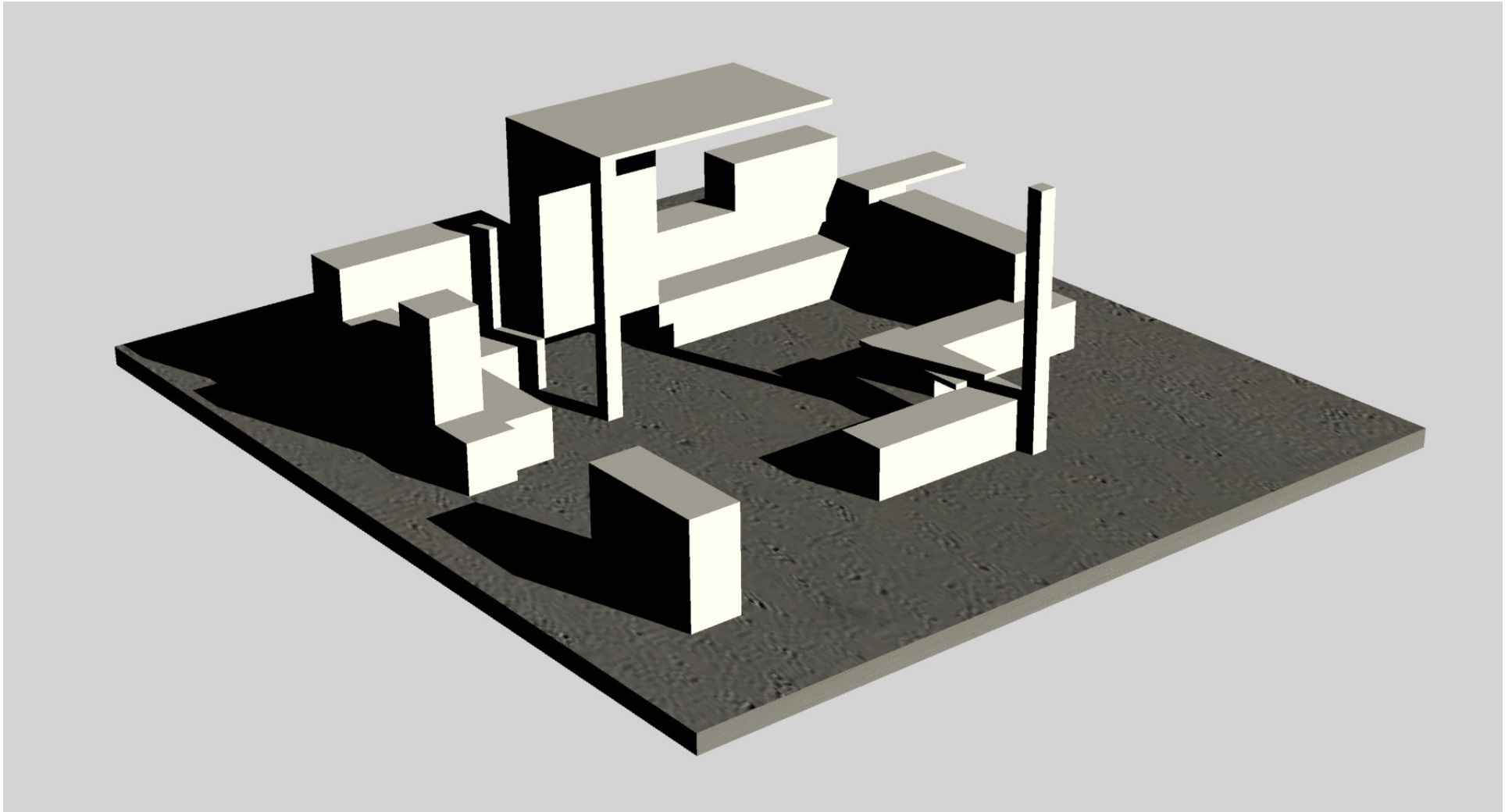


Figures 53-54. Gasworks Park, Seattle. Designer: Richard Haag. The simple elevated base plane creates a stage embedded in the viewpoint. It illustrates how a simple set allows the perceiver/actor to make choices about occupation. This element sometimes becomes the 'stage', while at other times it becomes the 'house' or seating area for spectators.

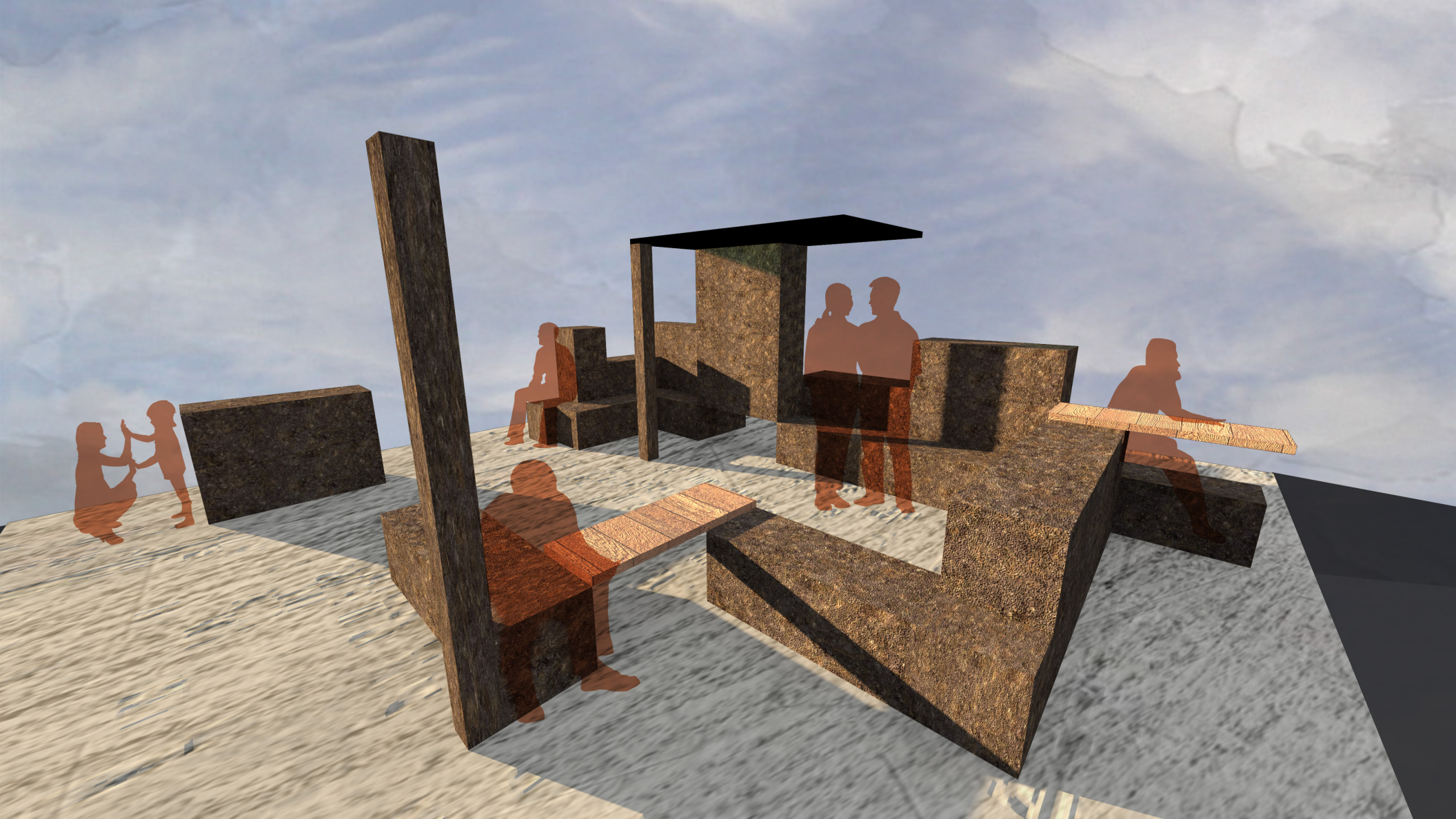
## Places within Places



Figures 55-56 - An exploration of how basic seating forms can be combined with vertical elements to increase the amount of refuge and comfort.



Figures 57 - One example of iterative studies in combining basic components to form larger modules that provide multiple levels, multiple orientations and embedded places of refuge.

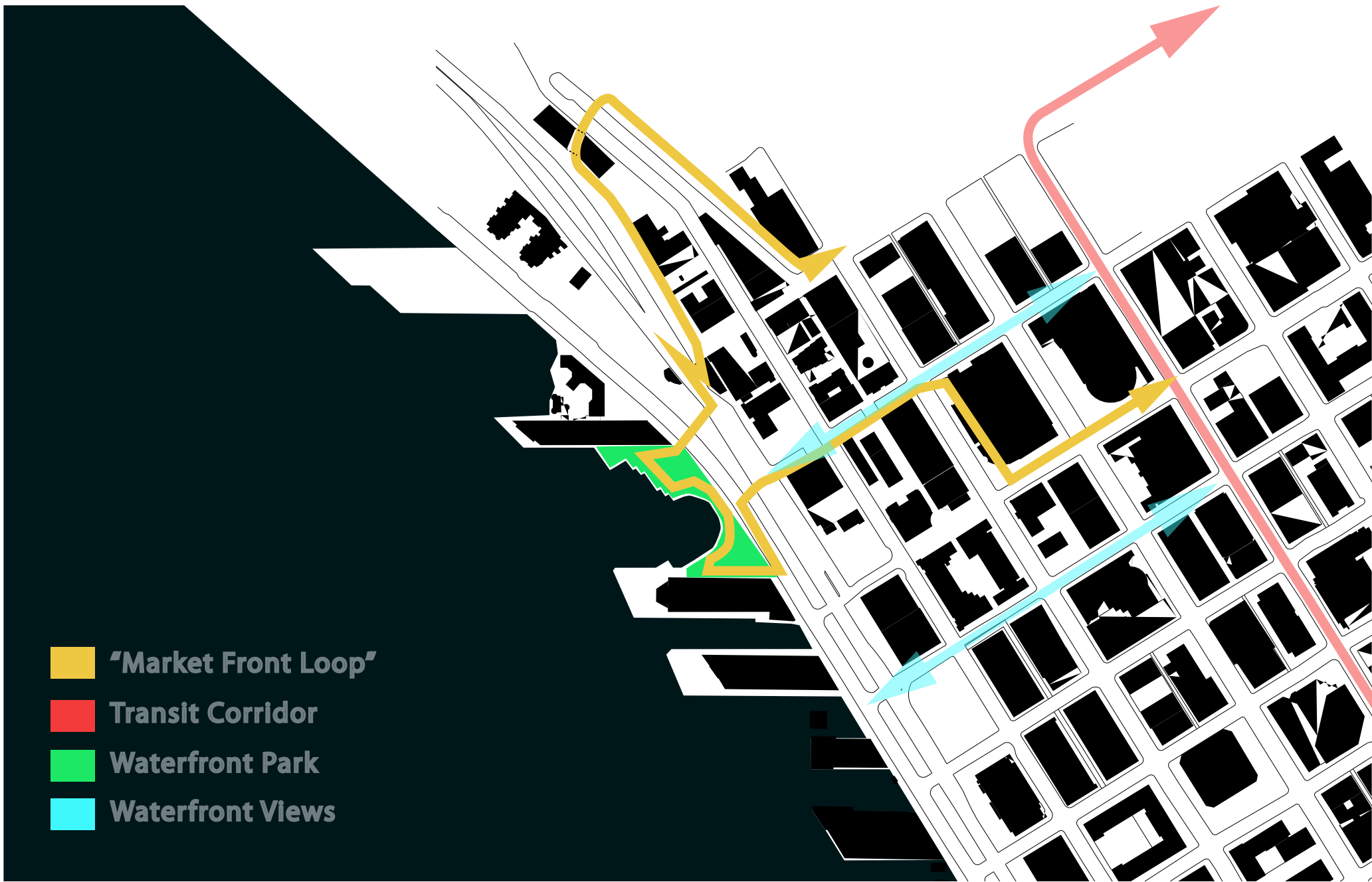


Figures 58 - The same example rendered to envision the scenography's potential for dwelling and connection.

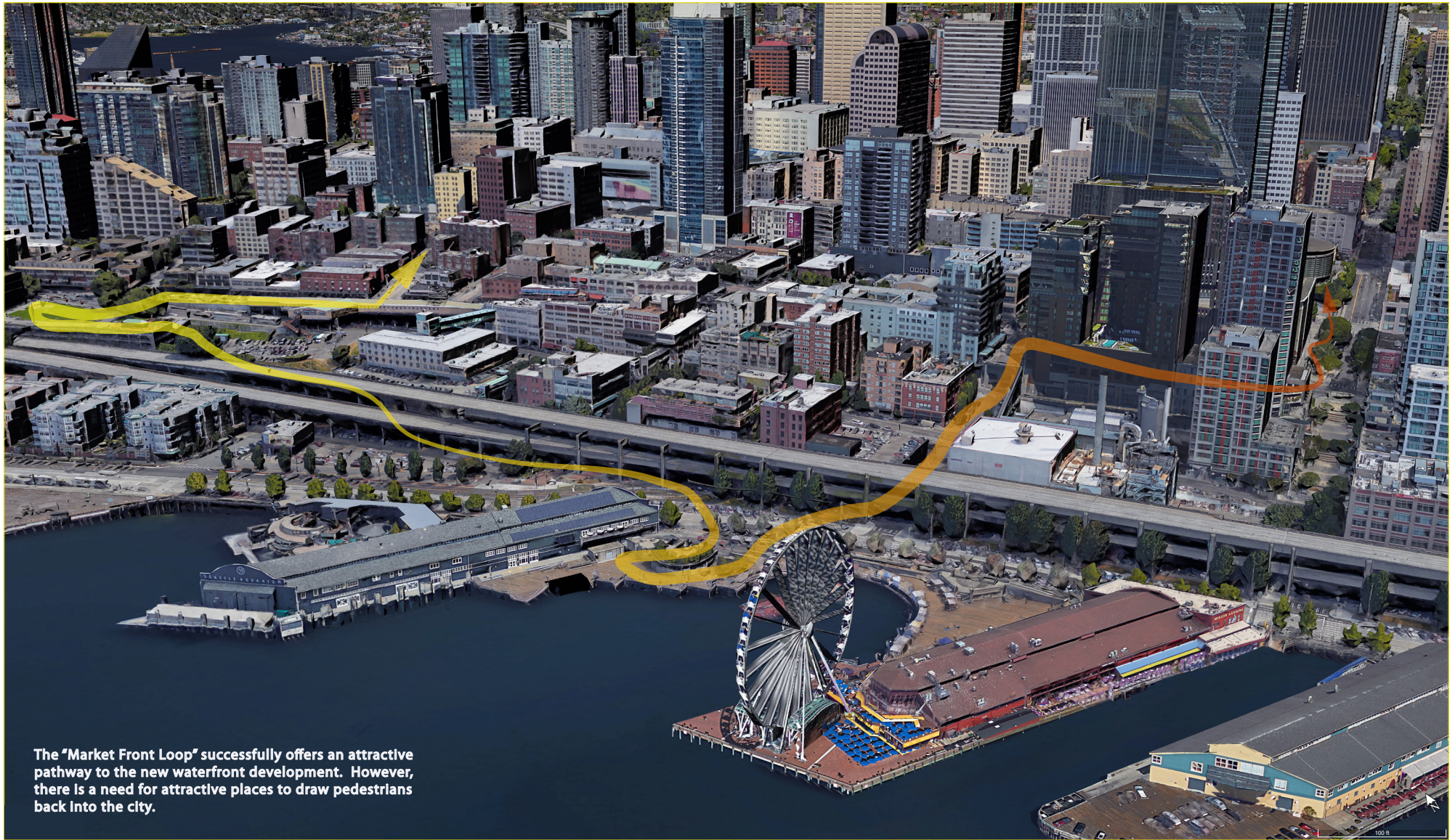


## Privately Owned Public Spaces

Figures 59 - Privately Owned Public Spaces within the field of study where analysis was done.



Figures 60 - Exploring “the market front loop”. The new Market Front project creates a terracing connection to the waterfront. I looked at several sites and interventions for attracting people back into the city - and to enhance the connection to the transit corridor.

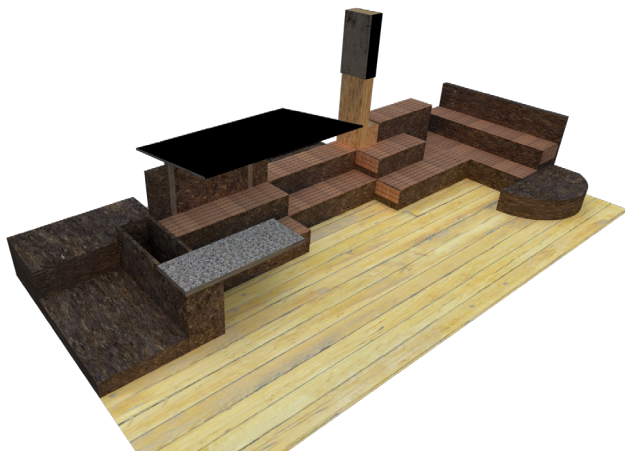
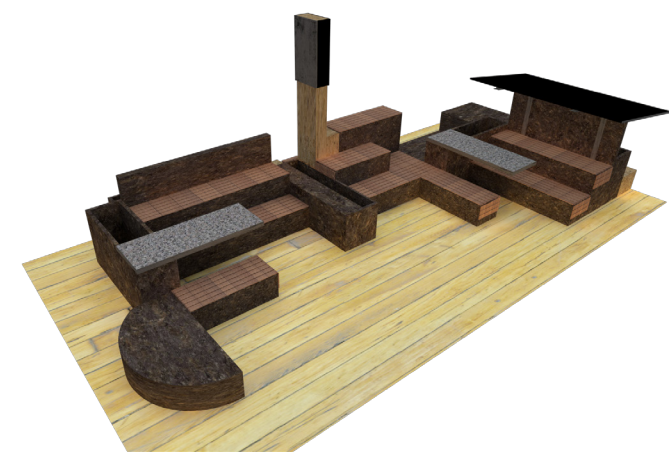
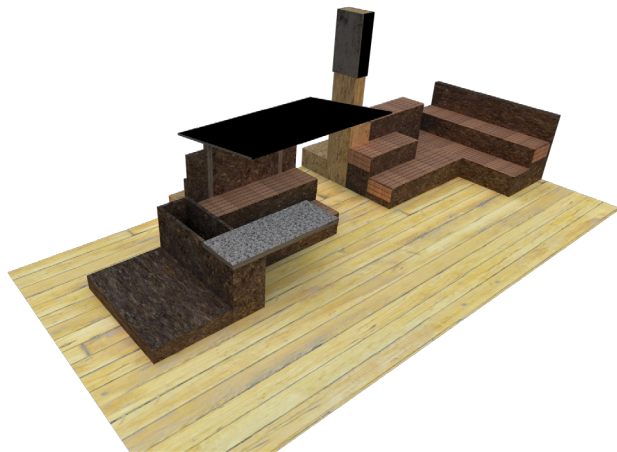
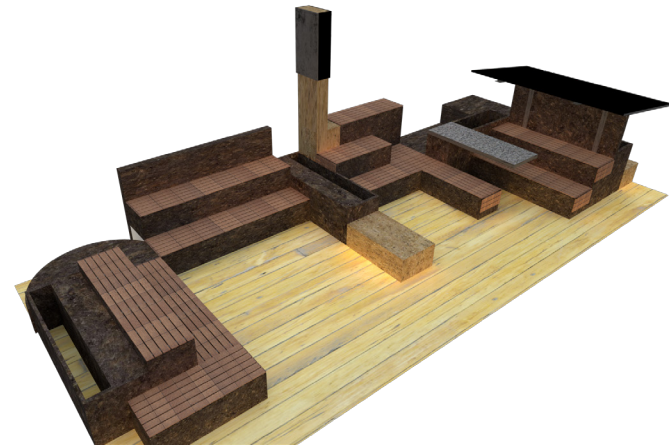
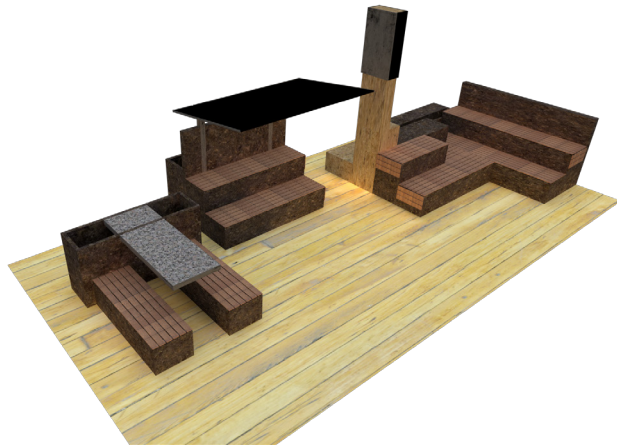


The "Market Front Loop" successfully offers an attractive pathway to the new waterfront development. However, there is a need for attractive places to draw pedestrians back into the city.

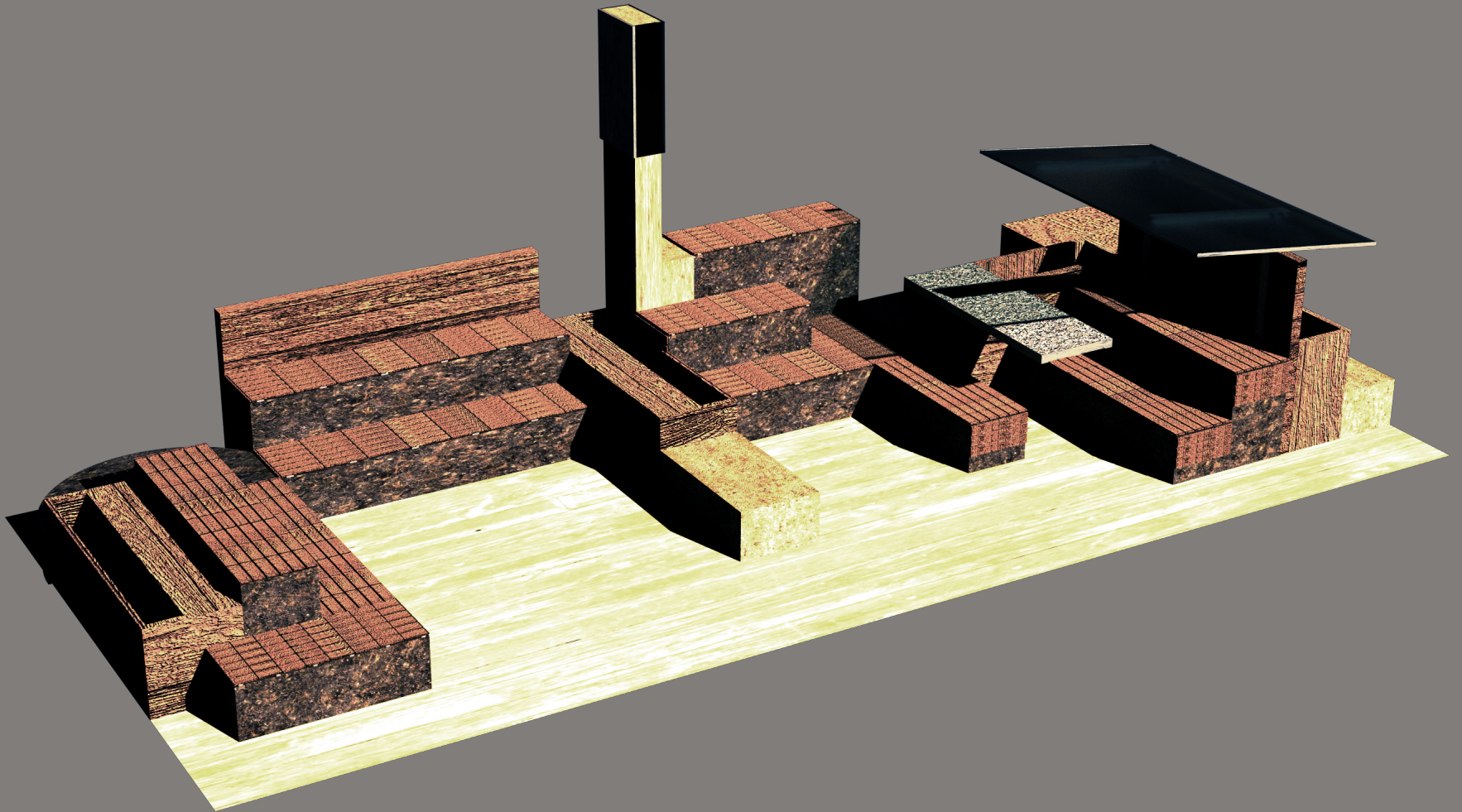
Enhancing the Market Front loop:  
Drawing people back into the city



Figures 62 - The terminus of Union Street in Seattle, which overlooks the waterfront, is a much loved place to linger. This place offers unrealized potential opportunities for shelter, vegetation, multiple orientations and levels. Such offerings would encourage greater choice-making, resulting in visitors identifying more with the place.



Figures 63-67 - Five iterative solutions. The strategy proposes beginning with a simple set of modular components installed at the site. The movement and dwelling of visitors will then be analyzed using the choreographic analysis tools described previously. Then, based on the analysis, refinements and/or additions will be made to the installation.



Figures 68 - Solutions are seen as temporal, responding to use and climatic variables.



Figure 69 - One of several iterations exploring offering further opportunities for dwelling.



Figure 70 - An image of the site inhabited.

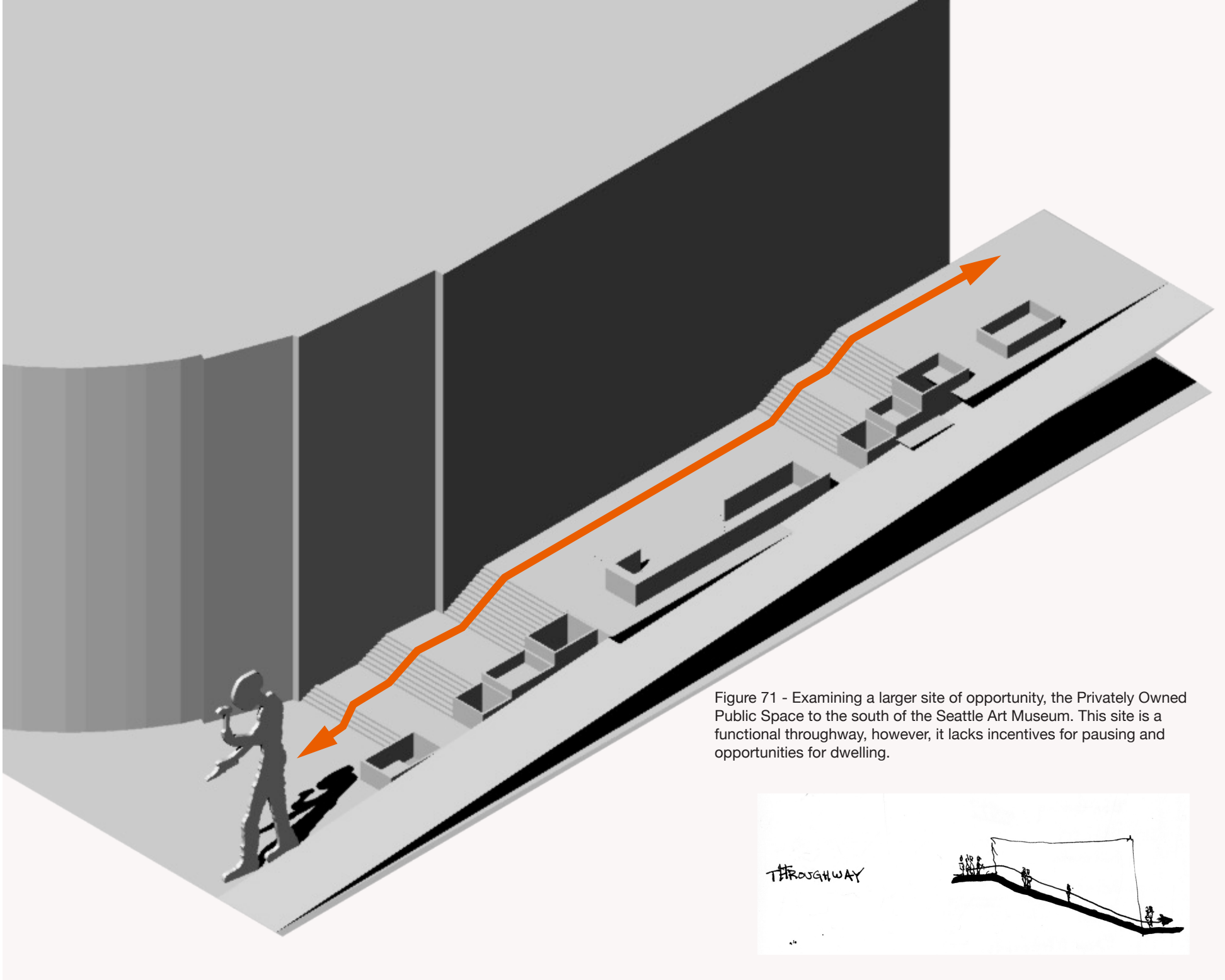
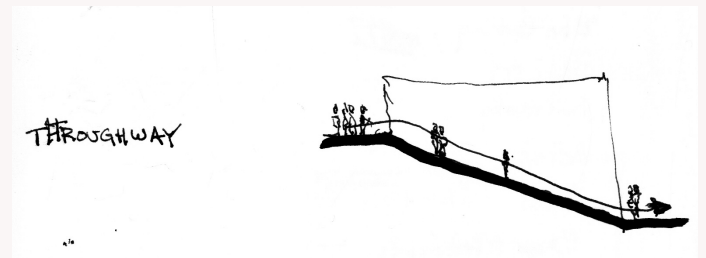
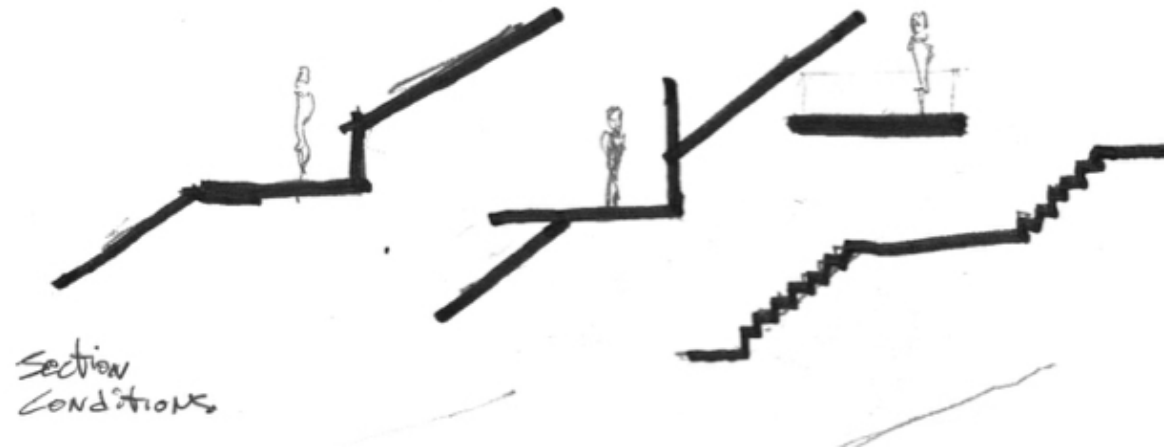
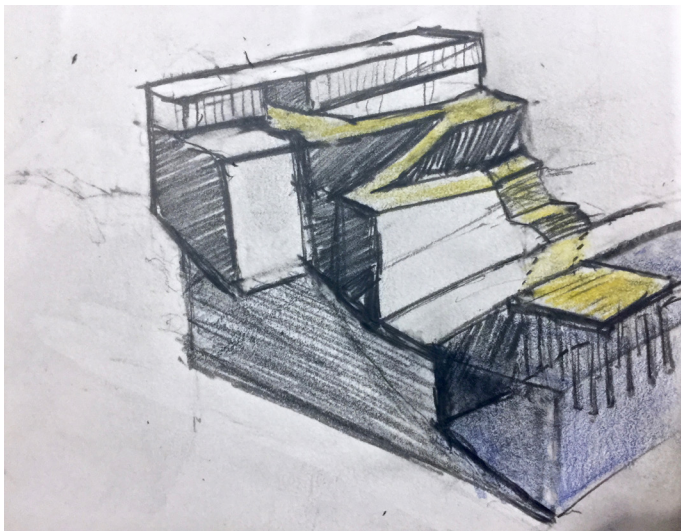
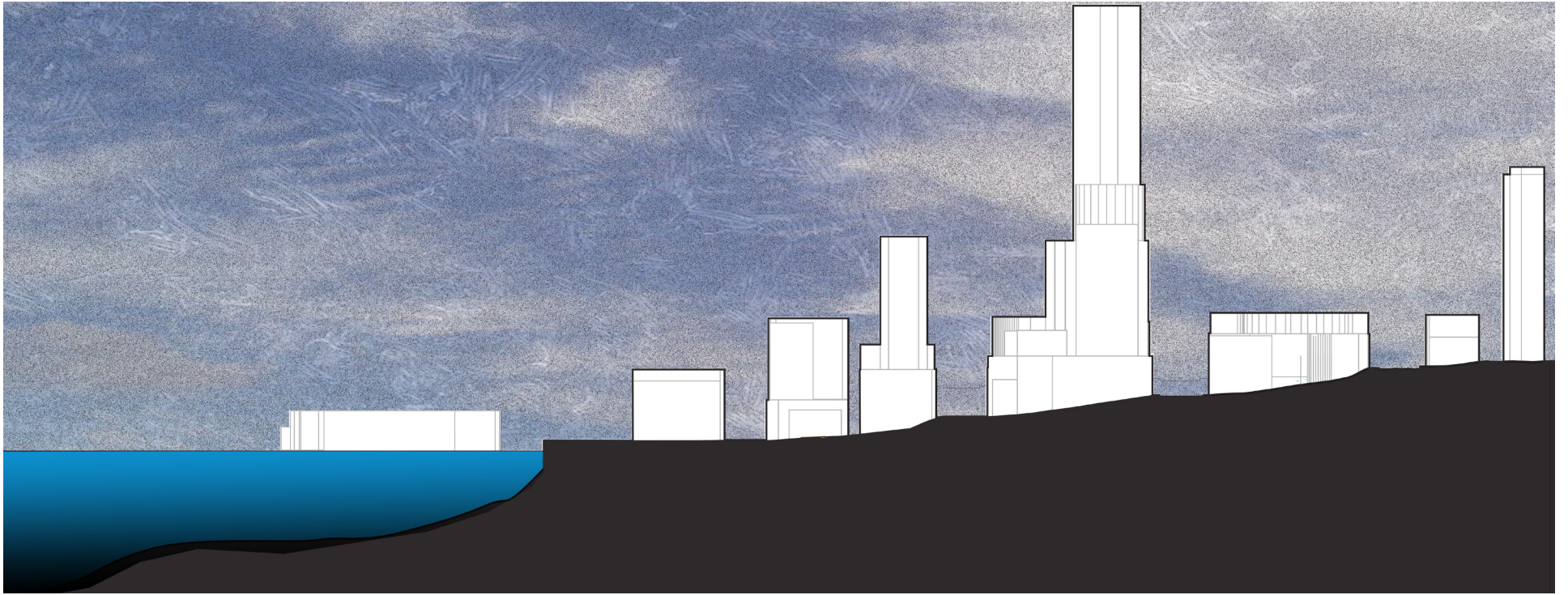


Figure 71 - Examining a larger site of opportunity, the Privately Owned Public Space to the south of the Seattle Art Museum. This site is a functional thoroughway, however, it lacks incentives for pausing and opportunities for dwelling.





Figures 72-75 - Site conditions



Figures 76-77 This part of the project explores a series of site interventions intended to draw reference to the European traditional cities discussed earlier. Here two thoroughways in Portugal offer opportunities for embedded seating and niches for dwelling outside the main flow of the thoroughfare.



Figure 78 - Hybrid drawing conveying the intended atmosphere of the intervention and referencing the staircases of traditional villages.



Figure 79 The design intervention also illustrates what might happen if a project is particularly successful with the public, and the intervention develops further into altering the site and topography. This example turns the site into a stage for experiencing the topography of the slope rising up from Puget Sound - and assists with bridging the 'open tooth' between the designs of Harbor Steps and Benaroyal Hall to reinforce this route as an attraction.

The intervention reduces the space allocated to circulation, referencing organic regional forms - and offers opportunities for exploration of path and choices about where to dwell.



Figure 80 - Looking closer at dwelling places created by disrupting the flow of the thoroughfare.



Figure 81 - The niches are additionally sheltered by vegetation, providing attractive places to enjoy the evening light shining in through the Harbor Steps site.

## Conclusion

This thesis explores tools and processes that might contribute to an effective strategy for proposing interventions that activate public space. It offers metaphors from the field of Physical Theater to offer fresh perspectives regarding our perceptions about the choices and behaviors people make in public space. It speculates about the impact the tools of choreographic analysis might have if applied to the problem of studying the human use of public space. Finally it considers how basic architectural typologies might be configured, and iteratively modified based on observations of use, with the intention of creating place-making installations for more active participation and engagement in the theater of the city.

## Endnotes

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## Figures

All images are made by the author, and all photographs have been taken by the author, unless noted below:

Figure 6 - Granada, Spain. Rehabilitation of Paseo de la Bomba.

By Arias Recalde and Luis Gonzalo. <https://www.pinterest.com/pin/400187116872636311/>

Figure 16 - Trisha Brown Dance Company. Photo by Lois Greenfield.

<https://www.dance-enthusiast.com/features/day-in-the-life/view/Trisha-Brown-New-York-Live-Arts>

Figure 17 – Nicky Shaw: The Coronation of Poppea. <http://nickyshaw.co.uk/wp-content/uploads/2017/06/nicky-shaw-the-coronation-of-poppea-production-05.jpg>

[http://4.bp.blogspot.com/-XXKjKPPqC00/VcyBdmsZg2I/AAAAAAAAAB3c/9jidDVX8jiU/s1600/Love-and-Information\\_web10f.jpg](http://4.bp.blogspot.com/-XXKjKPPqC00/VcyBdmsZg2I/AAAAAAAAAB3c/9jidDVX8jiU/s1600/Love-and-Information_web10f.jpg)

Figure 18 - [http://4.bp.blogspot.com/-XXKjKPPqC00/VcyBdmsZg2I/AAAAAAAAAB3c/9jidDVX8jiU/s1600/Love-and-Information\\_web10f.jpg](http://4.bp.blogspot.com/-XXKjKPPqC00/VcyBdmsZg2I/AAAAAAAAAB3c/9jidDVX8jiU/s1600/Love-and-Information_web10f.jpg)

Figure 19 - [http://arafen.com/a/1/o/opera-house-and-royals-on-pinterest-learn-more-at-theabstractunion-com\\_residential-lighting-design\\_within-interior-design-modern-home-ideas-country-style-house-plans-decorating-c\\_1080x688.jpg](http://arafen.com/a/1/o/opera-house-and-royals-on-pinterest-learn-more-at-theabstractunion-com_residential-lighting-design_within-interior-design-modern-home-ideas-country-style-house-plans-decorating-c_1080x688.jpg)

Figure 20 - <http://www.barbarasteppe.de/wp-content/uploads/2016/04/travelogue3-1.jpg>

Figure 24 - Project: numen / for use. Title: Tuft. [https://images.adsttc.com/media/images/55e7/62fb/4d8d/5d0b/c000/19d1/slideshow/tuft\\_pula\\_img\\_4493\\_1.jpg?1441227510](https://images.adsttc.com/media/images/55e7/62fb/4d8d/5d0b/c000/19d1/slideshow/tuft_pula_img_4493_1.jpg?1441227510)

Figure 25 - Project: numen / for use. Title: Tape. [https://images.adsttc.com/media/images/55e5/5228/775d/5f2e/8200/07c9/slideshow/tape\\_melbourne\\_img\\_4664.jpg?1441092113](https://images.adsttc.com/media/images/55e5/5228/775d/5f2e/8200/07c9/slideshow/tape_melbourne_img_4664.jpg?1441092113)

Figures 27-29 - Architectural Installations, Early Precedents:

Contemplation Environments at the Museum of Contemporary Crafts, 1970.

Figure 30 - Project: numen / for use. Title: Net. [https://www.archdaily.com/218341/public-art-installations-from-numen-for-use-design-collective/net\\_z33\\_img\\_3032](https://www.archdaily.com/218341/public-art-installations-from-numen-for-use-design-collective/net_z33_img_3032)

Figure 31 - Henrique Oliveira. Wood Tunnels Art Installation. <https://www.demilked.com/magazine/wp-content/uploads/2014/06/wood-tunnels-art-installation-henrique-oliveira-11.jpg>

Figure 36 - Jan Gehl: 12 Criteria Concerning the Pedestrian Landscape. Gehl, Jan. Cities for People. Washington, D.C.: Island, 2010

Figure 38 - Space Syntax: Study for Trafalgar Square. <http://www.spacesyntax.net/academic-development/>

Figure 39 - Space Syntax: Study for Trafalgar Square. <http://www.spacesyntax.net/academic-development/>

Figure 40 - Video Abstraction Tool. <https://synchronousobjects.osu.edu>

Figure 41 - Movement Density Tool. <https://synchronousobjects.osu.edu>

Figure 42 - Cue Annotation Tool. <https://synchronousobjects.osu.edu>

Figure 43 - Cue Annotation Tool. <https://synchronousobjects.osu.edu>