A NEWER URBANISM: MOLDING THE URBAN SURFACE

by

THOMAS MICHAEL RAINER

(Under the direction of Hank Methvin)

ABSTRACT

This thesis is a study of the recent shifts in the design of the urban surface. The urban surface refers to the ground-plane of the city, the active and dynamic field that supports all the activities of the city. In particular, this study is concerned with how the urban surface can be designed to diversify the activities that take place on it. To answer the question of how, this thesis embarks on a study of recent projects in landscape urbanism and examines the methods they use to manipulate the surface. The goal of this thesis is to extract design strategies—a summary of the more productive principles— from a variety of urban projects. These strategies become guides and a new vocabulary for designing the surface. The strategies are illustrated through a series of seven designs.

INDEX WORDS: Urban surface, design strategies, landscape urbanism, urban
                 design, design theory.

A NEWER URBANISM: MOLDING THE URBAN SURFACE

by

THOMAS MICHAEL RAINER

B.A. Birmingham-Southern College, 1999

A Thesis Submitted to the Graduate Faculty

of The University of Georgia in Partial Fulfillment

of the

Requirements for the Degree

MASTER OF LANDSCAPE ARCHITECTURE

ATHENS, GEORGIA

2002

A NEWER URBANISM: MOLDING THE URBAN SURFACE

by

THOMAS MICHAEL RAINER

Approved:

Major Professor: Hank Methvin

Committee: Ian Firth
                     Michael Oliveri
                     Jane Erwin

Electronic Version Approved:

Gordhan L. Patel
Dean of the Graduate School
The University of Georgia
August 2002

ACKNOWLEDGMENTS

TABLE OF CONTENTS

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

This thesis is a study of new approaches to the design of the urban surface. In particular, this project is concerned with *how* the urban surface can be designed to diversify the activities that occur on it. To answer the question of how, this thesis embarks on an analysis of recent projects in landscape urbanism and examines the methods they use to manipulate the surface. In this way, the urban surface acts like a chessboard, staging possible futures without dictating their outcome. My goal is to extract design strategies—a summary of the more productive principles—from a variety of urban projects. These strategies become guides and a new vocabulary for designing the urban surface.

Three main design strategies—thickening, flowing, and clearing—form the organizational structure of this thesis. The idea of thinking about urban design in terms of strategies comes from an essay by University of Pennsylvania urban design professor Alex Wall called "Programming the Urban Surface." In his essay, Wall summarizes his analysis of projects with a list of surface strategies that condense the ideas into useful principles for design. This thesis is an extension of Wall's method. Each of the strategies used here is defined and articulated in two ways.

The first section of my thesis is an analytical study of recent projects in landscape urbanism. Though diverse in their goals and scope, all of these projects share a new approach towards the urban surface. These new approaches are organized into sub-

strategies, a distillation of the larger strategy (Figure 1:1). The second section illustrates these strategies through a series of conceptual designs.   Each design corresponds with a particular strategy, showing how each approach can be applied in an urban area. These designs are purely conceptual, broadly outlining ways in which the strategies operate. They represent a synthesis of the ideas generated from the study.

Figure 1:1. Organization of the strategies
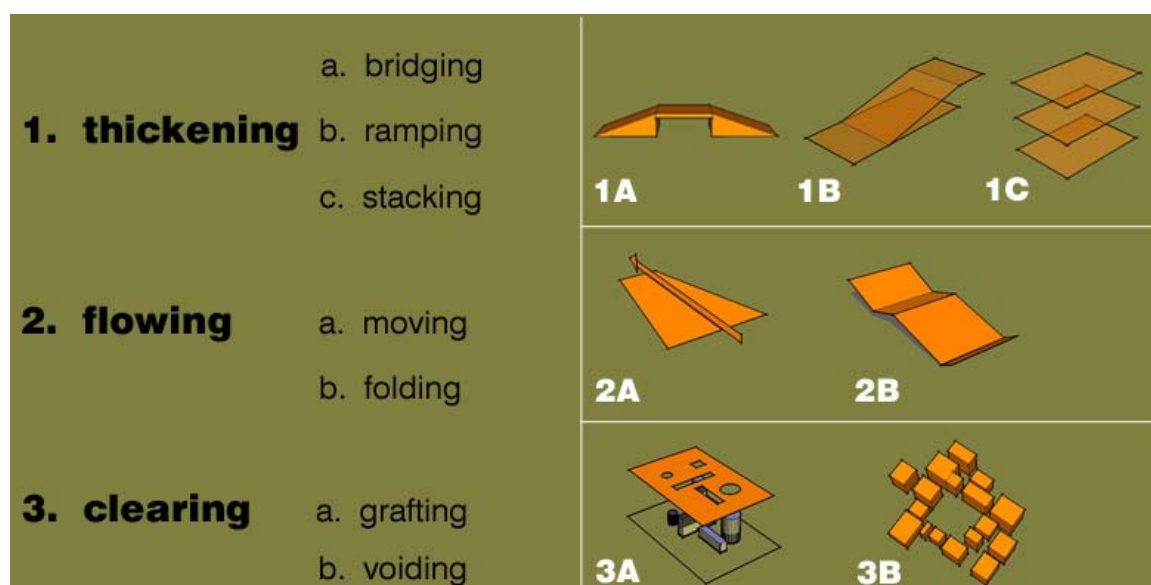
Rationale:

A perception of a radical change in direction within the design disciplines traditionally associated with the city—architecture, urbanism, and landscape—prompts my revision of urban design methods. In recent years, a number of projects fall between the categories of landscape and urbanism. These projects signal a shift in design thinking. Less interested in creating forms than in staging events, less involved in design symbolism than in the instrumentality of design, less concerned with the design of

enclosed spaces than the manipulation of larger urban surfaces, these works mark a new approach to city building. By examining the work of firms such as OMA, West 8, and Tschumi Architects, one can discern the contours of an urbanism that is no longer described using the postmodern conceptual framework. A *newer urbanism* is emerging, an urbanism for which such postmodernist notions as place, context, and representation have largely lost their meaning.

What all these projects have in common is the recognition of a new kind of urban site: the urban surface. This is not simply a referral to the space between buildings, as in parking lots, streets, and plazas; instead, these projects recognize their site as the ground-plane of the city, the active and dynamic "field" that supports all activities and programs of the city. With this understanding, the urban surface functions like a rich agricultural field—a territory of infinite potential—capable of supporting any variety of programs, forms, and appearances. This adaptability is due, in part, to recent advances in the technologies of infrastructure. Today, a vast array of services and instruments can be embedded into the surface, creating a living connective tissue between increasingly fragmented and unpredictable urban programs. In this way, the urban surface becomes a staging ground for the unfolding of future events.

This project distances itself from the romantic iconography of landscape architecture and explores the unexploited field in between urban planning, architecture, and landscape architecture. The crossing of these disciplines allows for the invention of new approaches to urbanism, a hybrid discipline that influences not only the physical spaces but also the social and cultural life of the city. The conditions these practices engage—mobility, infrastructure, globalization, unpredictability—require new techniques

of practice, new metaphors of description, and new methods for design. Cities everywhere reinvent themselves almost daily as they adapt to sweeping changes: widespread urbanization, new technologies of communication and mobility, globalized markets, and political instability. The function of design, therefore, is not just to make spaces more attractive but also, as Alex Wall says, "to make them more adaptive, more fluid, more capable of accommodating changing demands and unforeseen circumstances" (Wall 246). The strategies presented here offer new approaches to designing the urban surface, methods that respond to the changes in the nature of cities. Taken together, these strategies outline the beginnings of a newer urbanism, an urbanism whose goal is the orchestration of the unpredictable.

CHAPTER 2

THE CONTEMPORARY METROPOLIS

The city of the twenty-first century is hardly recognizable as a city. The traditional notion of the city as a historical core surrounded by suburbs and then countryside has been largely replaced by a polycentric and web-like sprawl—the metropolitan area. This shift in the nature of the city has profound implications for planning and design professions. Today, the city changes so fast and the effects of urbanization are so complex that urban design professionals have not had time to revise their practices. The epidemic urbanization that is now a global phenomenon requires new design approaches, approaches redefined as a way of operating on the inevitable. These strategies must be based on the broader realities of the contemporary metropolis.

Urbanization produces a complex, tangled web of cause and effects. While its effects are multiple, architect and University of Pennsylvania professor Alex Wall has identified three that are of particular significance to planning and design. First is the change in the shape of the city. The history of the city in the late twentieth century has been a history of urban dispersal. As the city is stretched beyond recognition, urbanists must come up with new conceptual models that make sense of this amorphous zone. The second effect of urbanization is an increase in mobility and access. As cities disperse over wide regions, urban dwellers must cover greater distances by automobile or train. For some, this mobility becomes a lifestyle. Not only do people move across regions, but

the flow of information and capital moves across global networks. A third effect of urbanization includes a shift in the way cities are conceptualized, from a geographical place to a dynamic system of effects. Infrastructure and material flows have virtually erased static political and spatial boundaries (Wall 234). These emerging conditions require designers to revise their approaches to urban projects. This chapter analyzes these three effects for their impact on designers and planners.

<u>Effect 1: The new morphology, the city as a rhizome</u>

The most visible effect of rampant urbanization is the change in the shape of cities. Historic city centers were once the locus of density, activity, and identity for cities. Postwar suburbs formed concentric circles around these historic centers. Their existence on the edge always related to the center, forming a kind of radiocentric dependency. But this relationship is now inverted. Massive decentralization, new technologies of communication, globalized economic markets, and the rise of consumer culture have created a discontinuous urban fabric (Bekkering 38). New "centers" appear over regional scales. The resulting shift from a monocentric city to a poly-centric metropolis has inverted the concept of the center: as the city continues to decentralize, that which was once considered 'central' has now become peripheral; that which was once considered 'peripheral' has increasingly become central (Woodroffe 7). This palindromic condition liberates places from their traditional contexts, creating ambiguous spaces loaded with potential.

Removed from their traditional contexts, these ambiguous spaces constitute a new philosophical zone: interstitial landscapes that are pervasive elements in the landscape.

These are new zones and new conditions of urbanity that are not fully described by the traditional urban models of center/periphery, downtown/suburb, or figure/ground. Dutch landscape architect Adriaan Geuze describes these places as the "New Voids," leftover spaces waiting to be colonized (10). In contrast, historic city centers are increasingly gentrified as they use their "identity" to sell tourism or conventions (Sorkin xiv). As the concept of the city is stretched and morphed beyond recognition, the gut reaction of urbanists is primarily nostalgic: the belated rediscovery of the traditional city. But they insist on the virtues of the traditional city at the very moment of its impossibility. Traditional city centers now stand as lonely sand castles in an ever-spreading sea of urbanization.

This melting of traditional urban structures has a morphological effect: cities act less treelike and hierarchical and more like a what philosopher Gilles Deleuze calls a "rhizome," spreading along lines of displacement and connection, taking root through the metro area (4). The In this way, static urban typologies such as squares, parks, and districts lose relevance; instead, the processes of urbanization—infrastructures, network flows, mobility—gain special significance. "The emphasis shifts here from *forms* of urban spaces to *processes* of urbanization," writes Alex Wall, "processes that network across vast regional—if not global—surfaces" (234). These processes unleash a discontinuous, disjointed urban growth that unfolds across the landscape like a time-lapse film.

Effect 2: The new mobility, city as process

An increasingly dispersed city is an increasingly mobile city. The stretch of cities across entire regions requires speedy lines of communication and transport. The

movement of people, information, and capital across vast regions erodes the idea of the city as a place and suggests instead the idea of the city as a process. Understanding the city as a process refers not simply to the movement of people across regions, but also to the increased instability of capital and investment. These two consequences are separated but related.

First, the city as process refers to the movement of people across regions. Everyday, the urban surface serves as a transit network for millions of people. Movement becomes the principle of order for the twenty-first century city. Interstates and cars give people the freedom to live in relatively low densities spread out over a vast terrain (Boyarsky 26). The development of a system of highways and public transit has enabled people and business to disperse from the immediate confines of the city. In this highly mobile city, the urban-dweller does not merely watch the processes around him, but actually becomes part of the process himself as he moves through the city at high speeds. After spending years in moving objects, today's city-dweller has adapted himself to the perception of the city under constant motion. Movement defines not only experience, but also the very form of new development. Roads connect and organize the landscape. New towns appear like beads on a string along highway lines leaving the city. The road thus becomes a regulator of the settlement of the landscape (Gregotti 118).

Secondly, the city as process refers to the increased instability of capital and investment. New technologies of the digital age undermine spatial relationships that once ordered cities. Computers, credit cards, phones, faxes, and other tools of connection disintegrate the political and spatial boundaries that have defined cities for so long.

Recent years have seen the emergence of a completely new kind of city, a city without a

place attached to it. Writer Michael Sorkin describes the resulting city:

> This ageographical city is particularly advanced in the United States. It's visible
> in clumps of skyscrapers rising from well-wired fields next to the interstate; in
> huge shopping malls, anchored by their national-chain department stores, and
> surrounded by swarms of cars; in hermetically sealed atrium hotels cloned from
> coast to coast; in uniform "historic" gentrifications and festive markets;in the
> disaggregated sprawl of endless new suburbs without cities. (xv)

Living in a city can no longer simply be defined by living on an urban street, but rather

"adopting a certain mode of behavior": where one consumes, what one wears, what one

watches on television (Wall "The Dispersed City" 10). These simulations of urbanity

have become a larger part of daily experiences than actually being in the city. The result

of all these simulations is a loosening of ties to any specific place. Both the movement of

people and the instability of capital generate a city that is less defined by geography than

by the processes that flow through it.

<u>Effect 3: The new metaphor, city as effect</u>

A third and final consequence of urbanization is a paradigm shift in the way cities

are understood. The shift here is from viewing the cities in terms of recognized urban

typologies—like streets, parks, and plazas—to viewing cities as a system of effects.

While the visible symbols of cities (buildings, streets, etc.) still remain, the invisible

network of infrastructures, communication lines, and energy have become more

significant in the daily operation of the city. The challenge for designers is to move away

from the static urban typologies and learn to think of the city as a dynamic system where

people, energy, and information intersect.

Understanding the city as a dynamic system of effects changes the emphasis of design. Design here is understood not in terms of representation or stylization, but in terms of functional organization. Understanding the city as a system requires design that can choreograph the complex flow of processes. As a result, the function of design is not to make places look better, but rather to make places that work for people. In this sense, design is about shaping the events that occur on the surface, not just shaping the spaces of the surface. Architect and writer Rem Koolhaas describes the paradigm shift in understanding cities. He writes:

> If there is to be a "new urbanism" it will not be based on the twin fantasies of order and omnipotence; it will be the staging of uncertainty; it will no longer be concerned with the arrangement of more or less permanent objects but with the irrigation of territories with potential; it will no longer aim at stable configurations but for the creation of enabling fields that accommodate processes that refuse to be crystallized into definitive form. Refined, urbanism will not only, or mostly, be a profession, but a way of thinking, an ideology: to accept what exists. (Whatever Happened to Urbanism 969)

Each of the design strategies mentioned in the next three chapters corresponds with the three effects of urbanization discussed in this chapter. The strategy of thickening responds to the change in the *shape* of the city; the strategy of flowing responds to increased *mobility* of the city; the strategy of clearing responds to the new *paradigms* for understanding the city. Collectively, these strategies find their rationale in the changing nature of cities. These changing conditions demand that designers and planners revise their approaches toward cities. The new approaches will no longer be concerned with ordering permanent objects, but with creating enabling surfaces that allow anything to happen.

Now, more than ever, the city of the twenty-first century offers a chance for bold design proposals. New instruments and equipment can be grafted onto urban surfaces,

giving designers the potential to stage unforeseen events. New kinds of urban sites and leftover voids offer a kind of *tabula rosa* for designers to try new experiments. New population densities demand new organizations of space. The strategies discussed in the next three chapters—thickening, flowing, and clearing—outline in a broad way conceptual tools for diversifying the activities on the surface.

CHAPTER 3

STRATEGY ONE: THICKENING

Thickening: (thk-nng) *n*. the strategy of exploring multiple ground planes to reinvent
spatial conditions in the city, stimulating new programs.

The ground-plane of the city—with its streets, parks, sidewalks, and plazas—has

traditionally been the locus of life and activity for cities. It serves as a living connective

tissue, spatially tying together a host of disconnected urban programs. From this matrix

arises the potential for endless variations of activities: its very horizontality offers us the

freedom of space and movement. But beginning with the development of the skyscraper

and culminating in recent developments in engineering and architecture, the ground-plane

of the city has multiplied, creating a multi-layered surface that challenges the very idea of

a single ground-plane.

The expansion of subterranean networks in cities such as Montreal and Tokyo,

and of aerial passageways in cities such as Atlanta and Minneapolis, effectively

multiplies the number of publicly used ground-planes (Wall 245). In a sense, the

multiplication of ground-planes subverts the traditional role of the streets; the same

activities that once occurred on street level now occur underground, overhead, or indoors.

Often, as in the case of Atlanta, this subversion is intentional. Pedestrian tunnels and

raised bridges shelter users from the street (Figure 3:1). In essence, these new pedestrian

throughways "provide a filtered version of cities, a simulation of urbanity" (Boddy 124).

While this subversion is frequently criticized by new urbanists for draining life from the

streets, a handful of designers celebrate the multi-layered city for its capacity to stimulate

new urban programs. "The multilevel movement of people, together with the connector flows of elevators, moving stairs, ramps, and so on, creates a marvelous spectacle in the city," writes Alex Wall, "This is the thickened surface, continuous, multiple and dynamic" (245).

Figure 3:1 . Bridge connecting two buildings on Peachtree Street in Atlanta.

<u>Thickening in practice:</u>

During the last decade, architects have developed the concept of a multi-layered, continuous surface most extensively, particularly for building programs. Architects such as Bernard Tschumi and Rem Koolhaas often experiment with ramps, staircases, elevators, and diagonals—all devices used to connect horizontal surfaces in a vertical context. In this sense, the building is thought of as a connected spiral of floors that works as a continuation of the ground. In designs by Koolhaas's firm OMA, such as the

competition entry for Yokohama, the Jussieu Library in Paris, and the Educatorium in

Utrecht, this concept is applied in the folded continuity of ramping floors, one long floor

essentially serving as a topographic extension of the landscape (Lootsma 263). Like the

OMA projects, Tschumi's design for Le Fresnoy National Studio for Contemporary Arts

(1991) employs intersecting catwalks, suspended staircases, and hanging cinemas (Figure

3:2). The combination of these elements creates what Tschumi calls a "landscape of the

in-between" (397), a continuous strip of ground woven through the building at different
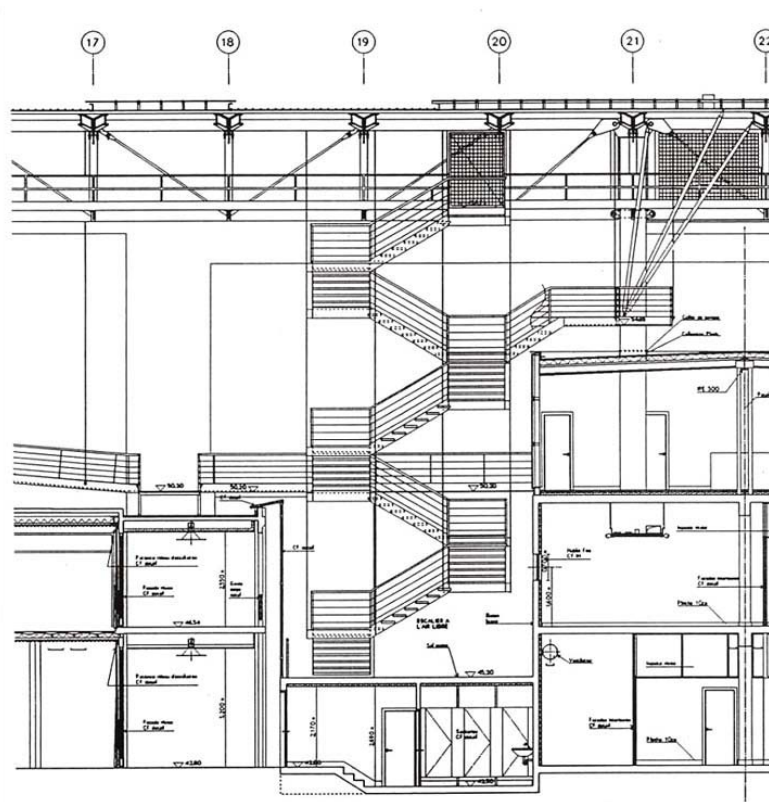
levels.

Figure 3:2.   Catwalks and suspended staircase accelerates the possibility of chance
events in the in-between (Tschumi 483).

The preceding projects treat architecture as an extension of the landscape, or as

extensions of the "skin of the earth," to use architect Raoul Bunschoten's term (58).

What all these projects have in common is the renewed interest in using the plan as the generator of the project. Koolhaas, in his retro-manifesto for New York, *Delirious New York*, is fascinated by Raymond Hood's declaration that the plan is the primary instrument of design. "The plan is of primary importance, because on the floor are performed all the activities of the human occupants," writes Hood. Koolhaas reads Hood's statement as a plea for a new functionalist architecture that de-emphasizes form; instead, he advocates an architecture that is physically absent, one that creates structures for human activity and 'metropolitan ritual' (153).

For architects, there is nothing particularly new about the concept of multi-layered structures; how to move people up and down different floor levels is an issue old as architecture itself. What is more innovative, though, is that, in recent years landscape architects have applied the idea of layered surfaces to landscapes and urban sites. Perhaps the seminal moment that introduced the idea of a thickened surface to the realm of urbanism occurred in 1982, during the competition for the Parc de la Villette just outside of Paris. As a part of President Mitterand's *Grand Projects*, Parc de la Villette challenged designers to resolve the spatial problems of a large-scale abandoned tract of land in the city with the complications of an exhaustive list of programmatic stipulations from the client. This dilemma was further complicated by the fact that the client was uncertain about what, how, and when different parts of this program would be implemented (Barziley 11). As a result, the surface had to be equipped and staged in such a way as to anticipate any number of changing programs.

Two of the most notable entries, again designed by Bernard Tschumi and Rem Koolhaas, responded to this challenge by superimposing strategic layers. In the case of

the winning entry, Tschumi organized the park into three autonomous systems of points, lines, and surfaces that overlap and intersect. The intersecting points of each of these systems become destabilized moments, spatial non sequiturs that stimulate new programs. Likewise, OMA responded with a strategy of layering four strategic layers for organizing the different programmatic requirements: the "east-west strips of varying synthetic and natural surfaces, the "confetti grid" of large and small service points and kiosks, the various "circulation paths," and the "large objects" such as linear and round forests. OMA described their thickened surface as a "landscape of social instruments," where the quality of the project would derive from the uses, juxtapositions, and adjacency of alternating programs over time (Lucan 88).

Parc de la Villette laid the conceptual foundations for applying the strategy of layering to the urban realm. The overlaying of program structures has been developed since by a small group of landscape architects and urbanists, not only for designing parks but urban landscapes, too. Much of the innovation with thickened surfaces can be traced to the Netherlands, especially the city of Rotterdam. While this technique may appear novel, it has its roots in the Dutch modernist tradition of town planning of the 1930s, "wherein programs and services were rationally distributed over an area according to statistical research" (Lootsma 262). The country has had to deal with the very real problems of density and growth since the end of World War II, and has addressed these problems with a progressive planning approach that embraces technology. While firms such as OMA have played a key role in the development of new urban approaches, a younger generation of designers has also emerged to tackle these issues.

One of the leaders among these is landscape architect Adriaan Geuze and his firm West 8. West 8's work continues to blur the boundaries between landscape architecture and urban design, establishing a sort of hybrid practice of landscape urbanism. One of the driving goals of this practice is to make open-ended places that resist definition and allow the urban dweller the freedom to interpret sites. Geuze critiques today's "landscape of mass-culture" because all spaces are overly defined. Geuze writes:

> To accommodate mass-culture, the contemporary city is organized into one-dimensional space and experience. Every single part is designed for one function only. It manifests monoculture. The city dweller is mobile and exchanging cultures: consuming like in a supermarket shopper . . . To exist, a human being must be able to take in the environment in his own way. (Geuze 12)

West 8 has been involved with a number of projects that create a thickened urban surface in order to expand the programmatic possibilities of the site. One such project involves a theoretical study of Times Square. Calling New York the "mother of all vertical cities," Geuze proposes creating a vertical park buried in the midst of Times Square. The Manhattan grid offers architecture "the ultimate freedom": its horizontal neutrality allows architecture unlimited vertical expression. As a result, green spaces and parks are doomed only to be a caricature of city greenery and are only permitted as filling for leftover spaces (Geuze 60). To resolve this problem, West 8 creates a vertical park sinking deep into the surface that gives the park the same freedom on the grid that is afforded to architecture. This vertical landscape would be produced out of the same ambition that created New York's skyscrapers: a green hole that penetrates hundreds of feet into the urban surface (Figure 3:3).
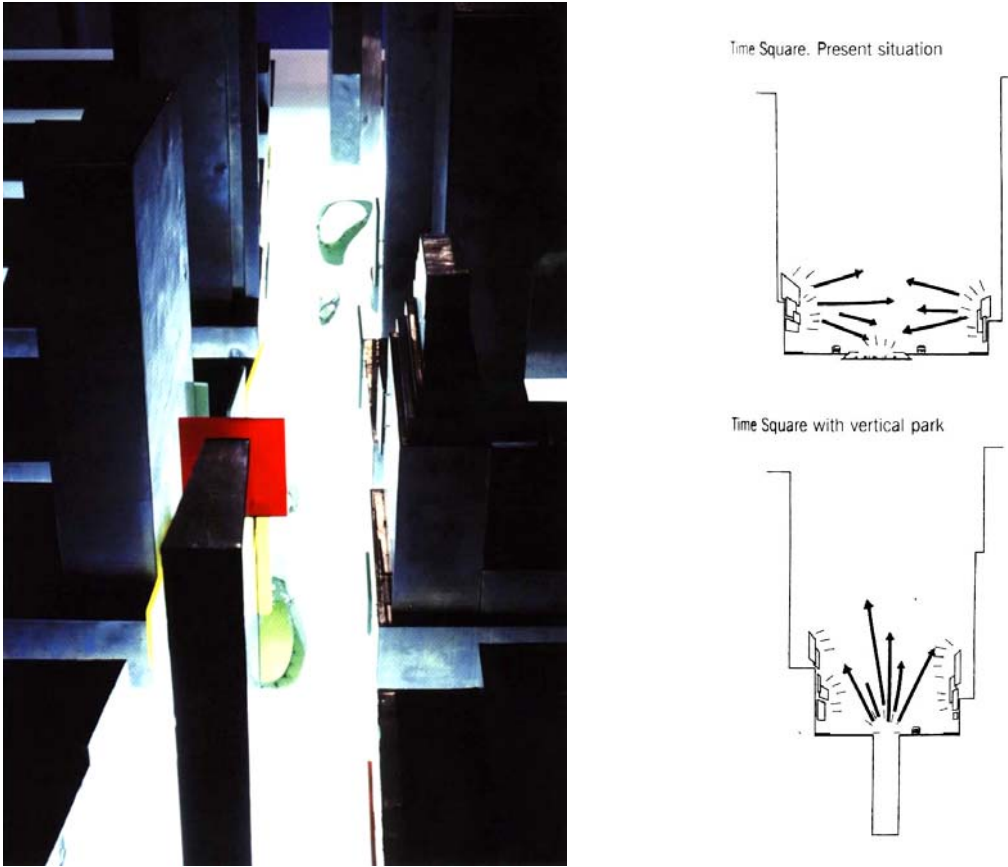
Figure 3:3. West 8's conceptual design for a vertical park (Geuze 61).

West 8's design for Carrasco Square in Amsterdam combines elevated train lines, roads, and a grassy park into one thickened surface. Once considered a leftover space because of its location underneath a train rail, the site has been turned into a park with a starkly realistic program: it is a park for commuters who park their cars and board the train and for rushed pedestrians who mow shortcuts through the grass on their way to the office. In this design, ribbons of black asphalt, alternating with patches of grass, meander between the rows of columns (Figure 3:4). The concrete columns of the rail line are the trees of the city. Spread over the grass stand long, hollow iron tree stumps. At night, light from the stumps illuminates the ceiling of rail lines, changing the space into a

"surrealistic fairy tale of light, sound, and moving trains, endlessly reflected in the windows of abandoned office buildings" (Geuze 120). Instead of trying to turn this space into a green oasis, West 8 layered different programmatic structures into a space that serves a very contemporary need: parking and moving through outdoor areas. The surface here was conceived not just as a visual pattern but more as a thickened topography.
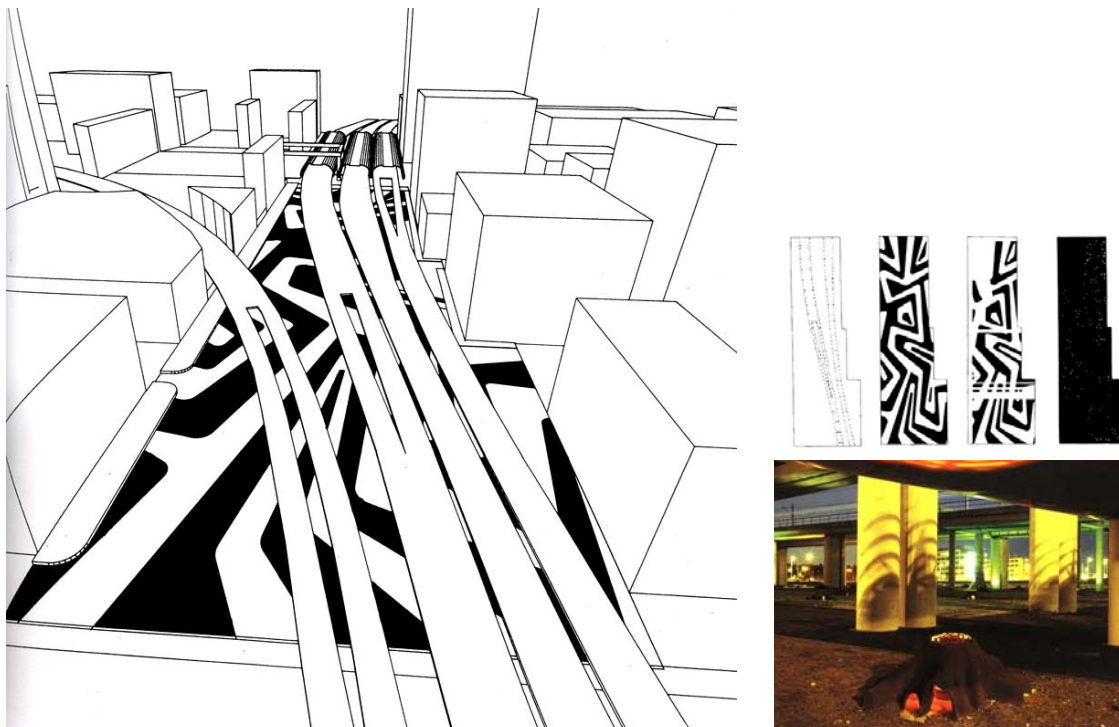
Figure 3:4.   West 8's design for Carrasco Square. Upper right show conceptual layers and lower right shows lighted stumps (Geuze 120).

Topography is a major source of inspiration for Bernard Tschumi's design for the city of Lausanne, Switzerland. Tschumi is fascinated with the severe natural topography of Lausanne because it makes a consistent ground plane practically irrelevant. The city's topography has transformed the relation of streets to buildings. In fact, in some parts of the city, streets are suspended and buildings buried in the ground (Figure 3:5). The

entrance to one building might be on the sixth floor while the exit is on the ground floor.

Rooftops act as ground floors; buildings serve as vertical thoroughfares and bridges as

multistory crossings. Tschumi's design for Lausanne uses both the natural topography

and Lausanne's existing bridge typologies as the stimulus for his project.
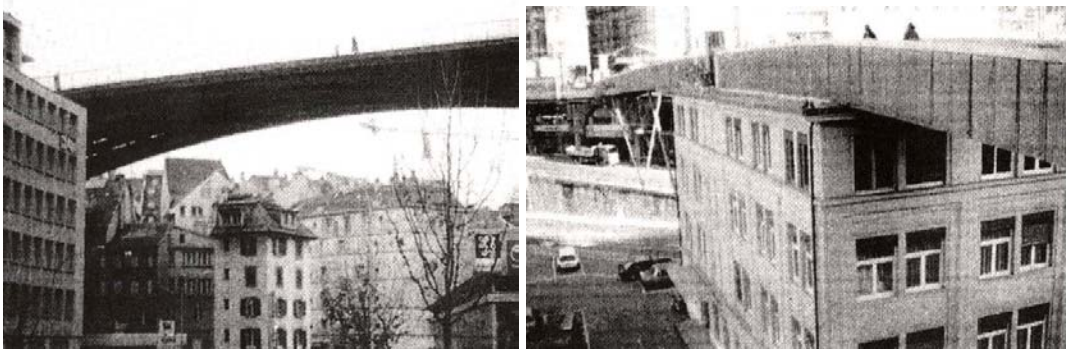
Figure 3:5. Lausanne's existing bridge typologies (Tschumi 164).

Tschumi proposes four bridge-cities that stretch across the city's north-south axis

(Figure 3:6). As functional supports, the four new structures augment the existing system

of bridges and create a new density of spatial relationships and uses. The inhabited

bridges are both "horizontal and vertical connectors, as their ramps, escalators, and

elevators link the lower levels of the valley to the upper levels of the historical city"

(Tschumi 157). Each of the four bridges has an individual program assigned to it, giving

each bridge its own character. Tschumi's goal is for these bridge-cities to not only act as

spatial connectors, but also as "urban generators," thus encouraging unpredictable

programs and new urban events (157).
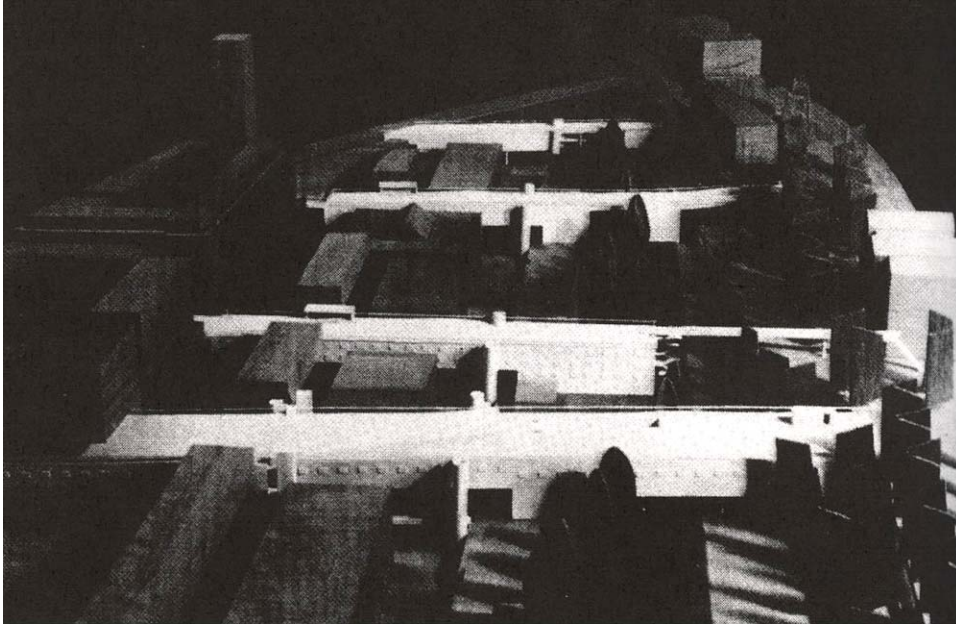
Figure 3:6. Model of proposed bridges (shown in white) (Tschumi 172).

With the creation of these bridge-cities, Tschumi effectively multiplies the number of urban ground-planes, giving birth to new sites for connection and diversification. The bridges serve as a mediator between the site and the programmatic demands of Lausanne. Tschumi's design also offers a plan for phasing in the construction of each bridge, allowing new programs to evolve over time. The real advantage of the bridges, according to Tschumi, is that their interaction with the surrounding valley creates a consistent density. Without the imbalances of over densification, Tschumi writes, "A new network of urban relationships result . . . supporting an urban center capable of integrating programs of any variety" (159).

A third example of design that uses a thickening strategy demonstrates how a space of intersection may also be a collective space. Located on the western edge of Queens along the East river, between the boroughs of Queens and Manhattan, is a leftover space that marks the intersection of six subway lines, numerous pedestrian paths,

and a few roads. Hosted by urban design non-profit, the Van Alen Institute, the 2001

design competition for Queens Plaza sought a design that could serve as a gateway to

Queens and Manhattan. The competition required participants to keep all the existing

elevated train lines, to allow for as much as 180,000 car trips a day to pass through the

site, and to create a collective space for pedestrians. In addition, the competition required

that designers incorporate information technology, lighting, signage, and other

beautification efforts to make the space appealing as well as functional. The winning

entry adopted a thickening strategy that acts both functionally as a streamlined

transportation hub and aesthetically as a symbolic gateway.

The winning project, designed by Surachai Akekapobyotin and Juthathip

Techachumreon, both architects practicing in New York, offers one large structural

gesture that ties together the various programs: a media corridor (Figure 3:7). This

corridor acts both as a connecting device and a focal point for the program. It connects

the major subway stations, pedestrian ways, medians and public spaces. Walking through

this corridor, a variety of users can interact with different programs embedded inside and

wrapped around the skin of this passageway. The corridor also links to traffic medians,

making them much more accessible and to the plaza at the JFK Commuter Triangle.

According to the designers, "The project attempts to develop the area and further the

potential of the site as a transit hub by connecting the different modes of transportation,

in combination with various communication technologies, for all types of users" (Ryan).

The design encourages a wide range of possibilities. It can accommodate everyday uses

such as parking and also, through simple manipulation, can be turned into an exhibition

or installation site, market or a fair (Ryan).

First Prize Surachai Akekapobyotin, Juthathip Techachumreon
New York, NY   Detail
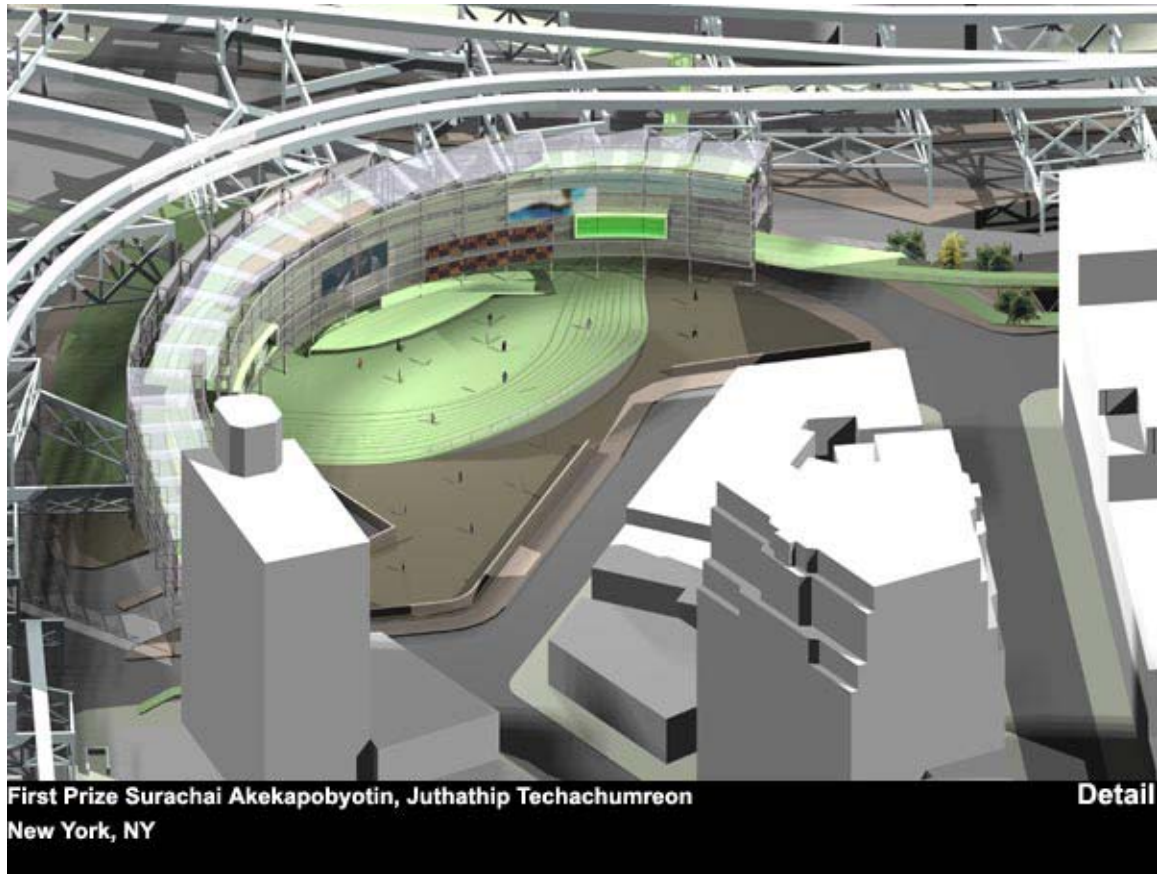
Figure 3:7. Detail of Queens Plaza first prize entry (www.vanalen.org)

The design for Queens Plaza creates a thickened, multi-layered surface that solves not only technical problems, such as infrastructure, transportation, and signage, but also brings a sense of identity to a transitional space while multiplying its range of uses. In this site, people move, collect, and spill out into various parts of the city. In a place of transition and intersection, Queens Plaza becomes a place of collecting, distributing, and connecting a great range of users and functions. The inherent flexibility of the media corridor creates a place less interested in permanent arrangements and more interested in temporal and dynamic potentials.

The projects discussed here, while drastically different in scope and emphasis, are united by their innovative approach to a thickened urban surface. These projects

represent a growing body of work that spatially reinvents the ground plane. Here, the very concepts of verticality (figure) and horizontality (ground)—concepts that for decades *defined* urbanity—are challenged by designs that effectively connect people through a range of disparate programs. Using themes from these projects, the next section will examine Five Points in downtown Atlanta as a conceptual laboratory for appling thickening as a design approach.

A. Bridging
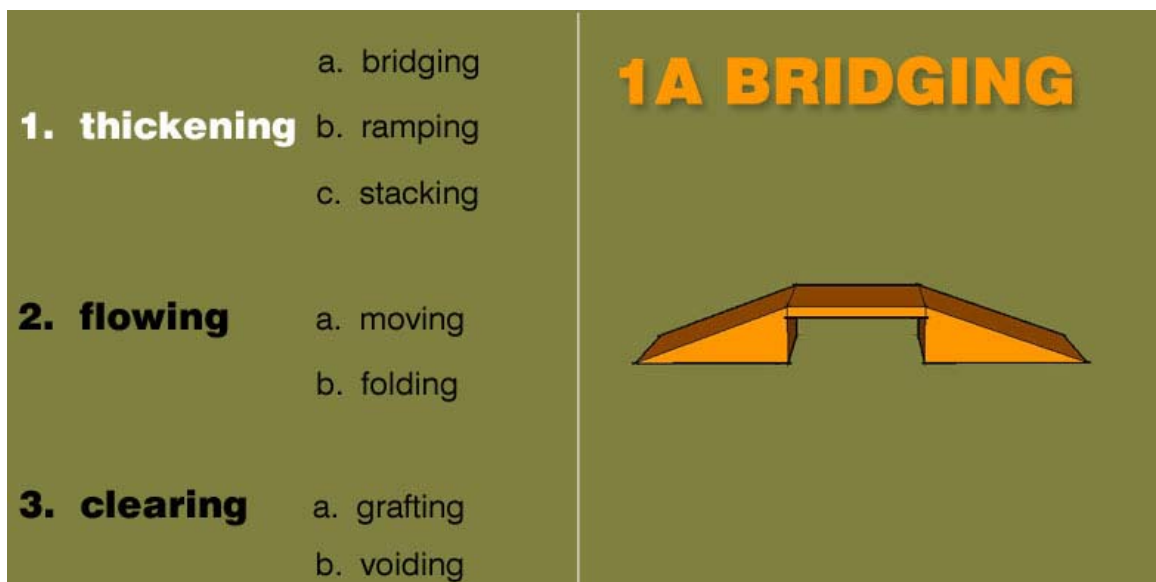
Bridging: (brg-nng) n. the connection of separate areas through a linking ground-plane.

My first conceptual design applies the strategy of bridging to the Five Points intersection in Atlanta, Georgia. The goal with this design is to create a new urban ground-plane that ties together many of the unconnected programs that exist on that site. Like Tschumi's bridge-cities or the Queens Plaza corridor, this design proposes an architectural structure that not only connects random programs, but also stimulates new

activities. This strategy aims at turning a place of intersection into a collective space, providing a platform for people to move, congregate, and interact.

<u>The Bridge:</u>

Five Points is both the historic and geographical center of downtown Atlanta. Formed by the intersection of three roads and four grid systems, Five Points expresses both centrality and intersection. Yet as one walks through Five Points, it feels peripheral. Once the sole center of the city, Five Points is now one among many—lost among the other nodes of commerce scattered throughout the metro area. This place is downtown yet it resists the very idea of downtown. The relationship between the buildings and the streets of downtown Atlanta is that of casual indifference, like two strangers on a subway, close in proximity, but politely inattentive. In some parts of downtown, whole blocks of buildings are connected to each other with bridges, forming an elaborate spider web of skywalks. Once inside, a worker never has to venture on the street. Downtown's major university, Georgia State, has raised most of its outdoor "public spaces" off the street altogether. Students commingle in courtyards between buildings that are two to three stories above the street. Even downtown's largest shopping complex, Underground Atlanta, is partially buried beneath the street. This is a place of aboves, underneaths, besides, nears, and in-betweens; here, one is never simply on the street.

The design strategy of bridging exploits this thickened surface of Five Points. The practical irrelevance of a consistent ground-plane in Five Points transforms the nature of urbanism, opening new possibilities for design interventions. The design offered here inserts a bowed bridge above the Five Points intersection, connecting several

of the buildings there (Figure 3:8). Its semi-circular form radiates from the intersection.

The bridge itself pierces the skin of the surrounding buildings like a spike. The random

juxtapositions created by this intersection create new programmatic activities.

Figure 3:8. View of bridge from above looking towards Five Points intersection.

The bridge itself works as a piece of architecture to be inhabited. But unlike the

buildings it connects, this bridge is a public space. The interior of the bridge works as a

multi-use pedestrian mall, an open corridor that houses a number of civic activities. The

large space can serve as a theater, a concert hall, a place for political protest, or a scenic

lookout onto downtown. Within this mall are smaller gallery spaces used for art

exhibitions or public meetings. The roof of the bridge is open, working as a plaza space

and garden.

The bridge is covered in a perforated metal, making the skin of the bridge semi-transparent (Figure 3: 11). This transparency stimulates the sensory experience of the users, visibly connecting them to the sights and sounds of the city. The impression created by this transparent skin is atmospheric, appealing to emotions, not intellect, or the users.

The bridge can be accessed in a number of ways from the street. The main public access comes from the tower in the center of the intersection (Figure 3:12). This tower contains glass elevators, whirling staircases, and lighted ramps, each drawing attention to the spectacle of moving up and down in cities. The tower becomes the central distributing point of the structure, gathering and dispensing people to their various destinations. Babel-like, this tower brings together different people with different agendas, collecting them for a brief moment in one space. This tower can also be accessed by a large ramp that connects with Decatur Street. Additional bridges and ramps can be connected to this tower in the future, permanently fixing its status as a concentration of activity.

The bridge works not only to give spatial links between otherwise disconnected buildings and spaces, but also serves as a powerful gateway marker announcing Five Points. Both sides of the exterior are covered with media screens, running news tickers, free outdoor films, and changing advertisements (Figure 3:9). The bridge announces Five Points as a node of intersection, a point of information exchange, a gateway for arrivals and departures (Figure 3:10).

Figure 3:9. Media screens flash images, creating a 24-hour spectacle.
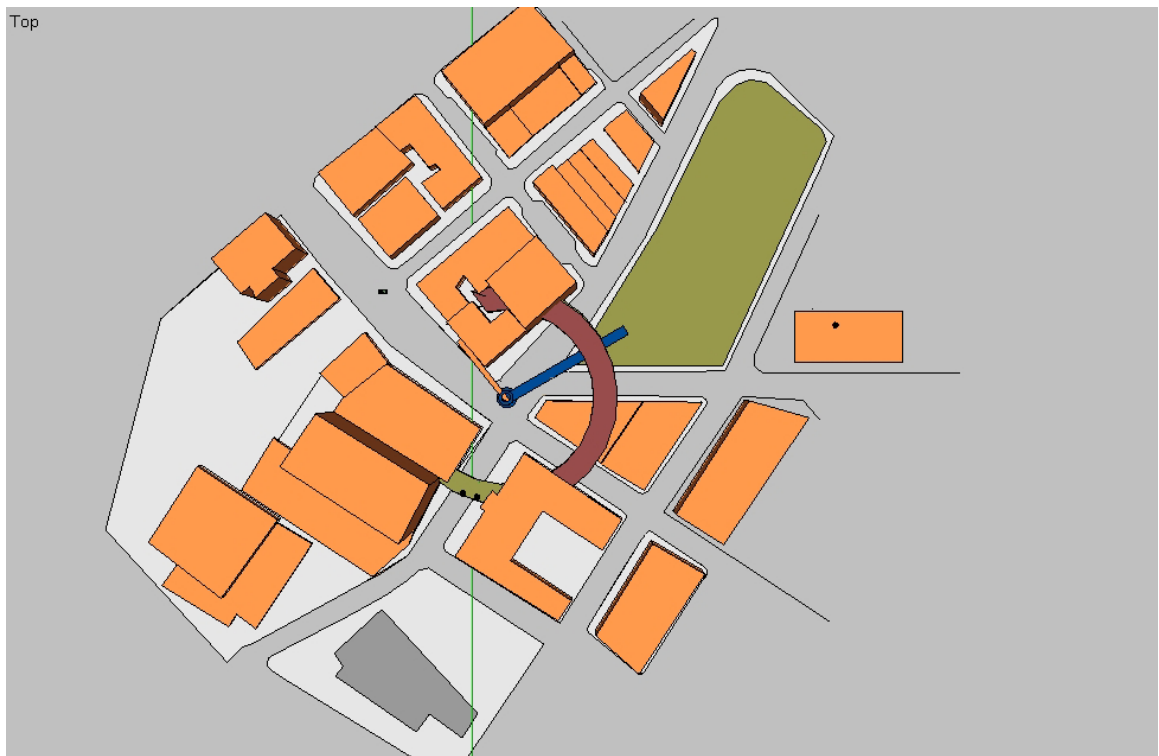
Figure 3:10. The bridge radiates from the center of Five Points, giving the area a sense of identity
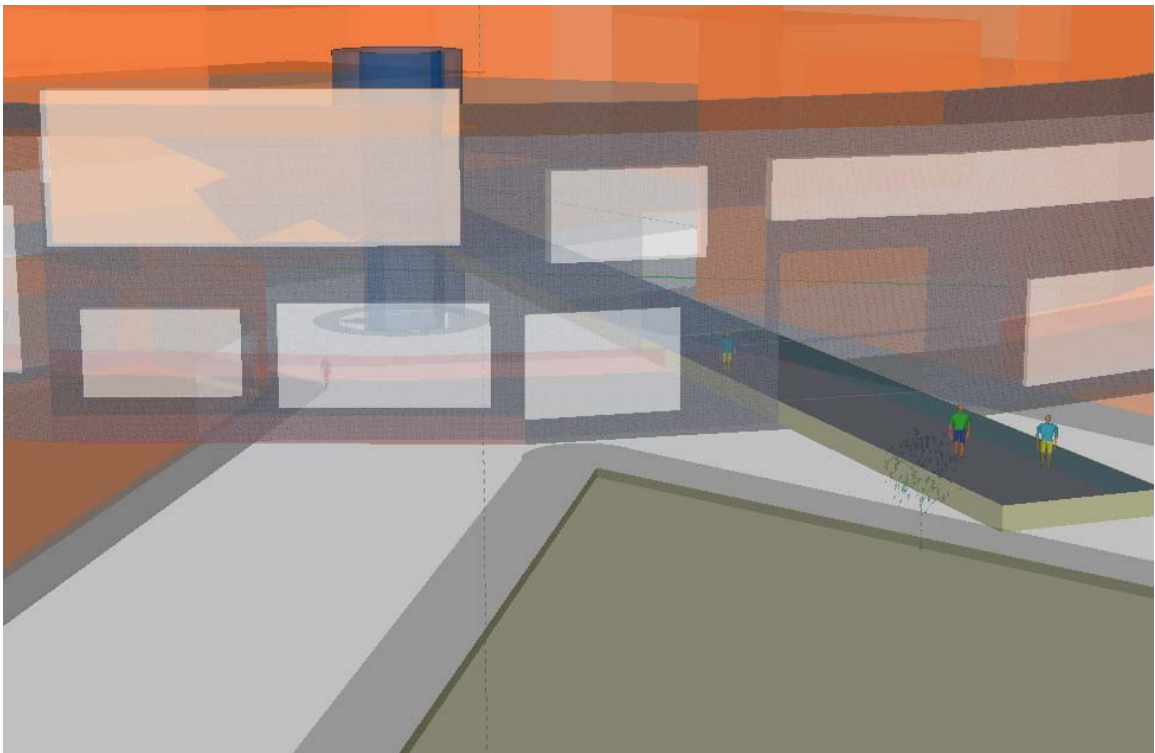
Figure 3:11. The skin of the bridge is made of perforated metal, making it slightly transparent.
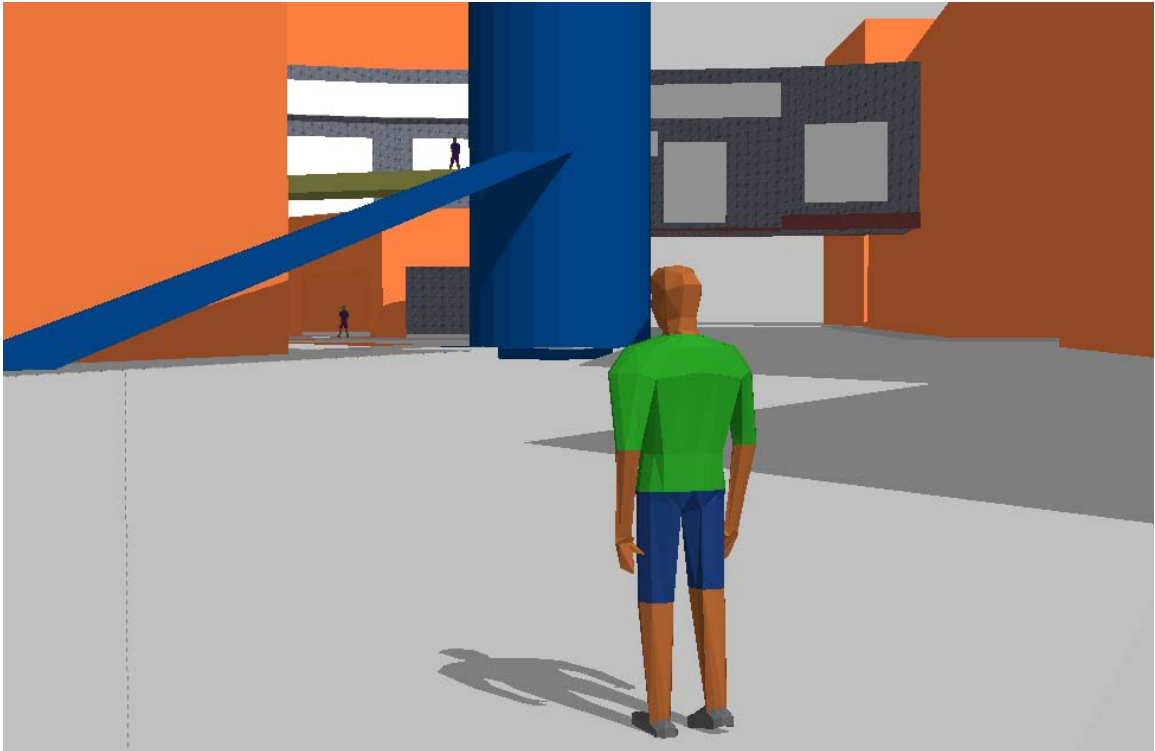
Figure 3:12. Perspective view of bridge from Peachtree
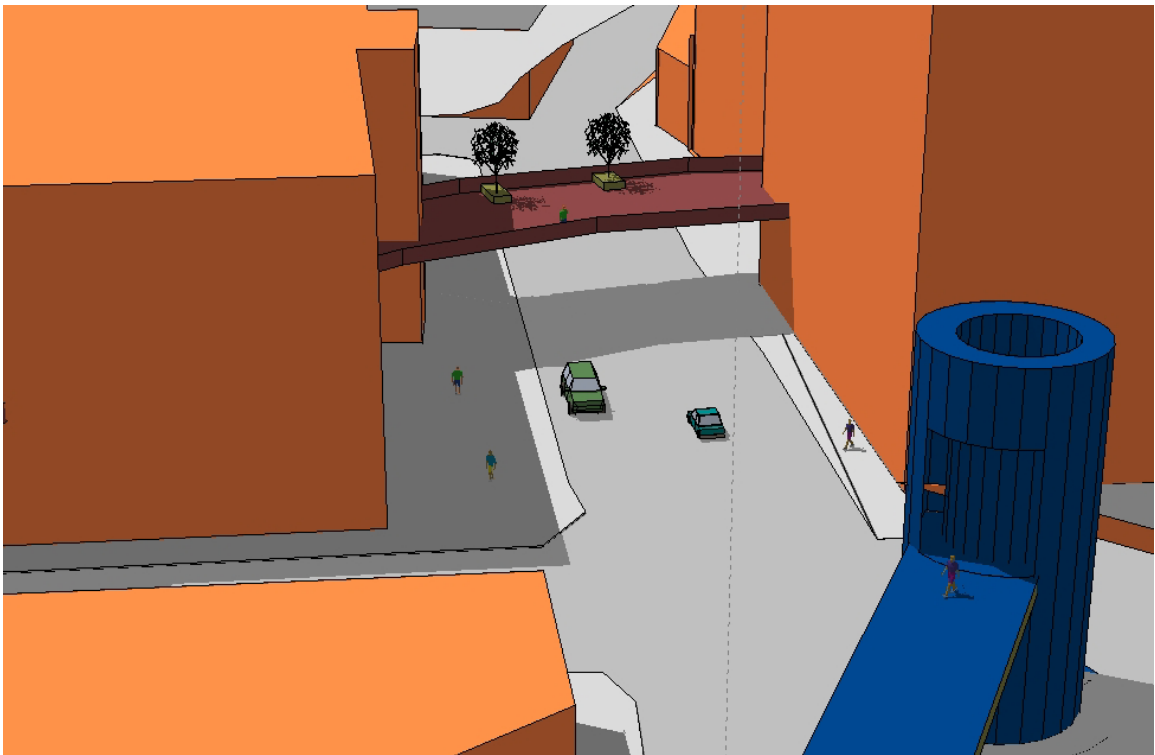
Figure 3:13. Suspended plaza

B. Ramping
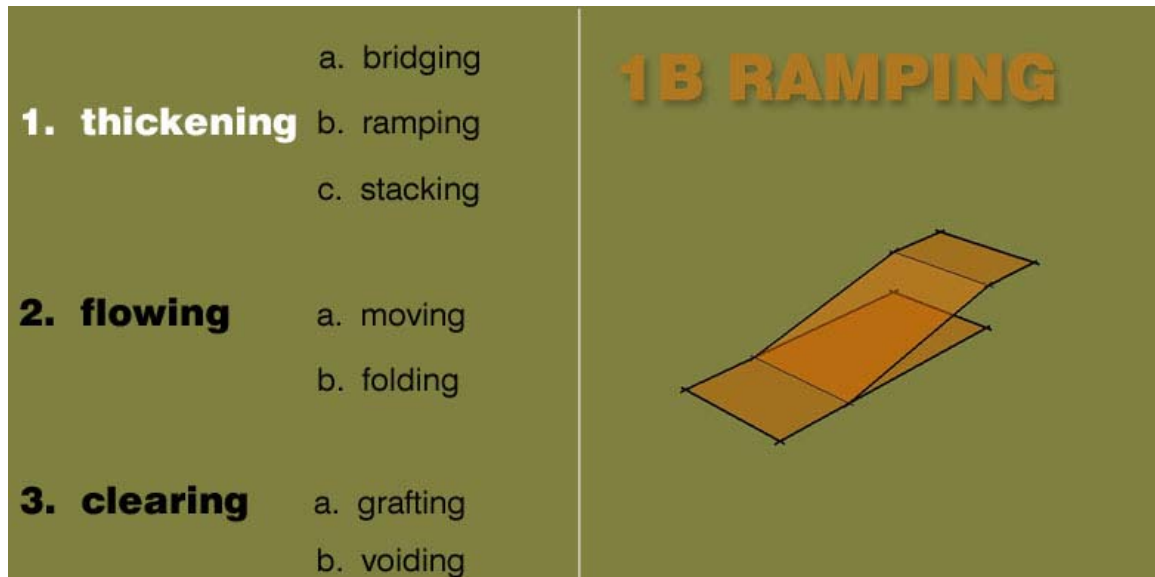
Ramping: (rmp-ng) *n*. the use of inclined surfaces to connect different levels more seamlessly.

This design applies the strategy of ramping to a building in Five Points, Atlanta. The goal of this design is to address the age-old architectural problem of connecting different floors of buildings. While the elevator and staircases move people up and down different floors, they effectively isolate the activities of one floor from the next. Each floor of a building is programmatically independent of every other floor, its stacked nature prevents continuity between the levels. Like Koolhaas's Educatorium in Utrecht and Tschumi's design for Le Fresnoy, this design uses a ramping surface to better connect the programs on different floors. But unlike both Koolhaas and Tschumi's projects, this design occurs on the outside of the building, connecting not just floor to floor, but also building to ground.

To illustrate the strategy of ramping, this design proposes a diagonal garden that ramps up the side of an office building in Five Points (Figures 3:14 & 15). The ramp starts on the sidewalk, offering a public entrance to an otherwise private building. After

rising to each floor, the ramp plateaus off and acts like an extended patio for that floor. The ramp rises and plateaus again, connecting another floor (Figure 3:16). Doors and windows allow people working on that floor to access the gardens. The character of the garden is both forested on the slopes and open on the flats, creating a rhythm of enclosure and openness that entices the visitor to keep moving. The sloping sections of this ramp use wide, low stairs and raised planting beds, offering a variety of nooks for the urban dweller to sit quietly. The level sections remain mostly open except for moveable chairs, tables, and canopies that allow users to shape their own spaces.

This series of diagonal gardens serve as a starting point for future connections. The ramp could turn the corner of the building and run down the other side; the ramp might connect to other buildings; the ramp could run along an entire street, threading buildings together like a beaded necklace. The real strength of the diagonal is that it mediates between the horizontal ground-plane and the vertical buildings. More importantly than the physical connection, the ramp offers platforms for social connection. People working on one floor of a building have a direct path to people on another floor. It provides corridors of movement from one level of the city to another, without the isolating effect of elevators. The multi-level movement of people from floor to floor, ground to building, and building to building promises to be a marvelous spectacle in the city, adding visual interest to otherwise sterile façades. The strategy of ramping extends the continuity of the urban surface while diversifying the interactions in the city.
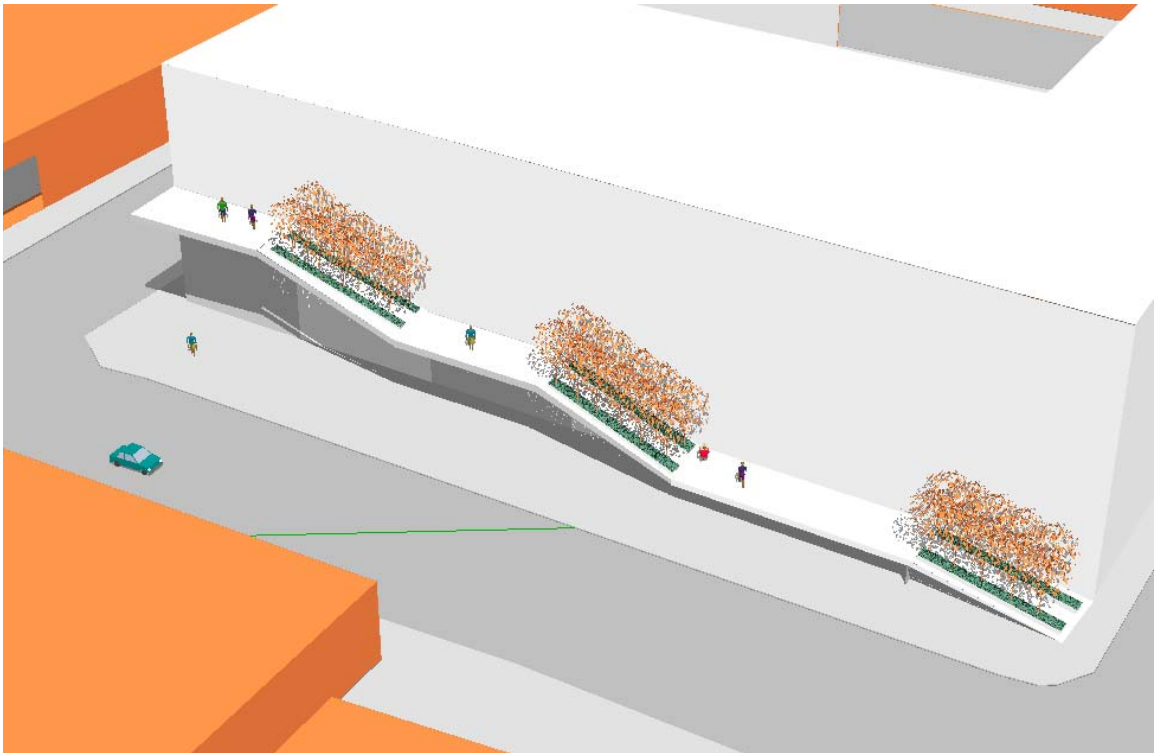
Figure 3:14. The "diagonal garden" uses one long ramp to connect various floors of a building.

Figure 3:15.
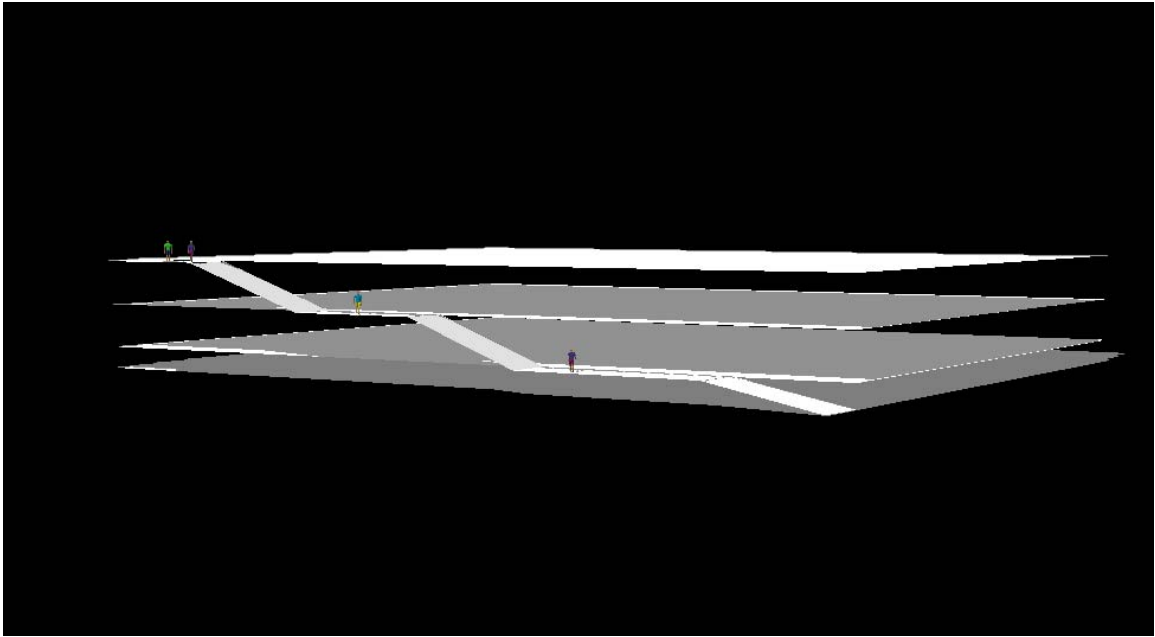
Figure 3:16. Diagram illustrates how the diagonal garden interfaces with the different floors.

C. Stacking
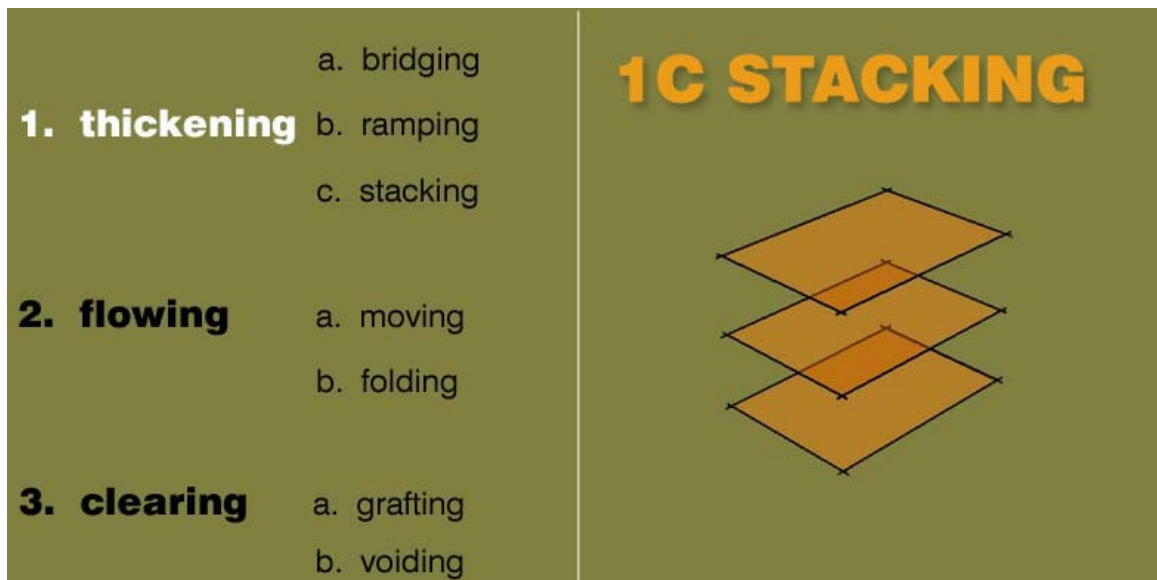
Stacking: (stck-ng) *n*. the vertical arrangement of different ground planes one on top of the other like a building with multiple floors.

This design applies the strategy of stacking to Woodruff Park in Five Points. Stacking refers to the arrangement of ground planes one above the other. Buildings with multiple floors are stacked in this sense; each floor is neatly aligned above the previous one. The strength of this strategy is its spatial efficiency: the congestion and density of cities makes open land scarce, but vertical space is free in respect to land costs. While architects and builders have long used stacking for buildings, the application of this strategy to the urban surface is less common. My design experiments with the idea of stacking a park in order to create zones of contemplation. I propose a series of raised platforms that hover above the park, an archipelago of contemplative spaces floating above the park (Figure 3:17).

Urban parks usually evolve from one of two concepts. The first view is advocated by designers like Olmsted who saw Central Park as a refuge from the city's bustle, an oasis of green that serves as an antidote to the city. To contrast the Olmstedian view, contemporary parks like Centennial Olympic Park in Atlanta actually try to add bustle to the city, injecting life into otherwise sleepy downtowns. This comes in part from the need to sell downtowns as a tourist package, stimulating spaces with visual urban excitement (Faga 51).

Woodruff Park fits into neither of these categories. During the late 1960's the city demolished a long block of buildings and carved out space for this park. Since that time Woodruff Park has had a variegated history, usually acting as a patch of green for downtown. Today the park is too small and open to provide any real refuge from downtown, and it is too underused and under programmed to add any real bustle to the city.

My design creates a drift of floating square platforms that hover along the edge of Woodruff Park, illustrating the stacking design strategy. These platforms act as urban gardens; their raised position provides separation from the street (Figure 3:18). Each garden has a different character. Covered in native grasses and flowers, one platform dreams of meadows. Another platform, covered with a polished cherry wood floor, holds a single chair (Figure 3:19). Another platform pretends to be a beach. Each of these platforms indulges in a fantasy of solitude. The gardens float above the park at different heights, creating a staggered effect that offers a retreat from the bustle of the city.

These gardens are open for anyone to use, although the size of each is designed to be small enough for only a few people. Occupied by more than a few people and the space becomes uncomfortable; the size thus naturally controls the number of users. Each platform offers its own unique way to be entered. One uses ladders. Another uses a spiraling ramp. One has pulleys and ropes and another uses elevators. In each case, the trip from ground to platform engages the user on a pilgrimage to the top, preparing the user for a contemplative experience.

The multi-level arrangement of this park creates a thickened surface that opens up new programmatic possibilities. Like West 8's design for a vertical park in Times Square, this park is inspired by skyscrapers and applies its vertical structuring to the park. As a result, the multiple spaces increase the number of inhabitable ground-planes and intensifies the use of space. In this way, new types of spaces never before possible in an urban area, like contemplative gardens, can be imagined. Stacking thus becomes a useful tool for inventing new typologies of space and interaction.
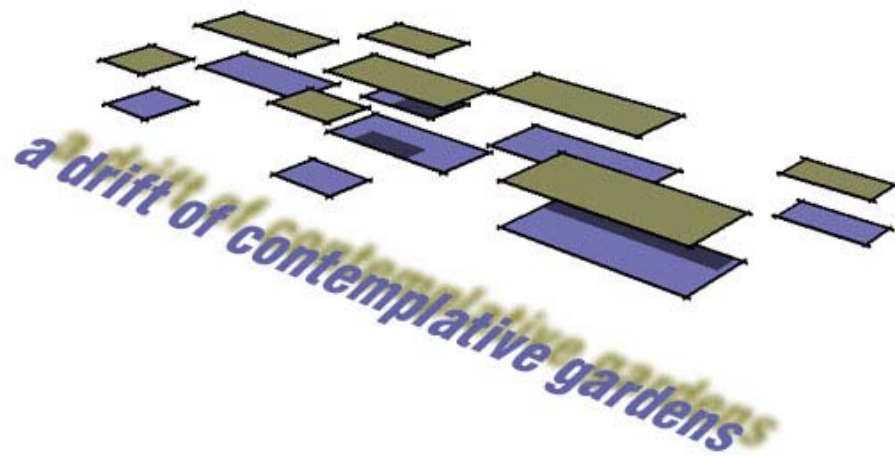
Figure 3:17. Diagram illustrating the drift of gardens.
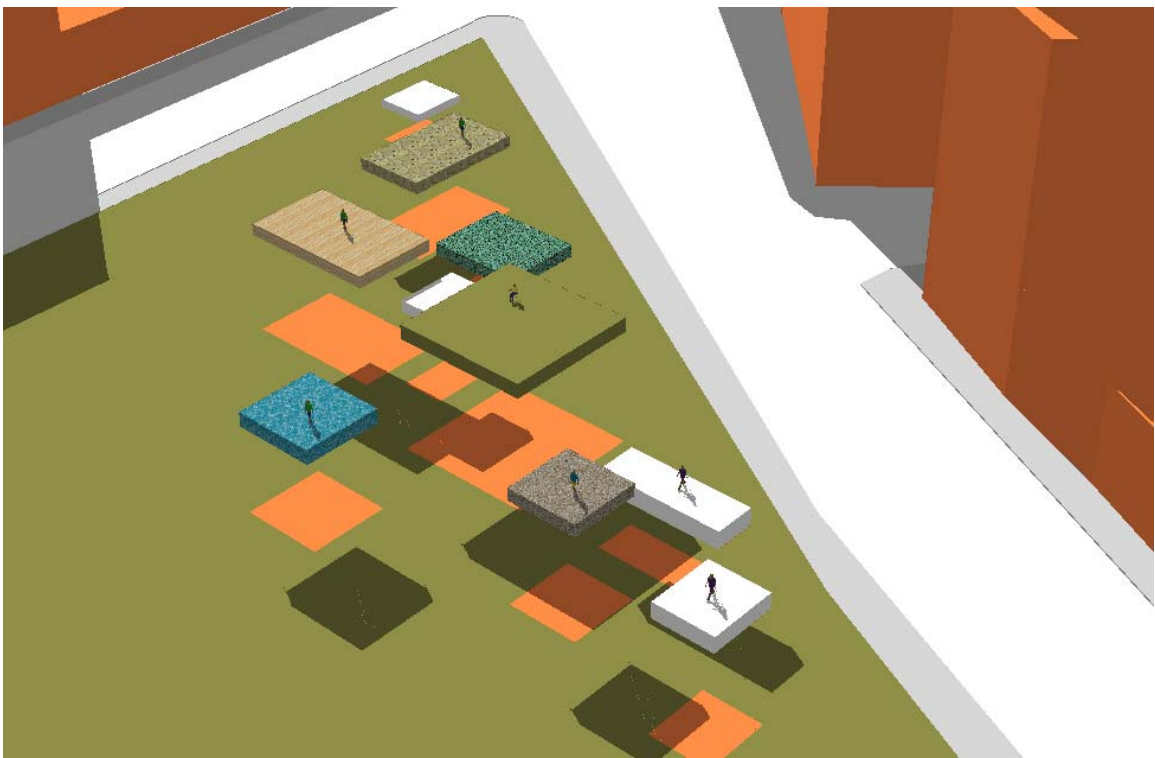
Figure 3:18. Drift of gardens over Woodruff Park.
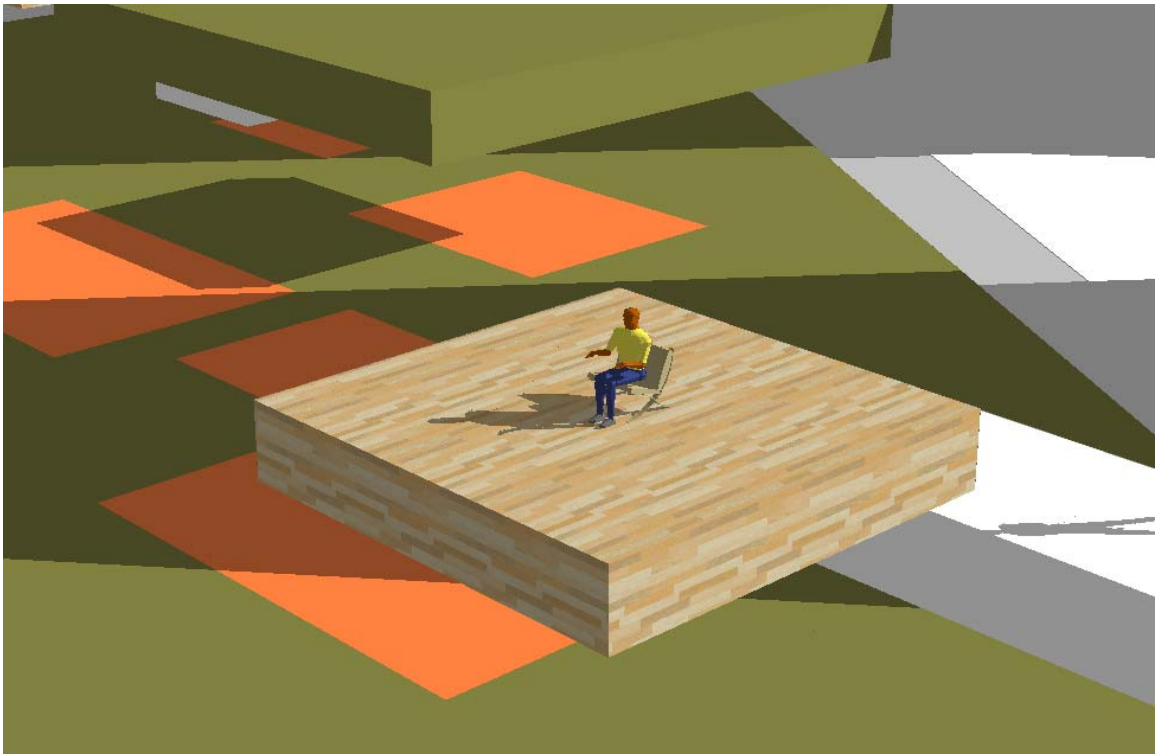
Figure 3.19. Close up of one garden.

The strategy of thickening, as in the case of bridging, ramping, and stacking, offers an alternative way of thinking about the urban surface. In a sense, thickening describes a condition that is already present in most traditional city centers. The complex web of skywalks, the mazes of underground tunnels, and the raised transit lines are all changing the very nature of our cities. The urban surface can no longer be understood as a single unifying matrix, but as a heap of disjointed planes, stretching as far up and down as it does outward. The goal of design should be to make this thickened ground-plane more continuous while at the same time diversifying the activities that take place there. The strategy of thickening provides a new conceptual model for designing this surface.

CHAPTER 4

STRATEGY TWO: FLOWING

Flowing *n*: The strategy of setting up the surface to run smoothly with an unbroken
continuity.

To view the contemporary metropolis from the air would reveal an irregular

patchwork of densities, uses, and spaces. Sprawling squares of commercial lots, tight

grids interrupted by an intersecting street, highways laced liked ribbons through the

landscape, scraps of leftover spaces wedged between roads—this urban carpet unfolds

before the viewer as a glorious mosaic. The experience on the ground is equally

variegated. Moving through this landscape produces short stroboscopic sensations as the

viewer progresses through the untidy collage of the surrounding fabric. "In this

perspective," writes Stephen Graham, an expert on urban technology, "cities and urban

regions become, in a sense, staging posts in the perpetual flux of infrastructurally

mediated flow, movement, and exchange" (8).

Increasingly, urban projects are beginning to address the realities of dispersed

cities: projects that both celebrate and combat the randomness of contemporary cities

with fluid organizations, smooth continuities, and dynamic topographies. The resulting

places effectively integrate the variegated parts of the city while at the same time

improving the flow of services and people throughout the metropolis. Though diverse in

their scope, all of these projects create a more fluid, continuous urban surface that moves through differentiated programs.

<u>The role of infrastructure and the technologies of mobility:</u>

Much of the reason for revising practices of landscape architecture and urbanism today derives from the renewed importance placed on infrastructure and technologies of mobility. Both functionally and experientially, infrastructures and flows of material have become more significant, especially as cities disperse and grow. This shift is particularly relevant to the planning and design professions. It marks a shift here from *forms* of urban space to *processes* of urbanization, "processes that network across vast regional—if not global—surfaces" (Wall 234). Infrastructure challenges traditional urbanism: essentially flow moves, and traditional urban design fixes or attempts to define a moment.

A major contributor to the understanding of this shift is architect and writer Stan Allen, professor at Columbia and co-founder of Field Operations. Much of the themes of his writing and work revolve around the idea of architecture not as a form, but as a system of effects. "Form matters, but more for what it can do than for what it looks like," he declares. Or alternatively, "Form matters, but not so much the form of things as the forms *between* things" (2). Allen's projects often operate at a very large scale precisely because larger scales require more attention to the process and flow of systems. As a result, infrastructure becomes an important motif in his projects:

> Infrastructure prepares the ground for future buildings and creates the conditions for future events . . . Infrastructures are flexible and anticipatory. By specifying what must be fixed and what is subject to change, they can be precise and indeterminate at the same time. They do not progress toward a predetermined state (as with master planning strategies), but are always evolving within a loose envelope of constraints. (55)

For the 1996 competition for the Logistical Activities Zone (ZAL) in Barcelona, Allen experimented with the possibilities of what he calls "infrastructural urbanism." The main feature of the project was a continuous roof structure supported on a regular grid of thin steel columns (Figure 4:1). This skeletal roof covers a large portion of the site and functions as an events scaffold, a flexible framework for future events (Allen 74).
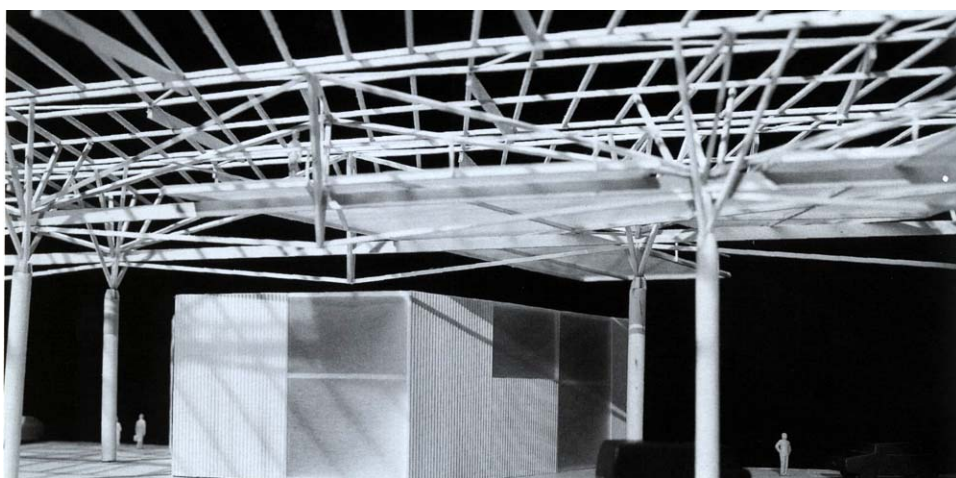
Figure 4:1. Skeletal roof for ZAL in Barcelona (Allen 72).

By thinking of projects as a creation of *infra*structures rather than mere architectural structures, Allen allows the sites to evolve over time. His project in Barcelona offers a field condition that is architecturally specific yet programmatically indeterminate, freeing the site to unfold beyond the fixed limits of the designer (74). Like Parc de la Villette, the design is first a tactical strategy, anticipating the uncertainties of future development. The strength of this approach is that it recognizes that the city is a continuously evolving place, offering designs that anticipate and respond to change.

Infrastructural design is advantageous not only for its flexibility, but also for its ability to create new networks and relationships. "Infrastructure networks," writes

Graham, "with their complex network architectures, work to bring heterogeneous places, people, buildings and urban elements into dynamic relationships and exchanges which would not otherwise be possible" (11). Nowhere is the network of infrastructural relationships more intense than in the modern airport. Across the globe, airports have grown into mini-cities, complete with their own nodes, public train systems, shopping centers, and interior boulevards. All of the themes of the contemporary age—mobility, accessibility, and infrastructure—seem to converge in the conceptual organization of the modern airport.

That the modern airport represents the essence of this age of globalization is frequently commented on in literature. "The terminal concourses are the ramblas and agoras of the future city," writes novelist J.G. Ballard in his book *Blueprint*, "time-free zones where all the clocks of the world are displayed, an atlas of arrivals and destinations forever updating itself, where we briefly become world citizens" (qtd. in Ibelings 83). As airport traffic increases, the airport itself must grow, requiring an increasing claim on space. Eventually, airports attain a density that almost resembles a city, making it a viable economic power that rivals historic city centers. Architectural theorist Hans Ibelings says that this is as it should be:

> That airports, infrastructural nodes and motorways should be the modern catalysts of urbanization is every bit as logical as the emergence in earlier times of human settlements at the spot where two roads intersected or a river was fordable. The essential difference this time round it is accompanied by the decline of the city center as the hub of urban life, leading to a complete transformation of the concept of the classic city as a self-contained entity into just one element in an omnipresent urban territory. (Ibelings 83)

Because airports embody so many themes of the age, they have become a major focus of design interest among architects and planners. "Airports are to the 1990s what museums

were to the postmodern 1980s," concludes Ibelings (78). This trend is evidenced in the number of big name architects offering their own designs for airports or other transportation nodes: Rem Koolhaas's design for a sea terminal in Zeebrugge, Belgium (Figure 4:2), Bernard Tschumi's design for Kansai's international airport, Renzo Piano's design for Osaka Bay, Japan. This interest in the design of airports signals the status of airports as a symbol of the times. Airports act as a microcosm for the twenty-first century city: a centralized node where infrastructure, transportation, and public space intersect.

Figure 4:2. Sea terminal, OMA (Ibelings 119).

Flowing through surfaces: roads and mobility

While airports offer a model for a centralized infrastructural condition, the more decentralized web of roads has rarely been recognized as a collective space unto itself. In most design thinking, it is the chunks of landscape that get our attention, while the linear strips—like roads—are forgotten, neglected, or just ignored. Chunks hold a privileged

position over strips, mainly because chunks connote place, building blocks and fixed programs while strips connote transition and placelessness. This is unfortunate because the reality of what is being built today increasingly occurs in the margins of leftover spaces, undefined zones, and linear landscapes. As cities become increasingly more dispersed and thus more mobile, our experience is that of moving *through* them. In this way, strips actually organize and dictate the placement and design of the chunks. These spaces of mobility provide new sites of collective life. The challenge for designers is to accept that infrastructure and strip landscapes are as important to the vitality and experience of today's city as the chunks. The Italian architect Vittorio Gregotti summarizes this position, "We are trying to return a positive morphological value to the road . . . in the attempt to revive it as a component of the settlement event" (118).

One of the best examples of road design that actually forms new collective spaces is the second beltway of Barcelona, completed for the 1992 Olympics (Figure 4:3). Designed by architect Bernardo de Sola, this 43 km-long road extends across the northern arc of Barcelona's periphery, crossing the upper part of the city at the feet of *El Tibidabo* hills. The driving concept behind this design was not to achieve the highest through-capacity of vehicles, but the highest capacity of collection and distribution among local transportation networks (Wall 239). This is achieved partially by the focus on interchanges. According to Alexandre Chemetoff, "the Barcelona strategy tackles the building of big urban interchanges within the framework of program . . . that should allow the extension of urban links by building bridges in order to overcome the bottlenecks of the existing networks" (124). Thus, the Ronda de Dalt becomes a

contemporary revision of the 1920s garden parkway, a device of aesthetics, efficiency, and connection.
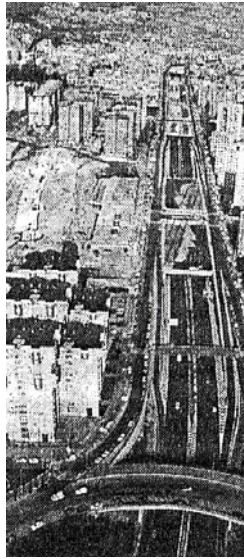
Figure 4:3. The Ronda de Dalt

The true achievement of this beltway is not just the road's efficiency, but rather its ability to stimulate new forms of urban space. These new forms are achieved by the segregation of the sectional character of the road, with faster (regional) lanes in the center, flanked by slower (local) lanes that connect with new frontage and neighborhood streets (Wall 239). Often, large public buildings such as sports arenas are built over the highway, utilizing both the empty space and the accessibility the highway affords. Finally, de Sola's design connected new parks and recreational spaces with the beltway, linking country estates with denser public spaces. The Ronda de Dalt thus demonstrates how an instrument of efficiency and accessibility can also become an instrument of local connection and program diversity.

The dispersal of cities and the corresponding emphasis placed on mobility is changing not only the shape of the landscape, but also the lifestyle of metro-dwellers.

According to a recent survey . . . "Today the road transcends its function as a connector

and becomes both a threshold and a place," writes Alex Wall, "if the space of the car is

sometimes an office, home, or place of courtship, then the roadscape becomes the place

we live" (10). To embrace the road as a place of habitation and community signals a shift

from recent critiques of the road as the culprit of sprawl and dispersal. For critics such as

James Howard Kunstler and other new urbanists, the great road is the protagonist of the

destruction of the social community. But projects such as the Ronda de Dalt adopt a

more optimistic view of the potential of the roads to stimulate, not destroy, community

connection. These connections are vital to the social welfare of the city. How roads

interface with the urban surface to stimulate interaction becomes the challenge for

designers.

Surfaces that flow: fluid urban topographies

Many of the projects discussed so far focus on the flow of people through

surfaces; another group of projects achieve the same goal by focusing on surfaces that

themselves flow. These projects take existing sites and cut, fold, or warp their surfaces to

create a more fluid urban fabric. This surface strategy addresses the age-old urban

problem of better integrating figure with ground. Instead of isolated buildings cut off

from the existing urban fabric—a common feature left over from urban renewal—these

projects create a smooth surface topography that dissolves the distinctions between figure

and ground.

One very distinct example of a smooth surface topography is architect Peter

Eisenman's entry for a design competition for the West Side in Manhattan. Eisenman

has long been known as a philosopher's architect, combining postmodern semiotics with built projects. In his design for the West Side, Eisenman again engages in a sort of philosophical word play, twisting the concept of the figure/ground relationship. Buildings have always been conceptualized as figural objects on a neutral ground plane. Eisenman's design challenges this concept by offering a "figure/figure, rather than a figure/ground urbanism" (Eisenman 104). Using computer modeling, Eisenman stretches buildings over a gridded space, thus blurring the distinction between building and context (Figure 4:4). As a result, three "buildings"—a stadium, a convention center, and the new Madison Square Garden—are integrated into a new urban fabric. Eisenman describes, "The city and the building as a unity, as a single thought generating new urban space, blur the edges of the project and modify the city's form" (107).

The morphed buildings act as both objects of architecture and a field to be inhabited. The project creatively integrates three public mega-structures—"icons of public assembly"—into a single topographic entity. Eisenman is thus able to avoid creating three large structures whose size and isolation would otherwise destroy the fabric of the city. The design includes a highly programmed series of architectural elements including an office development on 8th Avenue; the incorporation of the new Pennsylvania Station; a relocated Madison Square Gardens; a media center; an extended convention center; and a sports stadium. The resulting design offers a highly specific programmatic list while at the same time giving a highly flexible open space to be enjoyed. "In our project," describes Eisenman, "these specifically programmed spaces become part of a new continuous fabric of urban and park space" (107). The strength of this design is that it melds programmed space and flexible space into one topographic

entity. Working flexible space into specifically programmed areas allows the twenty-first
century city to adapt to the constantly changing urban climate.

Figure 4:4. Peter Eisenman's design for the West Side

A similarly conceived urban surface is the project for the International Port
Terminal in Yokohama, designed by Foreign Office Architects in 1996. Because their
site was a large pier, the architects struggled with ways to eliminate the overbearing
linearity of the site. Frustrated with both the directionality of circulation and the
complexity of the program, the architects proposed a multi-layer surface that flows into

each other. The various floors of the pier are folded and rolled one into the other using a building technology that allows for the construction of continuously convex and concave floors (Figure 4:5) (Moussani and Zaera-Polo 82). The blurring of spaces produced by this form is intended to resolve the randomness of the program—a place that is both land and sea, local and international, public and private. "Rather than developing the building as an object or figure on the pier," explains the designers, "the project is produced as an extension of the urban ground, that produces in its folded areas, covered surfaces where the different parts of the program can take place in" (83).

Figure 4:5. Folded surface of pier, Yokohama (Maussani & Zaera-Polo 82).
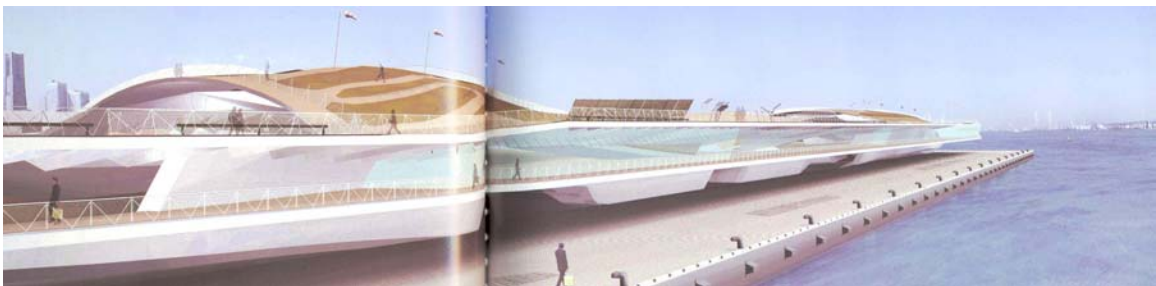
Because of its folded and warped surface, this design offers docking ships of various sizes flexible and anticipatory programs. Like Eisenman's design for the West Side, this pier offers an architectural structure that acts more like a field than a typologically defined building. In this way, the design gives users a place that is both highly structured and highly flexible. More importantly, the designers see this pier having a social function; its unique forms blur the boundaries that might exist in a place of international intersection (Figure 4:6). It offers the city, "a model that is capable of integrating differences into a coherent system; an unbounded landscape rather than an over-coded, delimited place" (Wall 244). In this way, the designers recognize the highly

changeable nature of today's urban environments by proposing a design capable of adapting to change.

Figure 4:6.   Montage of possible interactions on folded surface (Moussani and Zaera-Polo 82).

The use of folded or warped surfaces is a direct result of new computer technologies that allow designers to model complex curves. Peter Eisenman sees the use of these technologies as a part of a larger paradigm shift in architecture: the shift from the mechanical paradigm to the electronic one. While modernism championed the technologies of the mechanical age, this new age of urbanism champions the technology of the digital age. Digital technologies direct a powerful challenge to urbanism because it defines reality in terms of "media and simulation, appearance over existence, what can be seen over what is" (Eisenman 295). These technologies dislocate the person from his surroundings, causing the person to form a new relationship to spaces. "Suppose for a moment that architecture could be conceptualized as a Moebius strip," writes Eisenman, describing a new architectural strategy of folding, "with an unbroken continuity between interior and exterior" (296). Folded space thus articulates a new relationship between vertical and horizontal, figure and ground, inside and out—all structures articulated by traditional vision.

The next section includes two design strategies that better illustrate how urban surfaces can flow. The first strategy, moving, refers to the flow of people across the urban surface. It deals with the themes of mobility and access seen in projects such as Ronda de Dalt. The second strategy, folding, refers to the flow of surfaces. It focuses on ways to make the surface more smooth and continuous like Eisenman's West Side design or the Yokohama Port Terminal. Taken together, these strategies outline broadly ways in which the city works as a process, not just a place.

A. Moving
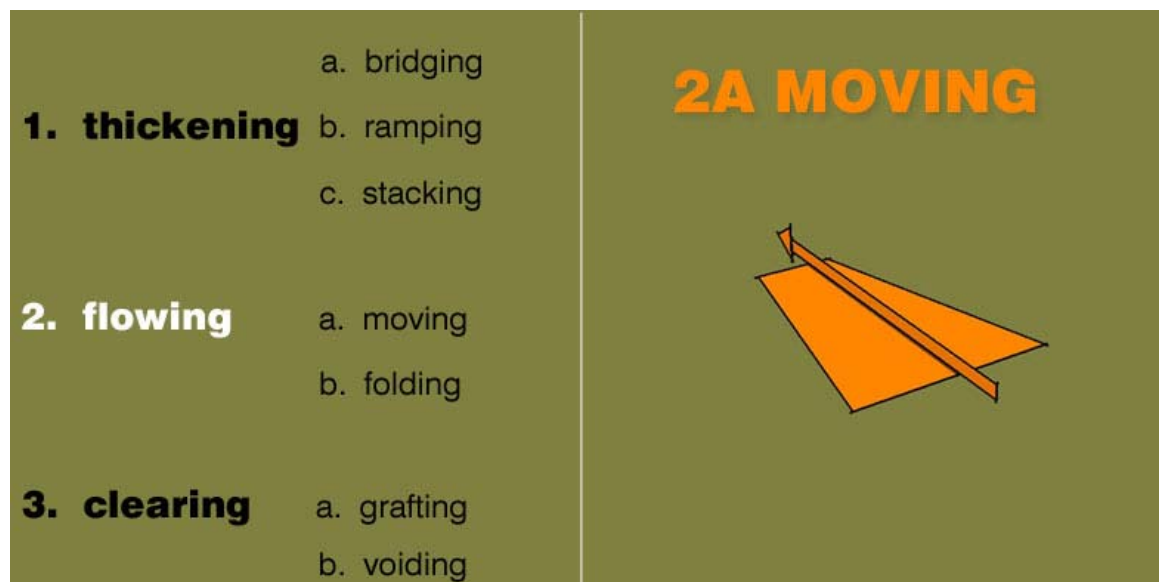
Moving (moo vng) *n*: to stage the urban surface to facilitate motion through it.

This design application applies the strategy of moving to the Five Points site along Peachtree Street. Living in today's cities requires the user to stay in constant motion. While our perception of a city may come to us in static images like skyscrapers and streets, our experience of the city is anything but static: we commute from rural counties on the edge of metropolitan regions; we come from cul-de-sacs buried in the

periphery; we come from housing tracts in the heart of historic centers; we drive downtown; we drive to office parks off the interstate; we take buses and trains to hop from site to site. We take motion for granted. The dispersed nature of the contemporary metropolis requires us to move, always to move, from home to work to shop back to home.

This design strategy celebrates the beauty of speed through a playful temporary design installation. The design is inspired by the effect of a stroboscope, an instrument used to view moving objects by making them appear stationary. A series of folded canvas panels are placed on either side of Peachtree Street, just south of the Five Points intersection (Figure 4:7). The panels are tall enough to fill a driver's line of sight when he or she is driving. Each panel portrays a single image of the Five Points intersection. As a driver drives up Peachtree, the panels appear to move like a flip-book, giving the driver the image that he or she just drove through Five Points (Figure 4:9). Immediately after the panels, the driver actually drives through the Five Points intersection. The effect of the panels is to give the inattentive driver a sense of déjà vu; they see Five Points right before they experience Five Points (Figure 4:10).

This stroboscopic sensation caused by the panels plays with the idea of motion in the city. The visual non-sequitor of seeing Five Points before the driver actually experiences Five Points calls attention to the act of moving through cities. It reminds the passerby that one of the primary experiences *of* the city is moving *through* the city.

The panels also work as a screen for pedestrians on the sidewalks of Peachtree (Figure 4:8). The panels are semi-transparent from the sidewalk, allowing the pedestrian to view the street while being partially screened from the traffic. Benches can be placed

against the inside of these panels, creating eddies of privacy off the main pedestrian

routes. At night, the top and bottom lip of the panel's frame lights up, emphasizing the

linearity of movement. In the twenty-first century city, movement orders our experience.

The ride through the city turns into a cinematic experience. This design celebrates this

everyday experience of moving through cities.
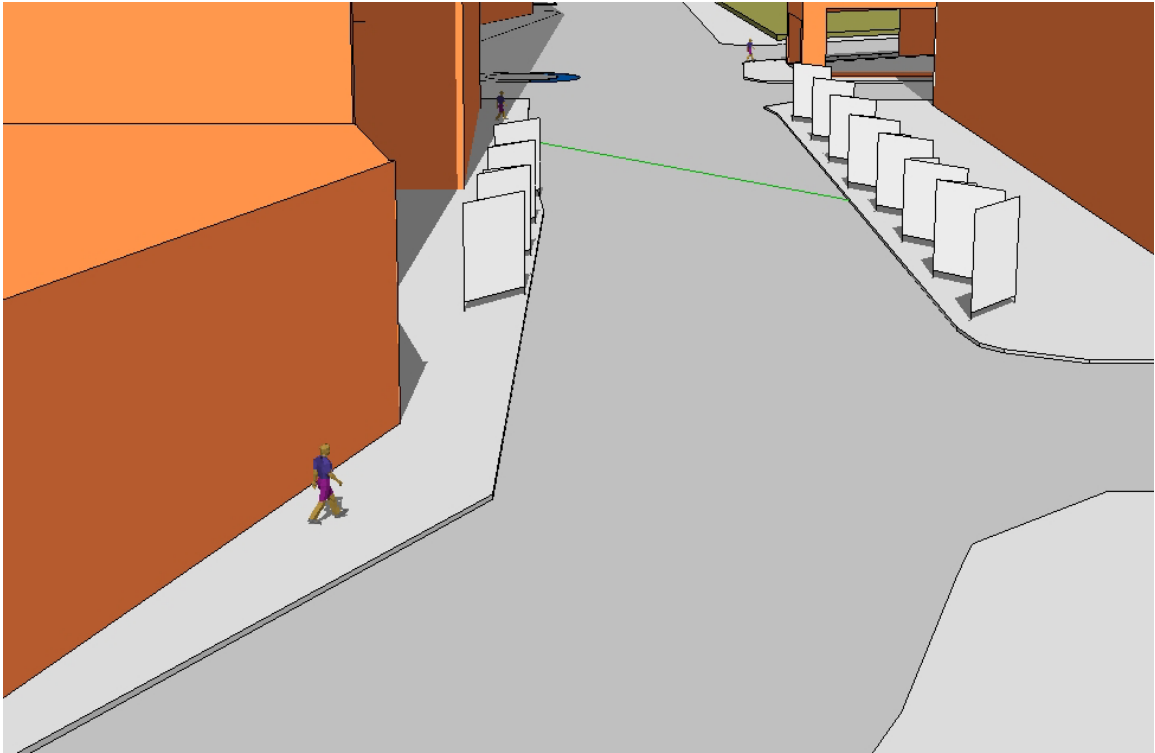

Figure 4:7 Folded panels along Peachtree Street, just south of the Five Points
intersection.
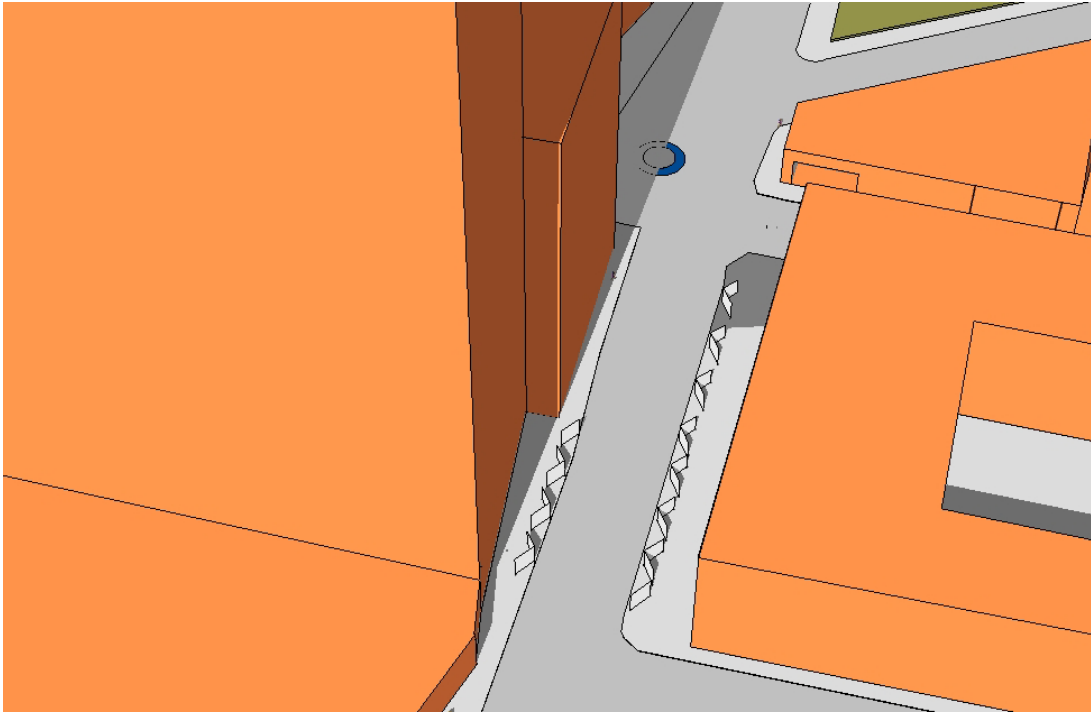
Figure 4:8. Folded panels also act as screens for traffic, creating spaces within the sidewalks.
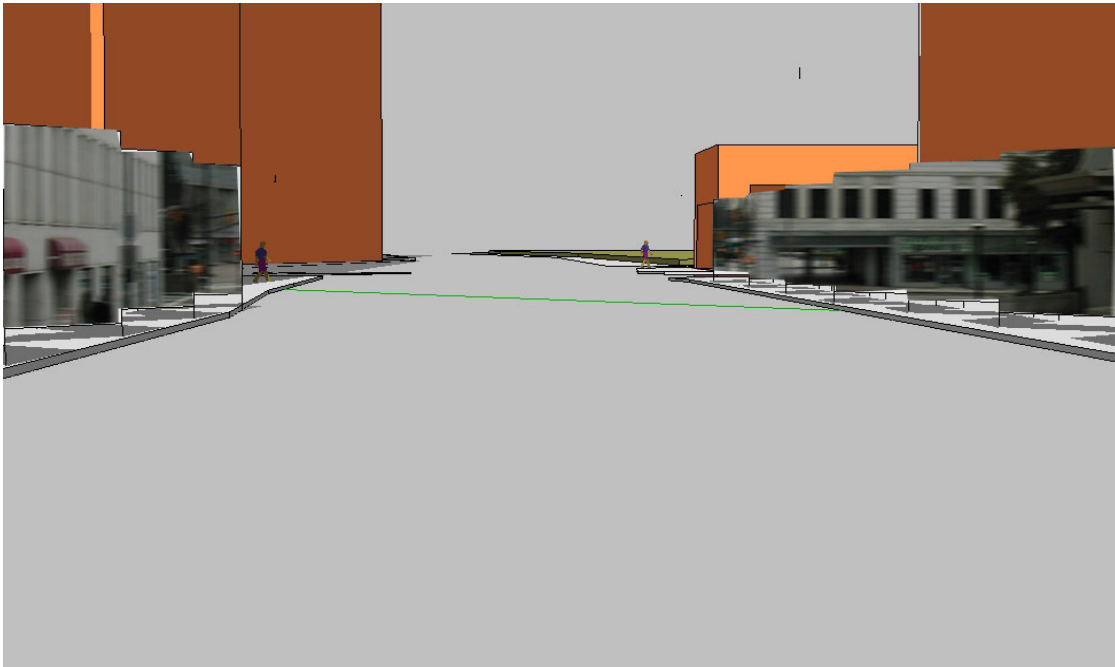
Figure 4:9. Driving down Peachtree, the driver sees Five Points right before he actually sees Five Points.

Figure 4:9. This diagram shows movement in a car north on Peachtree.
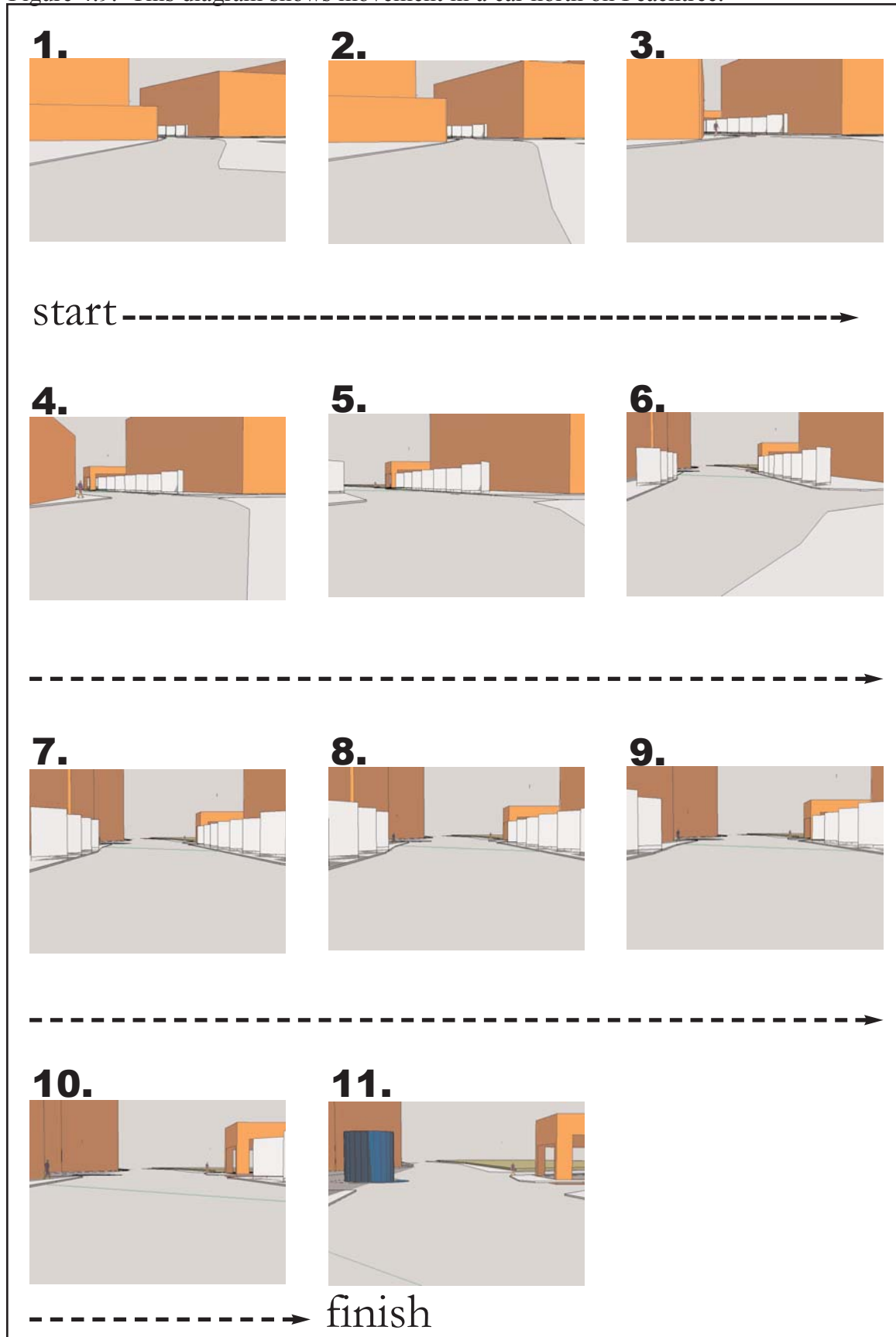
B. Folding
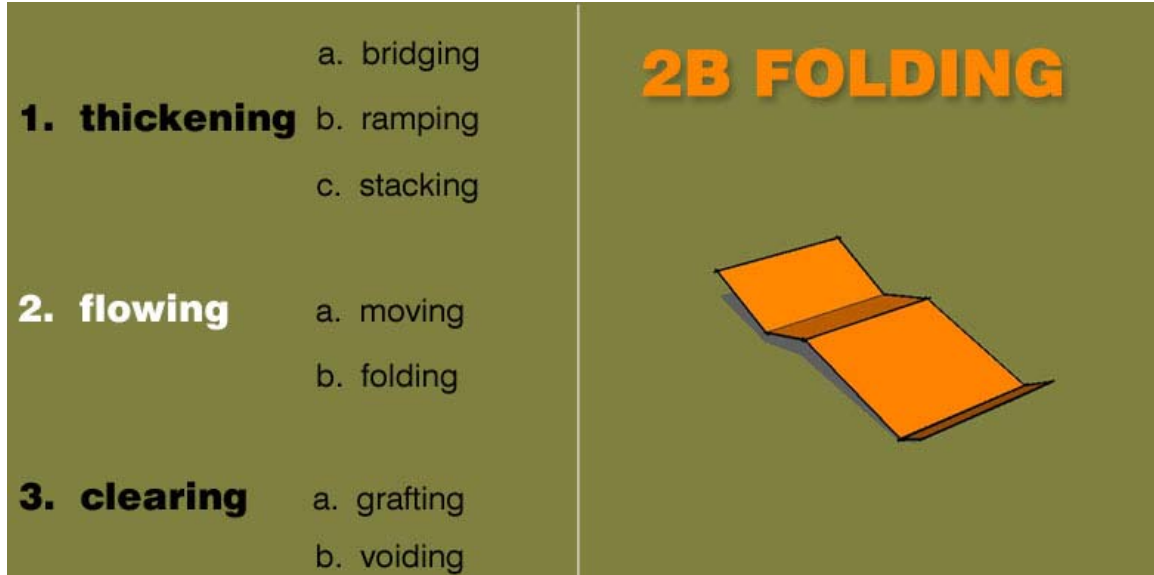
Folding (fo ldng) *n*: creating a smooth surface topography that joins interior and exterior space into a continuous surface.

The strategy of folding cuts, warps, folds, or bends the urban surface to create new interactions. Peter Eisenman's design for the West Side employed this strategy. His plan adopted a continuous, folded surface that rolled buildings into the ground. In a similar way, this design applies the strategy of folding to Woodruff Park in Five Points. During most of Five Points' history, buildings on each side of its streets defined the intersection. When the city razed an entire block to make Woodruff Park, Five Points lost one of its vertical edges that defined the space. Today, Five Points has a weakened identity: a visitor is rarely aware that he or she is actually in Five Points. The presence of the park diminishes the effect of enclosure that once defined the intersection.

How can a vertical element be added at that corner to better define the intersection while at the same time keeping the much needed green space the park provides? By employing the design strategy of folding, a pliable urban surface can both define this

edge and keep open space for the park. To that end, the south end of the park is raised out of the ground, creating a new space *underneath* the park

This design is inspired by aerial photography. To see the city from a plane or aerial photograph, one becomes aware of the vast amount of surface that roofs cover in the city. Despite the massive amounts of space occupied by roofs, they are programmatic deserts, dry expanses of concrete and utilities prohibited to users. But they also are places of great potential: exposed to sunlight and atmosphere, offering interesting views, and possessing openness for use. This design folds the roof into a park, creating an urban surface that functions both as a shelter and an open space.

This design uses an architectural approach that takes advantage of the park's aerial visibility from the surrounding buildings. The park fuses roof level with the ground plane in a collage of varied materials and vegetation. The surface of the park is a patchwork of different natural and hardscape zones: meadows, forests, wood decks, lawns, fields, and plazas (Figure 4:11). The multiple zones serve two ends. First, they divide the space into smaller, more communal spaces. Each zone becomes a more intimate setting to interact with the environment and with other people. Secondly, the variety of zones stimulates a variety of activities. The random juxtaposition of different man-made "natures" generates new ecotones where diversity and interaction happen (Figure 4:12).

Below the folded surface of the park is another park: the indoor wilderness park. Underneath the park surface is a dark and cool like a dense, mesic forest. The ground is covered in lush ferns and moss. Huge lighted columns rise out of the ground and extend through the roof of the park. Inside, these columns reference large tree trunks (Figure

4:13). Their soft glows light the interior forest. In addition to working as structural

supports for the building, some of these columns contain elevators that connect inside

space with outside space. Because true wilderness areas cannot survive in cities, this

indoor wilderness park relies on an artificially controlled environment to simulate a

wilderness. In this way, the design challenges the idea of nature in the city by inverting

one's expectations: the man-made nature exists on the outside; the wild nature exists on

the inside (Figure 4:14).
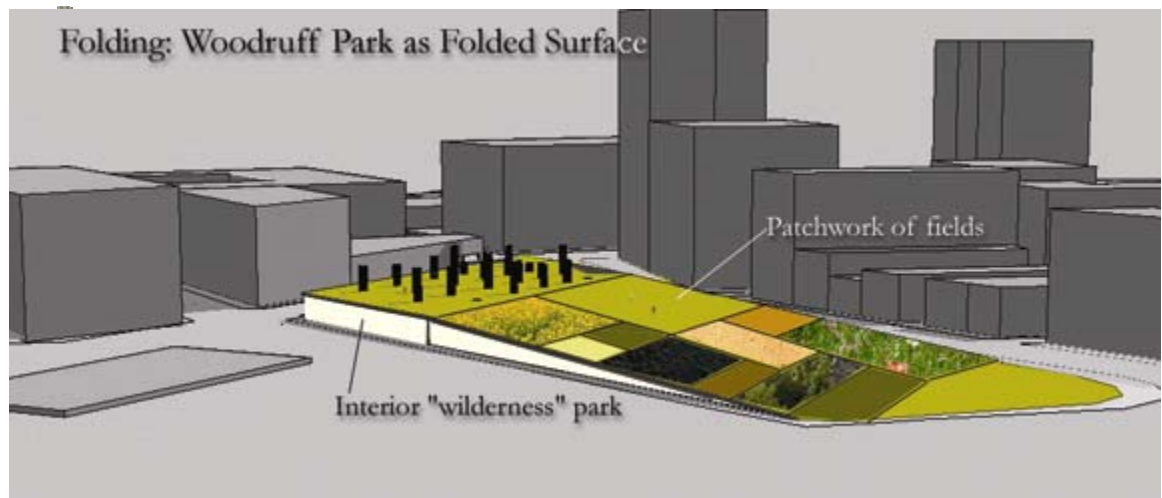
Figure 4:11. Folded surface of park.
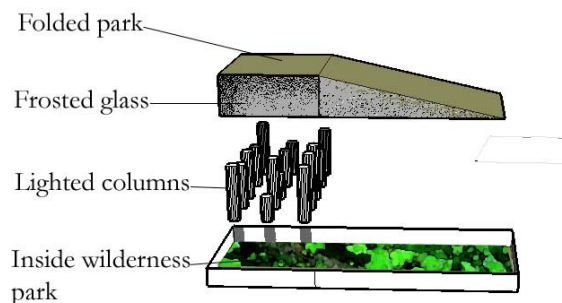
Figure 4:12. Conceptual layers

Figure 4:13. A view of the interior wilderness park.
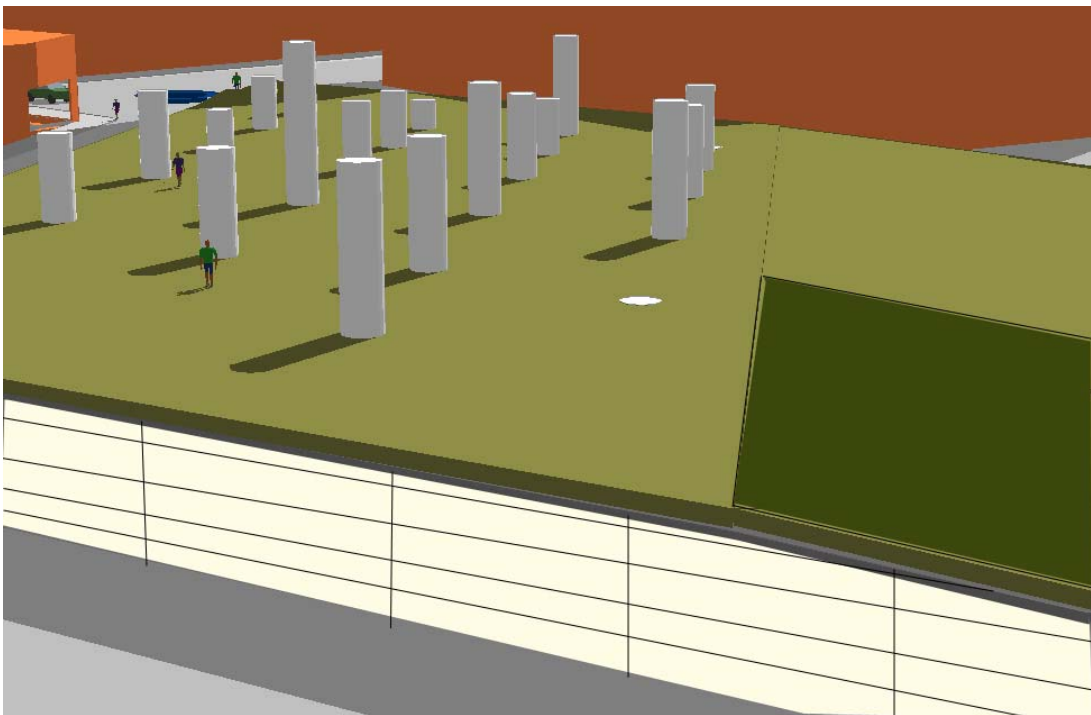
Figure 4:14. A close up of the exterior park.

By folding Woodruff Park, an entirely new space was created without sacrificing the continuity of the surface. The folded surface allows for a higher density of activities to occur on the site, thus diversifying the urban surface. The strength of this strategy lies in its ability to merge program separations into a more fluid organization. If the twenty-first century city is best understood in terms of processes and flows, then a fluid and continuous urban surface will serve it well.

The projects discussed here celebrate the flow of people and goods by using infrastructural intensities and smooth surfaces, creating new corridors of collective life. In the end, these projects offer a new conception of the city: the city as a field, a processal system where interaction, not place, forms the basis of city life. 'Urban' is no longer defined by living in a certain place, but rather by how one moves, connects, and flows within this field. At their heart, our cities have always been, and will always be, what flows through them. This is their life: the ebb and flow of a hundred thousand interactions and intensities, all staged and played out on the urban surface.

CHAPTER 5

STRATEGY THREE: CLEARING

Clearing (cleer ng) *n*: The strategy of setting aside spaces that are programmatically
indeterminate, allowing users to shape the spaces they inhabit.

Shopping malls for shopping only, parking lots for parking only, streets for

driving only, and sidewalks for walking only—these are the spaces spun-off by mass-

culture, spaces specifically defined for a single function. The modernist city has

generated an efficient layout of circulation and land use. Both zoning codes and the

consumer's demand for an auto-convenient city further enforce and perpetuate the one-

dimensional character of these spaces. Modernist city planning, constrained by

regulations, has produced a patchwork of monocultures, endlessly repeated across the

landscape.

Recently, however, a handful of designers have produced urban spaces that

address the lack of non-defined space in today's cities. These projects revive a kind of

baroque understanding of the public space: the surface as a stage where events of the city

are publicly performed. To achieve this effect, explains urban design professor Alex

Wall, these designers often choose "emptiness to over-programming" ("Programming the

Urban Surface" 242). In this way, they create spaces that are able to adapt to the rapidly

changing urban environment. Their designs employ the strategy of clearing, setting aside

spaces that are programmatically indeterminate, thus allowing users to shape the spaces

they inhabit.

The projects discussed here mark a shift in design thinking. Aware of the unpredictable nature of the twenty-first century, these designers stretch the role of program in their urban projects. Program is understood as both the generator and end goal of design. Or as Dutch architect and writer Juliette Bekkering says, "Program and functions are the goal, form is the means" (38). The work here represents a renewed interest in the functionality of design—a modernist revival—as opposed to representation or symbolism. But where modernism focused on fixed and determined functions that were ultimately discarded when new needs arose, these projects focus on designs with flexible and indeterminate functions. In this sense, urban design is as much about the events that take place in spaces as about the spaces themselves. Here the static notions of form and function long favored by planners and architects are replaced by a focus on the events that pass through the forms. Here designers orchestrate the unpredictable.

What all these projects have in common is a belief in the freedom of the urban-dweller. Given non-defined spaces, the urban-dweller becomes the designer, creating, adapting, and choosing. Many of landscape architect Adriaan Geuze's designs reflect his belief in the ability of the city dweller. He writes:

> The straight jacket of culture for the masses makes the city dweller crave for platforms inviting exhibitionism, apocalyptic sensations, and the beauty of silence. The contemporary city-dweller is self-assured and intelligent. The daily trips from work, to home, to school, to sports facilities or to friends and family are ritual journeys through challenging surroundings (13).

The contemporary urban dweller faces continuously changing conditions, adapting to the tempestuous winds of new infrastructures, networks, and economies. The role of the urban designer, therefore, is not so much to lessen uncertainty, but to embrace uncertainty as a liberating factor in urban projects. Uncertainty becomes a base condition for the

choice of the city-dweller. Urban design thus works as a kind of genetic code for cities, suggesting possible futures without dictating their arrival.

<p style="text-align:center">Grafting: Surfaces embedded with technology</p>

How to create spaces with open-ended programs requires one to design with a delicate hand, a balance of heavy-handed direction and hands-off planning. Urban designers must produce what Stan Allen calls a "directed indeterminacy:" proposals that are robust and specific enough to sustain change over time, yet open enough to support multiple interpretations (88). To achieve these ends, the designs discussed here often rely on new technologies and instruments embedded in the surface. The urban surface works as a field that is grafted onto a set of instruments and equipment (Wall "Programming the Urban Surface" 233). These technologies not only offer functional services, but also engage users in new activities. Much of the early conceptual work in this field was developed in the late 1960s by the radical architectural groups, Superstudio and Archigram. These theorists brought a renewed optimism between technology and architecture.

As a reaction to the wholesale demolition and urban renewal of large sections of cities, new visions of the urban surface were offered during the late 1960s. What seems particularly prescient about the design proposals of Florentine group Superstudio and the British group Archigram was their anticipation of the role of technology and communication networks on the shape of cities. Superstudio, in its project 'Microevent/Microenvironment' envisaged a continuously developed, artificial surface. The structure of the city would be replaced by the grid, inscribed onto the natural

landscape as a metaphor for a network of energy and information that would extend to all inhabitable areas. Because it is continuously serviced, this uninterrupted surface would encourage permanent nomadism. Called the "No-Stop City," Superstudio proposed a continuous urban surface that was in reality a large equipped floor. Neutral and unadorned, these infinite floors allow individuals to realize their own habitats. Urban design professor Alex Wall describes the result, "Design, which had merely become an inducement to consume, would disappear. Utensils would no longer generate ideas but rather ideas would become utensils" (9).

Likewise, British design group Archigram created a series of urban utopias that seem particularly relevant today. Their projects show concepts of plug-in communities and new infrastructural dependent event-structures whose arrival would permanently transform cities. Inspired by the emerging technology of rock concerts and festivals, the design *Instant City* proposes large-scale infrastructures to support mass events and activities (Wall 236). Drawings of "instant city airships" descending on a typical English town serve as a metaphor for the way events can intensify, infiltrate, and stimulate new networks in an otherwise sleepy town (Fig 5:1).
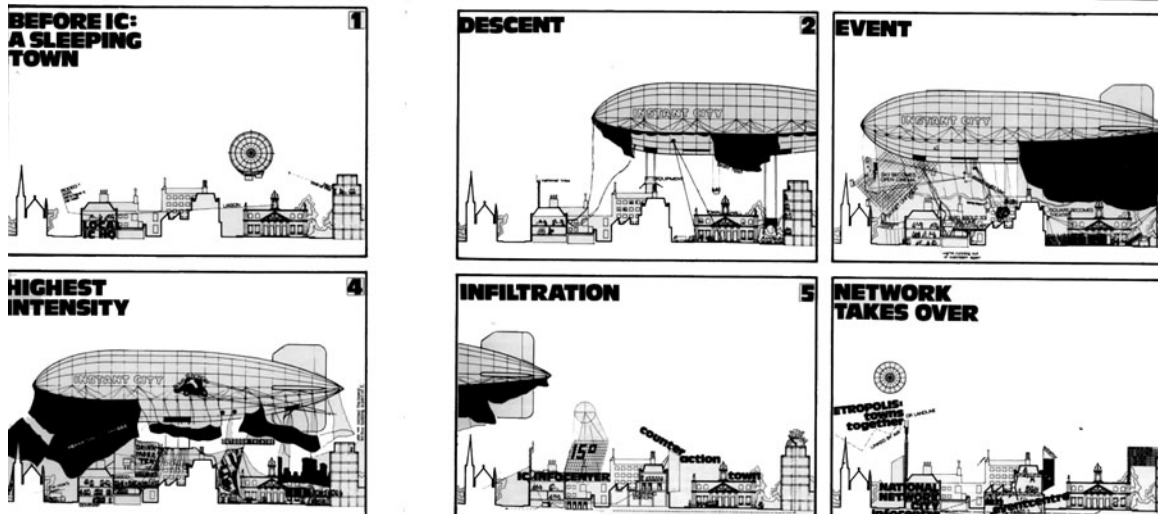
Figure 5:1. *The Instant City: Sequence of Effect* (Cook 99).

The enduring contribution of Archigram's work is that it offers designed systems that are inherently flexible; pieces can be added, subtracted, or reordered at will, accommodating a range of uses at different times. Their search for a new, highly flexible and technology-based approach to urban design elevates the freedom of the individual user working within collective structures. The emphasis on flexible designed systems is an exceptionally fitting tactic because it recognizes the highly changeable and unpredictable nature of the contemporary metropolis.

Not until the 1990s were some of the more radical proposals of the 60s actually implemented. Perhaps the best example of an urban surface whose design encourages users to create their own activities is West 8's Theatre Square in Rotterdam (Figure 5:2). Located in the heart of Rotterdam, Theatre Square has become a center for all kinds of urban activity. At first glance, the square appears remarkably undesigned; the surface is simple and spare, an empty podium surrounded by theaters, restaurants, cafes, and a new cinema complex. But while the surface appears spare, the square's floor is actually a complicated mosaic of different textures. Wood, perforated steel plates, granite, epoxy,

and rubber laid out in various geometries form a hardscape carpet (Figure 5:3). West 8

chose these textures in part because the square is built above an underground parking

garage, and this particular palette of materials is light in weight (Figure 5:4). But the use

of different materials also elicits different activities in the square. Rollerbladers, soccer

players, walkers, and musicians each choose their own zones, often based upon the

texture of the surface (Geuze 72). Below this surface construction are a host of utilities

and services, including lighting that produces "a Milky Way of light across the floor at

night" (Wall 243). In addition to these electrical services, the surface is also punctured

with fence and tent-post holes, allowing temporary structures to be quickly erected.
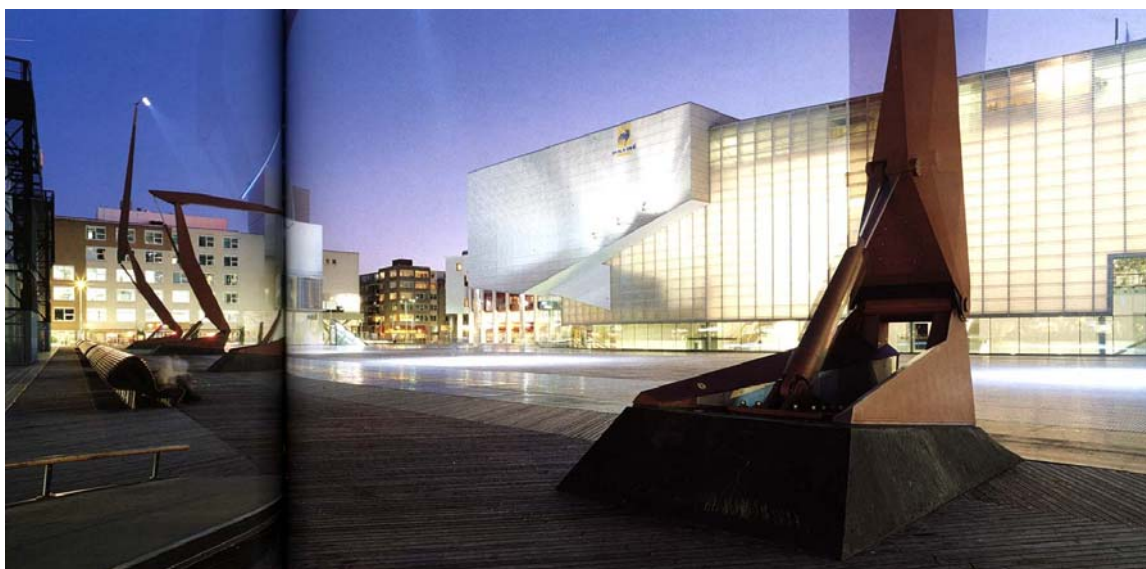
Figure 5:2. Theater Square at night (Geuze 72-3).

The true genius of West 8's design is not so much its space-making or aesthetic

forms, but its strategic organization of the surface. The design engenders events, not a

just a place. The square serves as a field grafted onto a set of services and equipment.

The advantage of this strategy is twofold: first, it creates empty space for the user to

inhabit, choose her own activity, and move about unimpeded by objects; secondly, it

compliments the emptiness with a range of active services that the user can plug-in to.
The square possesses a beautiful balance between active and passive programs, all of
which require the user to consciously engage before they are realized.
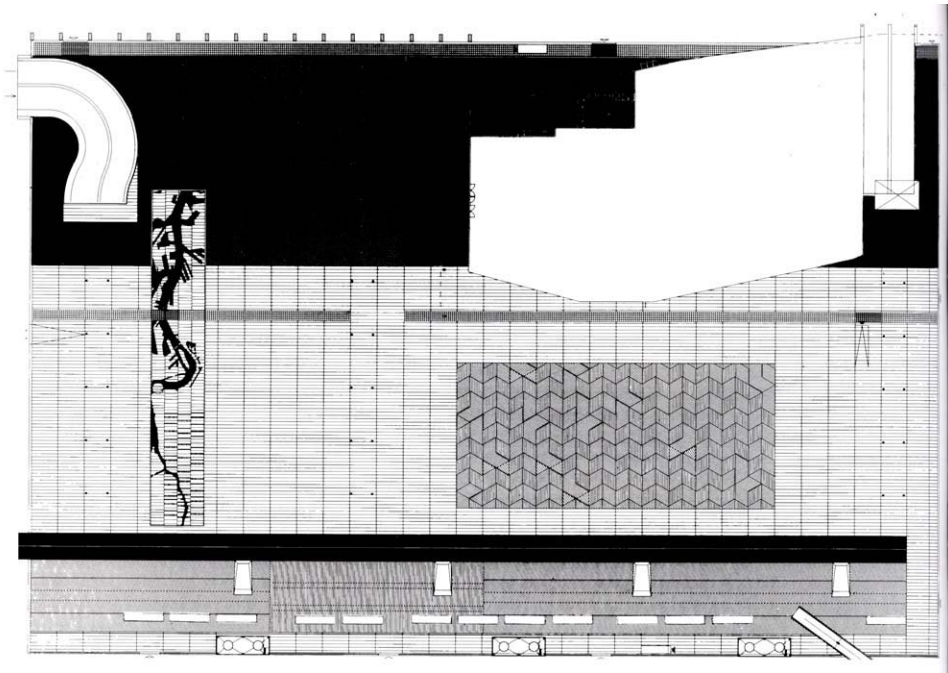
Figure 5:3. The surface "carpet" (Geuze 78).

Theater Square brings a kind of baroque playfulness to the public realm. West 8
designed the square literally as a stage for Rotterdam. Because of the flat, empty surface,
no one can cross the square unnoticed. "Once in the square, the visitor becomes an actor
or spectator," describes designer Adriaan Geuze. The only objects on the square are red
light masts, the glass entrances to the parking garage, and the 70-meter long bench. Each
of these objects acts as a piece of stage equipment. The four 35-meter high light masts
are working cranes whose form echoes the great structures along Rotterdam's docks
(Wall 243). By dropping a coin into a machine, people can cause the light to move up or

down according to their desires. "These are spotlights in which lovers may capture each other and street singers may perform," Geuze explains (72).

Anatomy
1. Cinema
2. Lightmasts and ventilation towers
3. Square surface
4. Structure
5. Roof
6. Parking
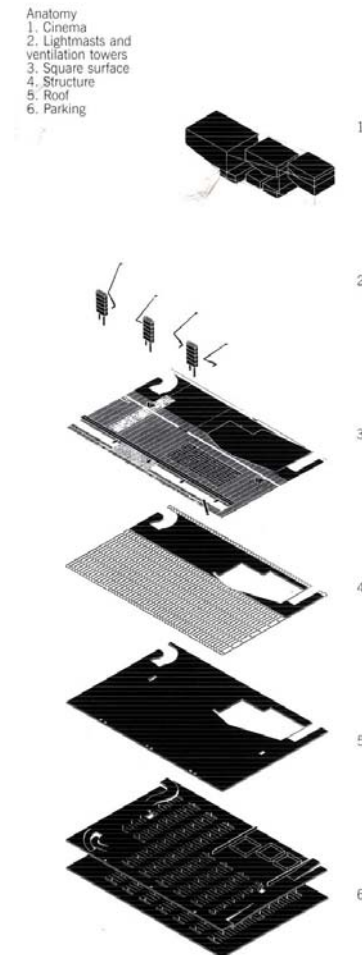
Figure 5:4. Conceptual layers of the surface (Geuze 77).

The character and potency of this design is in its capacity to change. By balancing emptiness with programmed space, users can activate these voids, making them stages where city life is played out. Grafting technology to urban surfaces works well, especially with relatively small sites like Theater Square. But a slightly different strategy is required to achieve the same effect at larger scales. These larger sites require planning strategies that are at once specific and flexible, active and passive, resilient and

ephemeral. One such conception was proposed by Rem Koolhaas and OMA in 1987 for

the competition for the new town of Melun-Senart, France.

<u>Voiding: Surfaces organized for emptiness</u>

The competition for Melun-Senart asked designers to create a new town in the

agricultural outskirts of Paris. OMA began with an unorthodox planning proposition:

that planning and mastering the urban—that is, the built—is both naïve and impossible

today. "The built is now out of control," says Koolhaas, "subject to permanent political,

financial, and cultural turmoil" (974). If the built is uncontrollable, then the opposite is

true of the unbuilt; emptiness might be the only certainty left. Rather than focusing on

the planning and arrangement of buildings, various programmed voids are outlined

(Figure 5:5). OMA inscribed a system of bands—linear voids—onto the site "like an

enormous Chinese figure" (Koolhaas 981). Through a thorough analysis of existing

roads, historical fragments, habitats, and proposed programs, OMA targeted areas they

thought should be preserved. . The urban development is banded to specific locations,

giving the city space to breathe.

These bands of preserved land isolate various islands that can be used for future

development. The "islands" will be developed according to the specific demands of site,

program, and developer. Some might be dense urban areas, others might be sparse

housing tracts, and still others might connect with transportation infrastructure. Each

island will be infinitely flexible in accommodating "different architects, different styles,

different regimes, different ideologies" (Koolhaas 983). Basically, anything can take

place on the islands as long as the framework of open space is preserved. Thus, OMA's

project is more an abstinence from architecture than a proposal for it.
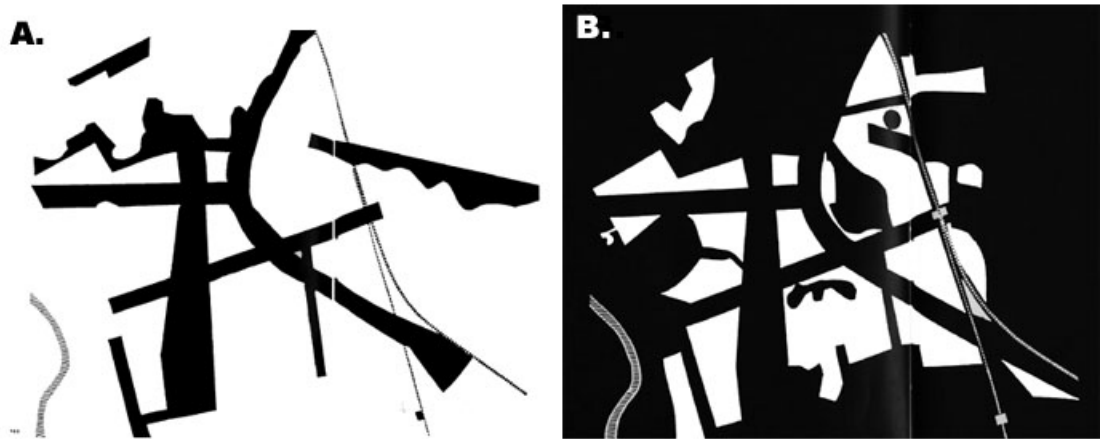
Figure 5:5. Voids to be uninhabited (A.) and islands (B.) to be inhabited (980-82).

OMA's plan represents a surrender to the inevitability of urbanism. It is a tactical

move, preserving emptiness while letting the urban have dominion in specified zones.

The voids will shape the character of the future environment far more than any particular

building layout. They give a stable structure that can withstand the unstable development

pressures that planners can rarely influence. In this way, OMA's proposal serves as an

antidote to the rigidities of master-planning strategies—strategies that ultimately "bite the

dust" when unexpected development pressures render them useless (Koolhaas 974).

Melun-Senart demonstrates an inversion of planning, a negative imprint that reverses the

formal roles of figure and ground, building and open space. Building sites are left open

and undetermined; the voids are rigidly maintained. "Instead of a city organized by its

built form," writes Koolhaas, "Melun-Senart will be formless, defined by this system of

emptiness that guarantees beauty serenity, accessibility, identity regardless—or even *in spite of*—its future architecture" (981).

Notation: Surface as a written score

One of the truly novel aspects of both Theater Square and Melun-Senart is their resistance to design, at least design as a means of representation. That is, both projects succeed because they leave large portions of the projects *undesigned*. What is expressed here is a disbelief in the efficacy of architecture and a belief in the totality of the urban. As urban becomes ever more pervasive and chaotic, designers must let go of fantasies of control and embrace strategies that accommodate processes. One such strategy involves the use of notation as a tool for conveying future events.

Architectural drawing has always been the language of the designer, representing on paper what could be built in reality. Traditionally, the value of drawing is its ability to represent a built form, such as a rendering of a building. But to think of drawings as pictures cannot account for either the instrumentality of architectural representation or for its capacity to render abstract ideas concrete (Allen 32). Architectural drawings work as notations. Like a play or a musical score, notations operate as a set of shared meanings, waiting to be performed. Their meaning does not depend on the author or a particular moment, but on the interpretation of the user.   The real value of notations is its ability to convey all the intangible properties of reality that cannot be represented in graphic form. The strength of notations is its capacity to anticipate the complexity and unpredictability of reality.

Notation can be of real value to the urban designer. The city in recent years has

been the subject of a violent conceptual shift. Today the technologies of communication,

the widespread effect of globalization, the accelerated pace of information exchange, and

restless mobility have made the city an "ageographical" entity (Sorkin xi), a placeless

place. This shift undermines the idea of the city as a place of architectural permanence.

Now that the city can no longer be described as a tangible site, static drawings that

represented the traditional city have lost their relevance. The city of today is better

described as a network of flows, a dynamic intersection of people, goods, and data.

Architect Stan Allen explains that in the rhetoric of early modernism, technology

was represented in symbolic form. The ocean liner, the airplane, and other machines

became "icons of modernity" (39). Today's technology no longer lends itself to

representation; they are uninteresting as symbols for design. The cell phone, credit card,

digital media, and computers are less heroically symbolic as forms and more interesting

for the processes they represent. Notation works like the new technology, describing a

project that is yet to be realized. They offer designers a chance to imagine flexible

futures without dictating exact forms. Stan Allen describes the potential of this strategy:

> As a model for operating in the city, the collective character of notation is highly
> suggestive. Going beyond transgression and cross programming, notations could
> function to map the complex and indeterminate theater of everyday life in the city.
> The use of notation might provoke a shift from the production of space to the
> performance of space. (89)

Allen's project for the Logistical Activities Zone in Barcelona (see chapter 2) employs a

set of notational schemas to further imagine his project. In addition to a range of

conventional representational techniques (plans, sections, and models), Allen offers a

User's Manual that anticipates how his design might change over time. The User's

Manual is a compilation of diagrams, maps, scores, and scripts that describe the

intangible aspects of his design (Figure 5:6). Designed as a series of posters, the manual

cross-references a tapestry of relationships resulting from his project. The manual is both

specific and undetermined, giving users a vision of the future that will evolve with time.
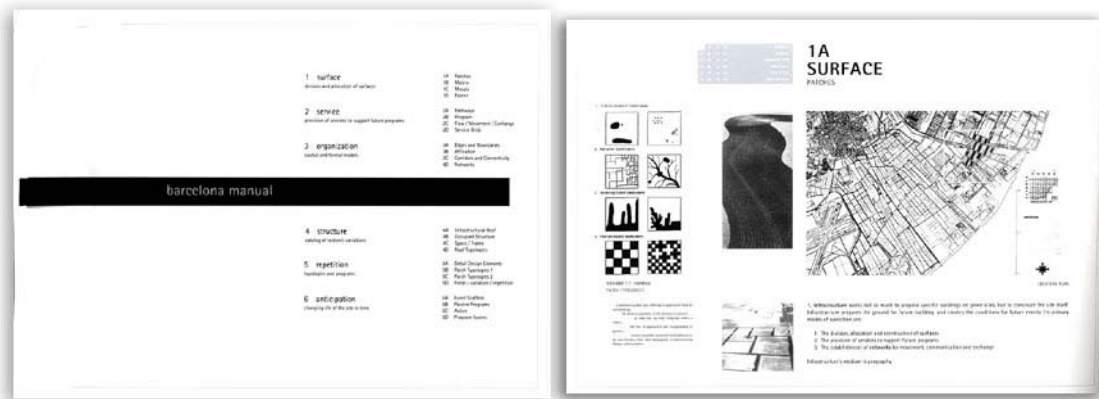
Figure 5:6. The User's Manual is a notational guide to the ZAL design (Allen 75).

Like the methods used in Theater Square and Melun-Senart, notational strategies

offer a means of designing for unpredictable futures. They also allow for site analysis of

less quantifiable phenomenon like experiences, smells, and sounds (Themens 2). All of

these strategies and projects demonstrate methods and designs that are indeterminate in

their functions, thereby allowing their users to invent and claim space for themselves.

"Such investment by the users subsequently ensures a long and affectionate occupation of

public space," explains Alex Wall (245). The user adds life and vitality that enhances the

initial design.

The projects discussed in this chapter, while diverse in their goals and scales, all

share a new interest in the role of programming. Instead of rigidly assigning uses to

certain spaces, these designs set up spaces with indeterminate uses, enabling the users to shape their own experiences. These designs create *clearings* within the urban fabric, giving users the space to breathe and choose. To better illustrate exactly *how* the strategy of clearing works, two designs are proposed for Five Points. The first design uses the idea of grafting equipment onto the surface—the "strip"—in order to engage users in new activities. The second design creates a clearly defined zone of open space—the "field"—that offers users freedom to choose their own activities. While each of these designs serve independent functions, they work together to form a space that is both active and passive.

A. Grafting
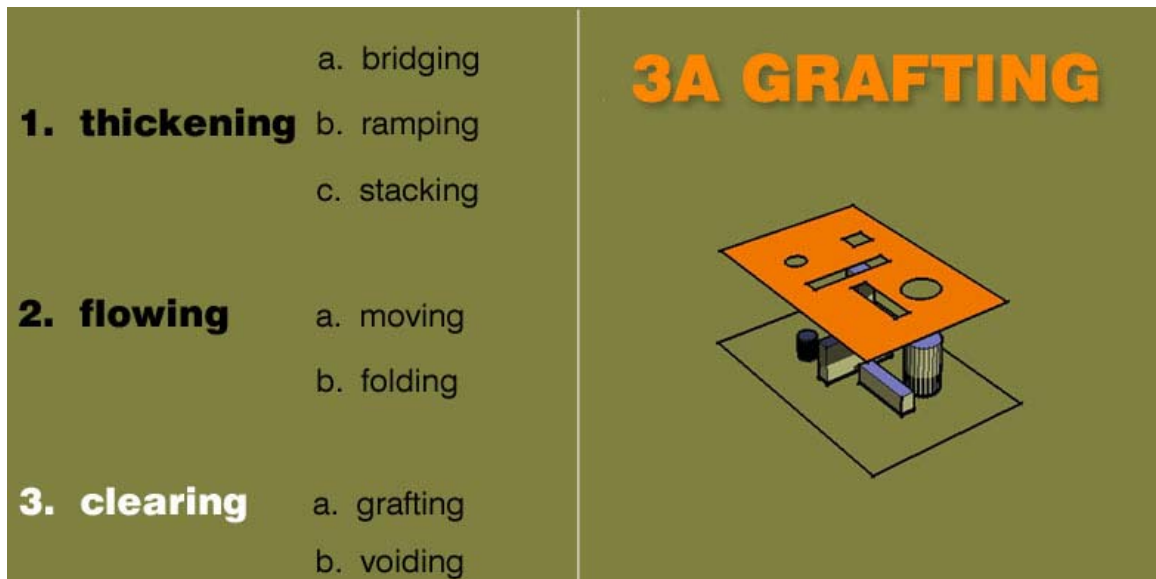
Grafting (gr aaft ng) *n*: embedding the urban surface with equipment in order to stimulate new activities.

Adding continuity to a discontinuous cityscape is a serious challenge for designing cities in the twenty-first century. How can you diversify activities in cities of monoculture? How can these seemingly competing goals—continuity and diversity—be

reconciled? To answer these questions, this design offers a running strip that runs along Peachtree Street. The idea of a continuous strip was inspired by Christo's running fence. In 1976, artist partners Christo and Jeanne-Claude unveiled the running fence, an 18.5-foot high fabric curtain that stretched almost twenty-five miles through the California countryside (www.christojeanneclaude.net/christo/fence.html). Although not an urban project, Christo's fence serves as an appropriate inspiration for an urban intervention. It does this in two ways. First, the strip offers a continuous element that changes the way we look at the surrounding landscape. A single continuous element, the strip, ties together the disparate landscapes it runs through. The fence changes the landscape; the landscape changes the fence (Figure 5:7). Secondly, the fence as an object in an otherwise empty landscape draws one's attention. Its structure and organization make the landscape more legible. Both its continuity and its legibility make it an appropriate fixture for an urban settting.

Figure 5:7   Christo's "Running Fence" stretches across the landscape (www. christojeanneclaude.net/christo/fence.html).

My design takes the running fence, the strip, and places it in Five Points. The strip stretches along the sidewalks and open spaces of Peachtree Street; it crosses streets, melding with the pavement; it gathers, bunches, then shoots out across a park; it disappears where the streets end (Figure 5:8).
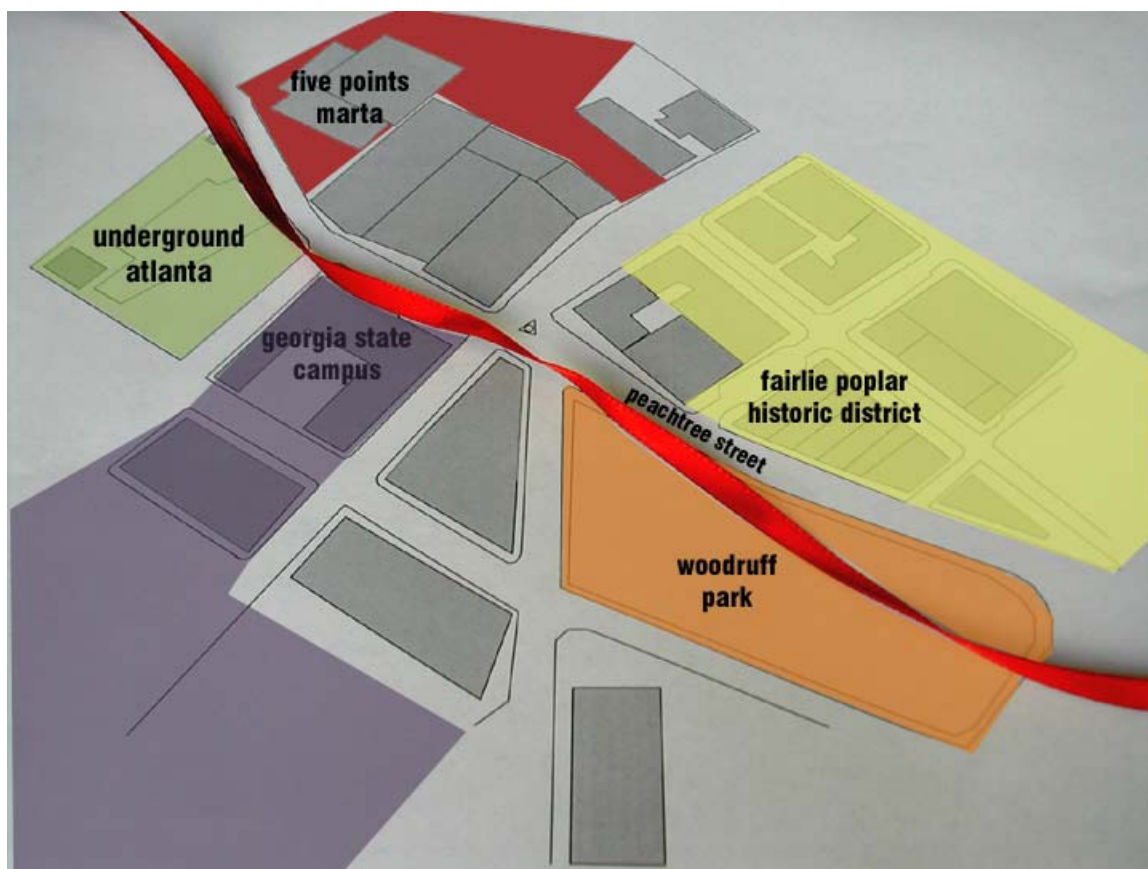

Figure 5:8 . The strip, represented by the red ribbon, connects the different zones in Five Points

The strip is a fence on the edge of a field. Around this fence, activities grow like a wild hedgerow. Pedestrians are drawn to this ecotone for habitat and interaction. This hedgerow is diverse and active, an antidote to the monoculture of the field. People

cluster like birds. They come for interaction. They come to be stimulated. Through this strip flows the energy of the city. It is *human* infrastructure.

This strip contains seat walls, canopies, moveable furniture, grassy dunes, clusters of understory trees, perennial flower beds, and misting fountains. This strip has media screens broadcasting street life in Beijing, stock market quotes, live footage from a moving MARTA train, ballroom dance instructions, and primate cages at the zoo. The strip has wireless docking stations for computers or phones. It connects, intensifies, and harbors (Figure 5:9).

The strip is a fence on the edge of a field. Around this fence, activities grow like a **wild hedgerow**. Pedestrians are drawn to this **ecotone** for habitat and interaction. This hedgerow is diverse and active, an antidote to the monoculture of the field. People cluster like birds. They come for interaction. They come to be stimulated. Through this strip flows the energy of the city. It is **human infrastructure.**

live media screens

grassy berms

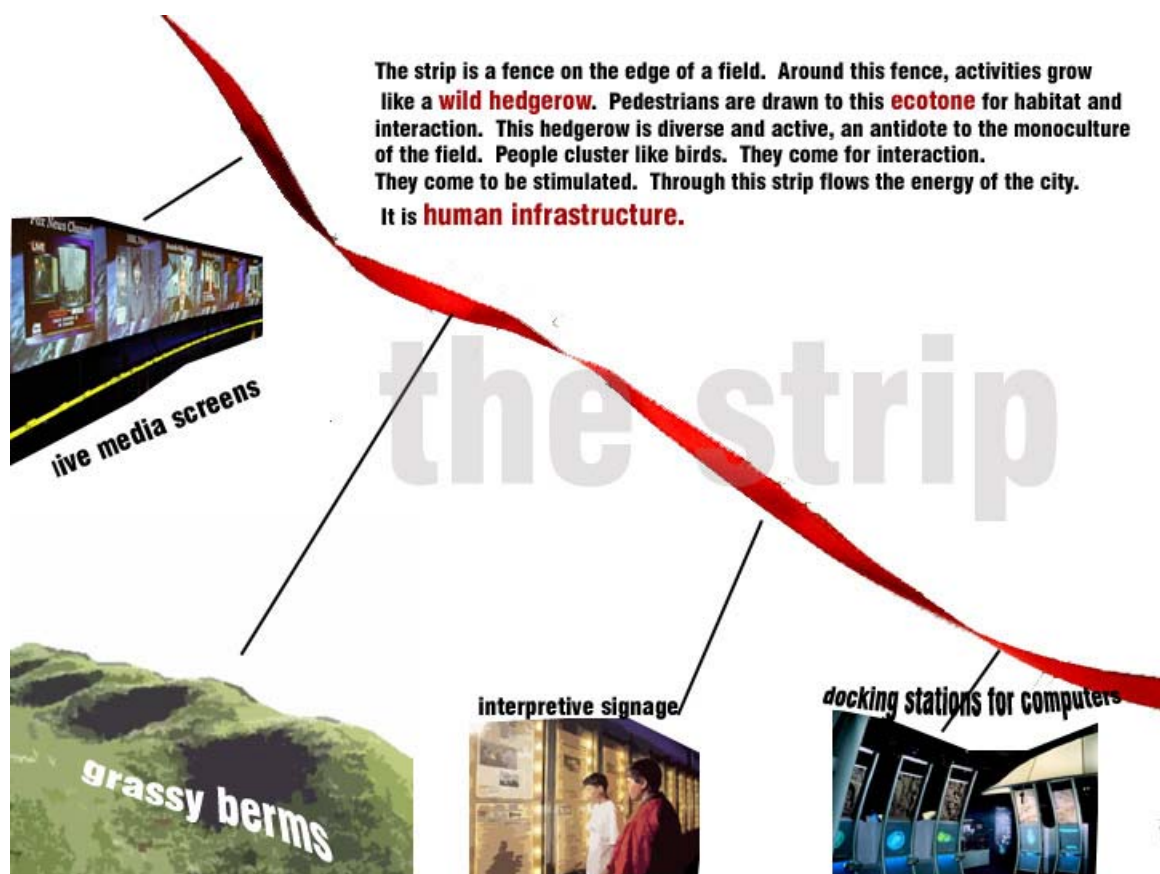interpretive signage

docking stations for computers

Figure 5:9 . The strip acts as a programmatic hedgerow, stimulating activities.

The activity of the strip depends on the emptiness of the field. One stimulates, the other relaxes. Together they form the yin and the yang of the city: one stirring life through random juxtapositions, the other stilling the user with the freedom of openness. It offers continuity to an otherwise disjointed urban surface, while at the same time stimulating new activities and connections. The strip acts as a collector that depends on areas left clear for new uses. The next project describes the cleared field that houses the strip.

B. <u>Voiding</u>
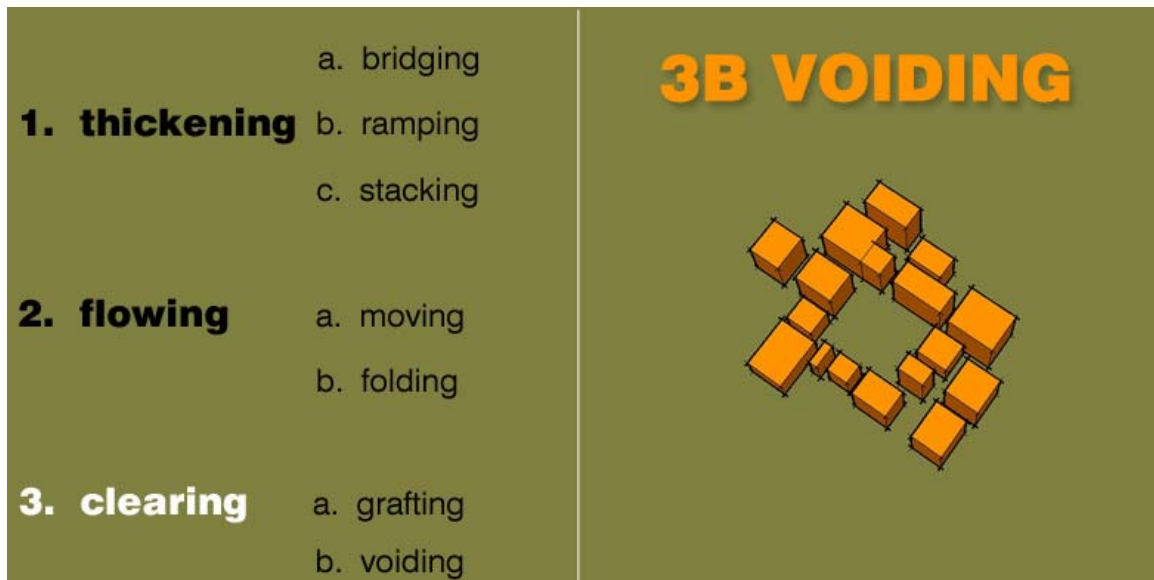
Voiding (v oy dng) *n*: the act of carving out spaces that are programmatically indeterminate.

To ground the intensely active strip, this design proposes an empty urban field that radiates off the strip. Like West 8's design for Theater Square, this field is constructed out of a variety of hardscape materials. The different zones created by these materials invite users to inhabit their own zone. Other than the variety of materials, the

dominant feature of this field is its emptiness. Often ignored by designers, empty spaces are seen as places to be filled. Architects and planners have been indoctrinated never to leave something empty or undetermined. There is a certain uneasiness that emptiness produces; it asks us to be *responsible* by giving us the space to act. In that sense, voids can be an important part of urbanity.

To illustrate the idea of voiding, the surface is thought of as a dynamic agricultural field. The field is wide and open. Its gift is possibility—anything can happen there. The fruits of the urban field are its activities: the chess players at the corner, the rollerblader on the sidewalk, the quarrelling couple on the bench (Figure 5:10). The field is endlessly adaptable: large and small events are rotated like crops. An outdoor concert turns into a vendor's market that dissolves into the pinball-like bump and flow of pedestrians. The horizontality of the field allows it to blanket the urban surface, wrapping sidewalks, parks, plazas, alleys, and streets underneath a continuous skin.
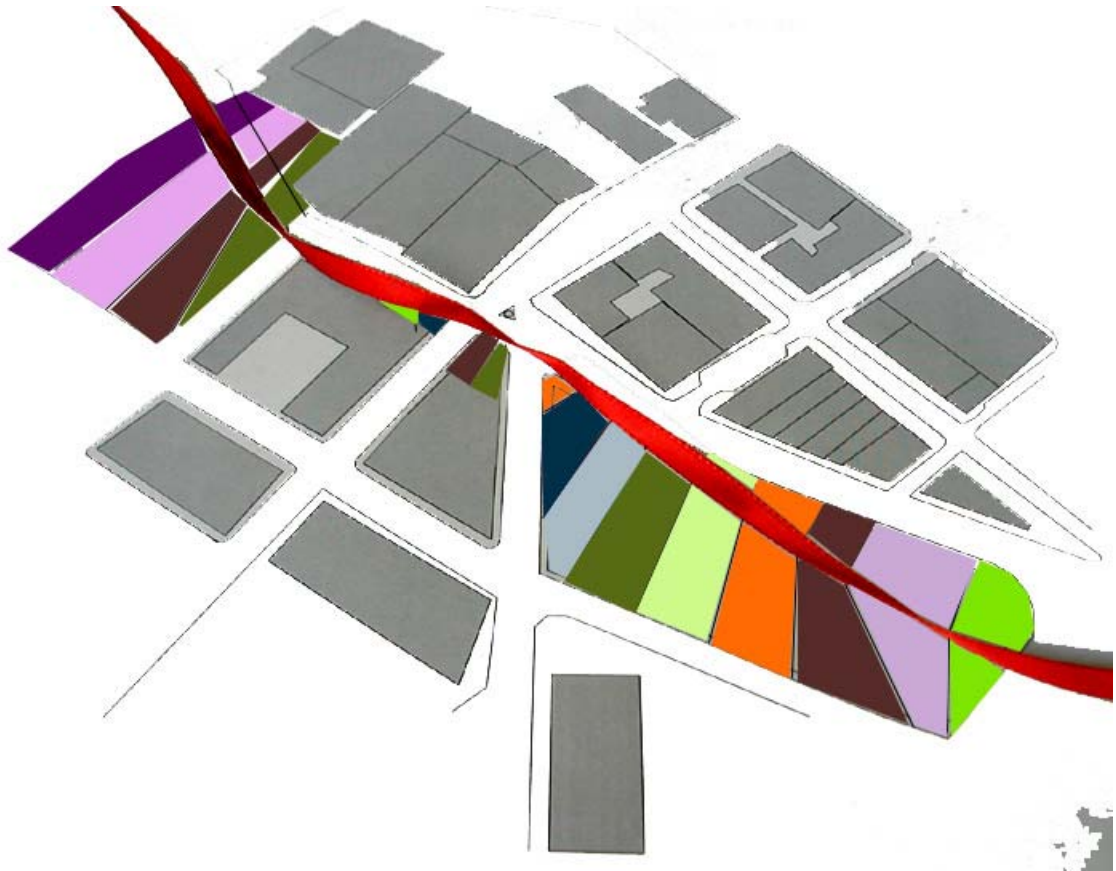
Figure 5:10. The field (shown in the colored strips) inhabits multiple zones

The surface of the field is like rich soil. The activities sprout out of the surface, nourished by a range of equipment embedded in it: utility hook-ups for vendors and concerts; pole-receptacles for tents and stages; light strips for nighttime interactions; removable surface strips for a sunken outdoor theater (Figure 5:11). The embedded equipment allows the program to be flexible and anticipatory, evolving with the unpredictable needs of the city.

Figure 5:11 . The field enables activities through its openness and equipment embedded in the surface.

The beauty of the field is twofold. First, it is spare horizontality offers the freedom of movement. Its size and emptiness accommodates crowds or individuals. Second, is its ubiquity. The field can be everywhere and anywhere in the city. This living connective tissue will spread across regions, reaching to the next metropolis, eventually blanketing the globe with a living matrix. The corollary of the field is the strip. Like Christo's running fence, the structure of the strip makes the field legible, giving it character and form. It activates the field with its infrastructures.

Both the strip and field serve as conceptual models that envision new possibilities for the urban surface. Thinking of the ground-plane of the city as an agricultural field suggests a surface that is dynamic and living, capable of evolving to change. The

strategies that these design illustrate, *grafting* and *voiding*, challenge designers to rethink the role of design: design here is understood not aesthetically, "prettying up" ugly urban spaces, but functionally, as a way to stage activities—even activities that cannot be determined in advance. Both grafting and voiding aim at preserving a key feature of the city that has long been ignored by urban designers: its unpredictability.

Unpredictability has always been a part of what it means to be urban. Choice has always been a part of what it means to be urban. The accumulation of all conditions on a single site has always been a part of what it means to be urban. It is time for design strategies that treat the urban surface not as a site for permanent development, but as "a staging ground for the unfolding of future events" (Wall 232). Contemporary urbanism should create voids, points of intensity, and totems of contemplation: these are the most fitting tributes to the creativity and the freedom of the city dweller.

CHAPTER 6

CONCLUSION

The strategies discussed in this thesis outline the beginnings of a new approach to urbanism. The advantage to thinking about design in terms of strategies is that they condense many of the design themes of the times, offering a distilled version of complex design ideas. They create a simple vocabulary for design. Strategies describe the *how* of design, explaining design in terms of its functional application. Each of the major strategies—thickening, flowing, and clearing—provide a guide for understanding the twenty-first century city: thickening responds to the change in the shape of cities, flowing responds to the processes of the city, and clearing responds to new metaphors for the city.

Taken together, the goal of the strategies is to create urban spaces that can evolve with the highly changeable nature of the contemporary metropolis. If the themes of this age are dispersal, mobility, and instability, then the *ways* we design cities ought to reflect these themes. The legacy of modern city planning has left us with binary models of cities that are static and dated: figure/ground, street/block, downtown/suburb. But these images ultimately fail us; they describe a time and place that has long since past. It is time for a newer urbanism, an urbanism whose project is the staging of uncertainty. The one certainty, the one guarantee in the rapidly changing urban environment, is the persistence of the city. The urban appears everywhere, though its forms are not always obvious. Today the city thrives with a life and vitality that thwarts the best efforts of designers and

planners to mold it. "It would require a second innocence to believe, at this end of the twentieth century, that the urban—the built—can be planned and mastered," warns Rem Koolhaas (974). Therefore, what is required are design strategies that leave room for the unplanned, the unpredictable, and the uncontrollable.

The themes that converge around the subject of urbanism—themes of place, time, and process—are all directly relevant to the landscape architect. That landscape architects are taught to appreciate large systems like watersheds or evolving processes like ecology makes them potential stewards of twenty-first century urbanity. Even in 1765 the architectural theorist Laugier suggested the potential role for landscape designers in the city. He wrote:

> Whoever knows how to design a park well will have no difficulty in tracing the plan for the building of a city according to its given area and situation. There must be regularity and fantasy, relationships and oppositions, and casual, unexpected elements that vary the scene; great order in the details, confusion, uproar, and tumult in the whole." (qtd. in *The Idea of the City* 48).

To understand the urban surface as a horizontal and continuous surface is to understand the surface as landscape. Landscapes engage issues of time and change. This enables the landscape architect to accept that his designs are continually adapted and transformed. The growing number of urban project that engage these landscape themes and techniques give rise to a new conception of urbanism. This new concept of urbanism will no longer be dictated by the master-planned, the over-programmed, or the fixed, but nurtured by the dynamic potential of the unpredictable.

REFERENCES:

Allen, Stan. *Points + Lines: Diagrams and Projects for the City*. New York:
       Princeton Architectural Press, 1999.

Allen, Stan. "Mapping the Unmappable: On Notation."   *Stan Allen Essays: Practice,
       Architecture, Technique, and Representation*. The Netherlands: G+B Arts, 2000.
       29-45.

Archigram. "Instant City." *Archigram*. Peter Cook, ed. London: Studio Vista,
       1972. 86-101.

Barziley, Marianne, ed*. L'Invention du Parc: Parc de la Villette, Paris, Concours
       International* Paris: Graphite Editions, 1984.

Boddy, Trevor. "Underground and Overhead: Building the Analogous City."
       Variations on a Themepark. Michael Sorkin, ed. New York: Hill and
       Wang, 1992. 123-130.

Boyarsky, Alvin. "Chicago a la Carte." The Idea of the City. London: Architectural
       Association, 1996. pg 10-49.

Busquets, Joan. "Barcelona: Overall Considerations," *Casabella* 553-554. January-
       February (1989): 124.

Corner, James. "Ecology and Landscape as Agents of Creativity.*" Ecological
       Design and Planning*. Eds. George Thompson and Frederick Steiner.
       New York: John Wiley and Sons, 1997: 80-108.

Deleuze, Gilles and Felix Guattari. "Rhizome." *A Thousand Plateaus: Captialism and
       Schizophrenia*. Minneapolis: University of Minnesota Press, 1987. 3-25.

Ellin, Nan. *Postmodern Urbanism*. Cambridge: Blackwell Publishers, 1996.

Eisenman, Peter. "Zones of Undecidabilty: The Interstitial Figure." *Anybody*.
       Cambridge: MIT Press, 1997. 240-247.

Eisenman, Peter. "Urban Icon." in *Lotus* 108. 2001. pg 104-107.

Faga, Barbara. "Parks Downtown." *Urban Land*. July 2001. 48-53.

Graham, Stephen and Simon Marvin. *Splintering Urbanism: Networked
       Infrastructures, Technological Mobilities and the Urban Condition*. London:

Routledge, 2001.

Gregotti, Vittorio. "La Strada: Tracciato e Manufatto/The Road: Layout and Built Object," in *Casabella* 553-554. January-February 1989: 118.

Ibelings, Hans. *Supermodernism: Architecture in the Age of Globalization*. Rotterdam: Nai Publishers, 1998.

Jackson, J.B. "The Discovery of the Street." *The Necessity for Ruins and Other Topics*. Amherst: University of Massachusetts P, 1980. 55-66.

Kieran, Stephen and James Timberlake. "A Tale of Two Cities: A Symbiotic rather than Consumptive Relationship." *Architectural Design*. Vol 64. No. ¾. March/April. 1994. pg 30-34.

Koolhaas, Rem. "Atlanta." *S,M,L,XL*. (New York: Monacelli Press, 1995), 835-858.

Koolhaas, Rem. "Melun-Senart, France." *S,M,L,XL*. New York: Monacelli Press, 1995.

Koolhaas, Rem. "Whatever Happened to Urbanism." *S,M,L,XL*. (New York: Monacelli Press, 1995), 71-79.

Kunstler, James Howard. *Geography of Nowhere: The Rise and Decline of America's Man-Made Landscape*. New York : Simon & Schuster, 1993.

Lootsma, Bart. "Synthetic Regionalization: The Dutch Landscape Toward a Second Modernity." *Recovering Landscape: Essays in Contemporary Landscape Architecture*. James Corner, ed. New York: Princeton Architectural P, 1999: 251-274.

Lucan, Jacques. *Rem Koolhaas/OMA*. New York: Princeton Architectural Press, 1991. 86-95.

Molinari, Luca. *West 8*. Milan: Skira Editore, 2000.

Moussani, Farshid and Alejandro Zaera-Polo. "Yokohama Project," in *Lotus* 108. 2001: 80-83.

Ryan, Zoe. "Queens Plaza Design Ideas Competition." 17 July 2001. <http://vanalen.org/competitions/queens_plaza/projects.htm>.

Sorkin, Michael. "The New American City and the End of Public Space." *Variations on a Themepark*. New York: Hill and Wang, 1992. xi-xv.

Superstudio and Moryami Studio, eds. *Superstudio and Radicals*. Tokyo: Japan Interior, 1982. 9-86.

Themans, Minke. *Bergweg: New Notational Systems for Urban Situations*.
    Rotterdam: deMink/010 Publishers, 2000.

Tschumi, Bernard. *Event-Cities: (Praxis)*. Cambridge: MIT Press, 1994.

Tschumi, Bernard. *Event-Cities 2*. Cambridge: MIT Press, 2000.

Turner, Tom. *City as Landscape: A Post-Postmodern View of Design and
    Planning*. London: E&FN Spon, 1996.

Wall, Alex. "Programming the Urban Surface." *Recovering Landscape: Essays
    in Contemporary Landscape Architecture*. James Corner, ed. New York:
    Princeton Architectural P, 1999: 232-249.

    --"The Dispersed City." *Architectural Design*. Vol 64. No. 3-4. (March/April
        1994). 8-11.

Woodroffe, Jonathon, Dominic Papa, and Ian MacBurnie. "An Introduction."
    Architectural Design. Vol 64. No. ¾. March April 1994. pg 6-