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Reinventing Infrastructure: The 101 Freeway and the Revisioning of Downtown Los Angeles

Author
Samuels, Linda C.

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Reinventing Infrastructure:

The 101 Freeway and the Revisioning of Downtown Los Angeles

A dissertation submitted in partial satisfaction of the

requirements for the degree

Doctor of Philosophy in Urban Planning

by

Linda Carol Samuels

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ABSTRACT OF THE DISSERTATION

Reinventing Infrastructure:

The 101 Freeway and the Revisioning of Downtown Los Angeles

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Linda Carol Samuels

Doctor of Philosophy in Urban Planning

University of California, Los Angeles, 2012

Professor Dana Cuff, Committee Co-chair

Professor Anastasia Loukaitou-Sideris, Committee Co-chair

In the first decade of the 2000s, three coinciding conditions instigated attention from architects, urban designers, and landscape architects towards infrastructure as an untapped site for the reinvention of the public realm: a series of tragic and highly visible infrastructure failures; an economic recession which simultaneously left tens of thousands of creative professionals unemployed and spurred a new generation of public works programs; and a shift in the disciplinary discourse away from the pessimism and cynicism of the 1980s and 90s towards collaborative, productive alternatives. Resulting competitions proved creative infrastructure reinvention projects possible, though successfully implemented versions remained scarce.

One site in Los Angeles, the 101 Freeway north of downtown (known as the "trench"), has been the location of four such proposals since 1988, including Steel Cloud by Asymptote, winner of

the West Coast Gateway competition, and Morphosis's 101 Pedestrian Bridge. Though award-winning projects by globally distinguished firms, both failed to be implemented. By comparison, another project similarly challenged to reinvent divisive lines of mobility through visionary design, Olympic Sculpture Park by Weiss/Manfredi, has proven instrumental in providing new public space that connects the city to the water, increases the area's ecological contribution, and capitalizes on infrastructure's spatial, material, and financial possibilities. The two failed cases were analyzed in six categories -- objectives, politics, stakeholders, context, finances, and discourse -- and through ten conditions derived from policy scholarship known to improve implementation success. The findings from an equivalent analysis of the success case were used to cross-examine the failures. The results revealed ways the likelihood of project implementation might be improved, including the disciplinary hybridity unique to landscape and infrastructural urbanism.

Those rather pragmatic findings are framed within an intellectual argument that seeks to reclaim infrastructure as public space. Having lost its collective role when, first, it was relegated to engineering through demands of modernization and, second, its "public" was sanitized and limited, this new discourse requires loosening infrastructure's myopic definitions and rigidly controlled uses. By conceptualizing infrastructure as part of the production of public space it reclaims that marginalized territory for design intervention, alternative occupation, and political appropriation.

The dissertation of Linda Carol Samuels is approved.

Susanna Hecht

Dell Upton

Dana Cuff, Committee Co-chair

Anastasia Loukaitou-Sideris, Committee Co-chair

University of California, Los Angeles

2012

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VITA

Education

1990-1992 Master of Architecture, Princeton University, Princeton, NJ.

1986-1990 Bachelor of Design in Architecture, University of Florida, Gainesville, FL.
Graduated with High Honors
1990 Outstanding Architecture Graduate Faculty Award

Experience

2010-2011 University of Southern California, School of Architecture
Part-time Lecturer

2009-2011 cityLAB
University of California Los Angeles, Department of Architecture and Urban Design
Senior Research Associate

2009 Otis College of Art & Design, Integrated Learning Department
Senior Lecturer

2007 Woodbury University
Adjunct Faculty

1998-2007 University of North Carolina at Charlotte, School of Architecture
Assistant Professor of Architecture

1997 North Carolina State University
Adjunct Faculty

1996-1997 Meredith College
Adjunct Faculty

Publications

Samuels, L. (2011) "Stitches and Insertions: Reconfiguring and Refilling the Body of the City," in *Fast-Forward Urbanism: Rethinking Architecture's Engagement with the City*. Dana Cuff & Roger Sherman, eds. New York: Princeton Architectural Press.

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Chapter 1. REINVENTING INFRASTRUCTURE

Why infrastructure, why now?

The vast majority of America's infrastructure is poorly maintained, obsolete, or failing. The 2009 Report Card for America's Infrastructure conducted by the American Society of Civil Engineers (ASCE) indicates that the condition, capacity, maintenance, and operation of our fifteen infrastructure systems "rates a cumulative grade of D."[1] The disaster decade -- 2000 to 2010 -- which featured such large and seemingly unimaginable infrastructural catastrophes as the levee and floodwall failures following hurricanes Katrina and Rita in the Gulf coast, the power outages that affected over 50 million U.S. and Canadian residents in the northeast during the summer of 2003, and the collapse of the Minneapolis I-35 West bridge during rush hour traffic in 2007, were simply the most visible and haunting proof of what Choate and Waters (1983) began telling Congress in the early 1980s -- America's infrastructure is in ruins, and the continued dearth of investment in our basic infrastructural systems threatens both the country's economic health and its ability to maintain the quality of life we have grown to expect. Such an emergency state -- quietly sustained for well over four decades[2] -- creates a simultaneously panicked and resigned attitude around infrastructural spending almost as a necessary evil of the modernized condition. These demands put pressure on the distribution of resources that have resulted in some of the country's most challenging instances of social justice while producing expensive yet socially and experientially impoverished contributions to

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[1] *2009 Report Card for America's Infrastructure*, American Society of Civil Engineers, http://www.infrastructurereportcard.org/ accessed 24 April 2012. The fifteen categories evaluated by the ASCE are aviation, bridges, dams, drinking water, energy, hazardous waste, inland waterways, levees, public parks and recreation, rail, roads, schools, solid waste, transit, and wastewater.

[2] According to Choate and Walter, the national investment in public works fell 21% between 1965 and 1977, from $38.6 billion to $31 billion, or, in constant dollars, $198 per person to $140 per person. In terms of GDP the drop was from 4.1% to 2.3% -- a 44% decline (Choate & Walter, 1983).

the public realm. At the same time, development interests gutted the diverse fabric of the city through urban renewal then crippled the remainder of the public realm through neoliberal strategies of privatization and commercialization. It has taken a second crisis in the disaster decade -- an economic recession triggered by dubious investments in the housing market among other "too big to fail" financial missteps -- to unearth the recommendations of Choate and Walter and again demand attention from the federal government to reinvest in and perhaps reinvent what is left of our public works.

As the originators of WPA 2.0 (Working Public Architecture), the design competition run by UCLA's cityLAB[3], argued, the summer of 2009 seemed a perfect storm of colliding opportunities to invite architects, landscape architects, and urban designers to engage the often-absent question of their role in infrastructure development. Federal economic initiatives like the American Recovery and Reinvestment Act (ARRA) of 2009 and the impending promise of a long-term infrastructure bank, meant billions of new dollars invested in public infrastructure. Simultaneously, opportunities for commissions were diminishing in the slow economy, so designers found themselves with creative energy and time to spare. The competition, then, provided a platform for collective consideration of design's value for water management, waste treatment, energy production, food production and distribution, information systems, and spaces of mobility. A renewed interest in densified, multi-modal living also meant the postsuburban city was growing antagonistic towards its modern-era behemoths, particularly the urban freeways which hogged land and moated so many downtowns.[4]

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[3] I was a member of the WPA 2.0 cityLAB team serving as a Senior Research Associate under the leadership of Dana Cuff (cityLAB director), Roger Sherman (cityLAB co-director), and Tim Higgins (cityLAB Associate Director). WPA 2.0 was also a symposium and exhibition at the National Building Museum in Washington, DC. Information and design proposals can be accessed at http://wpa2.aud.ucla.edu/info/.

[4] "Postsuburban" is a term used frequently in the LA School urbanism literature to describe the condition *beyond* suburbanism. This condition is not suburban, rural, or urban, but a varying, even contradictory, pattern of generally multi-centric, dispersed development. Instead of a classic suburban model of center and periphery, in a postsuburban environment, suburbs may be "urbanized" and vice versa. (Kling, Olin, & Poster, 1991)

Their removal or reinvention was growing as a popular strategy for reclaiming lost territory and suturing urban scars.[5]

The results of the competition proved that drastically different forms of infrastructure were possible, at least conceptually. The most interesting versions revealed a consistent set of attributes that might be sought in future infrastructure initiatives that go beyond the functional to also include well-designed spatial, social, and economic amenities.[6] As Dana Cuff argues in her reflections on the competition, "Infrastructure is the heart of the next generation's public sphere. Since public spending on dedicated public space has evaporated, it is storm water systems, rail easements and stations, and roadways that will be obliged to give back to their neighborhoods in the form of parks, community services, and affordable housing" (Cuff, 2010, p. 5). Yet, as she and Sherman also confirm in *Fast-Forward Urbanism*, "just how to invent a robust infrastructure, whose design is as ambitious as its economic underpinnings, is a question that planning and architecture have not posed, let alone answered, from the sidelines" (Cuff & Sherman, 2011, p. 11).

This research does just that -- poses the question from a combined framework of planning and architecture, asking: Why have infrastructure reinvention proposals, even at sites with decades of sustained interest in such projects, failed to be implemented? Implying, inversely, how might the likelihood of implementation be improved? What will it take to reinvent infrastructure, once again,

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[5] Cap parks (where sections of freeway are decked or capped and landscaped) are growing in popularity following successful models like Chicago's Millennium Park. Complete or partial freeway removal projects like Seoul, Korea's Cheonggye Expressway (2003-5) which allowed for the restoration of a stream and insertion of a linear park in the city center are models for freeway removal efforts in Seattle (Alaskan Way Viaduct, in process), Oklahoma City (I-40 cross-town expressway, in process), New Orleans (I-10, Claiborne Avenue, under consideration), among others. Such projects are getting extensive coverage in planning and urban design publications. See websites such as: http://www.smartplanet.com/blog/cities/top-12-urban-highway-removal-projects/1953 (accessed 10 August 2012) or http://urbanland.uli.org/Articles/2011/September/SpivakTopTenHighway (accessed 10 August 2012).

[6] These attributes include: multi- rather than mono-functional; public; visible; socially and/or environmentally conscious; locally specific, flexible, and adaptable; and the possibility to become design prototypes or demonstration projects. See Cuff, D. (2010). WPA 2.0: Working Public Architecture. *Harvard Design Magazine, 2010-2011 Fall-Winter*(33), 36-43, 162-163; and Samuels, L. (2010) "Working Public Architecture," *Places: Forum of Design for the Public Realm*, http://places.designobserver.com/entry.html?entry=12427.

as public space? A case study approach was utilized to first inductively generate six categories of investigation: project objectives, politics, stakeholders, context, finance, and discourse. That content was then analyzed based on theories of implementation analysis, particularly those of Pressman and Wildavsky (1973) and their critics, Mazmanian and Sabatier (1983, 1986). A critical case with a series of unimplemented proposed projects was first investigated then cross-examined by a success case according to the same criteria.

The evolving conceptualization of infrastructure as a component of the public realm in the discourse of architecture, landscape architecture and urbanism, serves as an intellectual context for this research. From the transformational role of the freeway in the modernizing city of the 1950s to the recent ideas of landscape and infrastructural urbanism, architecture's intermittent relationship with infrastructure is again coalescing. Chapter two discusses this literature in a review that starts with the pivotal role of the public realm in the city and examines its relationship particularly to issues of roads and mobility. It follows the emergence of infrastructure in the design discourse when public works were transformed from collective moments of cultural investment to conduits of efficiency. Alternatives to modernism's totalizing schemes -- from the utopianists of the 1960s to the everyday urbanists of the last decade -- are explored as well. Finally, the primacy of infrastructure in Landscape and Infrastructural Urbanism is examined as its practitioners in particular seem to contribute to the optimistic atmosphere for implementation of high-design infrastructure projects.

Chapters 3, 4, and 5 are devoted to the analysis of three infrastructural reinvention competitions and their winning projects. In each case, I evaluated project objectives, politics, stakeholders, context, financing, and the impact of both popular and disciplinary discourse. In addition, I considered the implementation process and officials responsible, support of interest groups, the differences between top-down and bottom-up processes, project contexts, and the

effects of decision points and delays on project progress. Those conditions and categories most relevant in each case were focused on most extensively.

Chapter 3 begins with the exploration of Los Angeles of the 1980s. An explosive time, Los Angeles was first emerging as a polyglot city, defined by growing immigration numbers and rapid diversification. At the same time, massive investment from Pacific Rim corporations meant booming corporate development and a growing economic divide. Scholars found LA to be worthy of keen observation as endemic of postmodern urbanism. The city was first hailed as the exceptional then the prototypical example of sprawl, privatization, and globalization. The West Coast Gateway competition attempted to turn attention back to downtown, to celebrate rather than condemn LA's vast mixing pot status, and to recognize the highway as the real entry point to the city. Young architecture firm, Aks Runo, was asked to reimagine the whole of northern downtown, and irrevocably shifted the direction of the project away from a traditional, European style monument. Politician and project champion Nick Patsaouras is introduced in this chapter, as well as numerous other stakeholders who follow the 101 trench through its various guises over the next two decades.

After the failure of Steel Cloud, Chapter 4 starts by asking: Why try again? Los Angeles, particularly downtown, had gone through a real estate recession; the social turmoil of the 1992 riots further lessened interest in downtown redevelopment. This chapter discusses two strategic plans for northern downtown that include projects at the trench site, insistently bridging the 101 freeway. A third factor that encourages further attempts is public transit which, surprisingly, forges ahead in the early 90s. Chapter 4 discusses an agency-generated competition and focuses on the bureaucratic divide that emerges between MTA, the City of Los Angeles, and the Bureau of Engineering. Following the money trail, it includes an examination of how $5 million can be whittled away over half a decade resulting in nominal, yet still celebrated, change at the site.

The intention of Chapter 5 is to analyze a success case, Olympic Sculpture Park in Seattle, while focusing on the cross-examination of the failures in LA. Initially, inherent differences seem evident between Los Angeles and Seattle and the two sites, but ultimately the research shows that the differences reside as much in the process, the structure of the competitions, and the new infrastructure-based urbanism discourse as in the differing contexts. The last half of Chapter 5 explores three areas of cross-examination: the corroboration or dispute of findings from the LA cases, the gaps uncovered in the third analysis, and the assumptions that are then challenged when examining the failures in light of the success case. Finally, the text returns to the idea of the design discourse and the role design thinking plays in the success of infrastructure reinvention.

Chapter 6 concludes with the summary of criteria that contribute to a successfully implemented infrastructure reinvention project based on the comparative examination of the three cases. It considers the newest project proposed for the site and its already evident shortcomings. In addition, I ask what it means to the public sphere to question the values of those producing the most significant infrastructure projects in Los Angeles and other U.S. cities.

Notes on Methodology: Critical Case: the 101 Freeway

One infrastructural site in Los Angeles in particular proves resilient commitment to reinvention by public and private stakeholders, even in the face of multi-decade failure to implement any of the proposals. The completion of the Civic Center link (as it was called when the Los Angeles *Times* announced its opening in December of 1951) of U.S. Route 101[7], created a new boundary to

[7] The 101 freeway in this area is technically a U.S. highway and officially named U.S. Route 101. It is the second oldest highway in Los Angeles and was built to connect the San Fernando Valley to the city of LA. To the immediate west of the trench, the 101 and the 110 intersect in what is known as the Four Level Interchange. West of the Four Level, the 101 is called the Hollywood Freeway, east of the Four Level, it is called the Santa Ana Freeway, though the trench is at times referred to as either, sometimes both. The freeway splits into Interstate 10 and U.S. 101 just east of the trench, past the Los Angeles River.

downtown Los Angeles, separating the city's historical origin point, El Pueblo de Los Angeles, and its regional transit node, Union Station, to the north, from the growing commercial, government, and cultural development south of the freeway. Though technically and formally crossed by the street grid, this 'trench' site -- the quarter mile of freeway between Hill and Alameda streets where the road dips below grade -- has become more and more problematic as development south of the 101 freeway has garnered greater physical, economic, and political investment in the hopes of regenerating the urban core. As metro, light rail, and proposed high speed rail enter the city at Union Station, there is additional motivation to encourage pedestrian flow south.

The 101 trench is, in Bent Flyvberg's terms, a "critical case", one that has "strategic importance in relation to the general problem", and therefore has the potential to reveal more about the condition under study than multiple equivalent cases simply because of its extreme nature (Flyvbjerg, 2001). The 101 site is a combination of difficult and highly charged conditions: one of the top five worst traffic-clogged sections of road in the entire country; cutting through some of downtown's most valuable yet under-utilized property; segregating the ethnically diverse populations centered in Chinatown, Little Tokyo, and Olvera Street (the historically Mexican center of the city); separating some of the city's most significant landmarks and nodes; and contributing to a stalemate in redevelopment in an area of downtown in need of jobs, housing, basic retail, and public space. Transforming this site has garnered repeat attention from the City of Los Angeles, agency leaders, mayors, the Metropolitan Transit Authority (MTA or Metro), California Department of Transportation (Caltrans), and numerous world-famous architects, planners, and urban designers. Yet after nearly three decades of attention, the gap remains.

A total of four projects have been proposed for this 101 site. Two of the four proposed projects serve as the primary cases in this research. Both are notable works in the architecture

discourse, proven through publications, exhibitions, or awards, produced by prominent and well-regarded design professionals. Regardless of their lack of implementation, they each claim some historical position of significance in the discipline. Each was selected through a design competition, ensuring, at least in theory, that innovative, design-based solutions were sought over normative engineering responses. The failure of these projects to be implemented indicates that good design, in the complicated mix of factors, may be critical for this kind of multi-faceted reinvention but is not enough to guarantee implementation. Alternatively, a third project, a simplified deck of no architectural merit, was also not implemented, proving that the complications of high-design projects alone cannot be blamed as the single cause of failure. The fourth proposal, Park 101, is currently in process, meaning its ultimate success (implementation) or failure (non-implementation) is yet to be determined. It was not studied here due to its speculative status, though the findings of this research will certainly be relevant to the Park 101 team and those working on numerous other cap park proposals in Los Angeles and nationwide.

To recap the criteria for the selection of qualified projects, each (1) aims to reinvent *active* infrastructural sites, specifically (2) lines of mobility, through (3) architectural means of (4) recognized design merit selected (5) via design competition. The two projects proposed for the trench site that do meet these criteria are 1988's West Coast Gateway competition won by Asymptote with their entry, Steel Cloud, and 1999's 101 Pedestrian Bridge competition won by Morphosis. Steel Cloud was a massive, deconstructivist, four block long and forty foot high conglomerate of inventive program from bi-coastal aquaria to multi-story projection screens. Framed in the competition as "a monument to immigrants", its main objective was to join the diverse populations of Olvera Street, Chinatown, Little Tokyo, and the City Center through public space and symbolic amenities. More modest in scale and objectives, the 101 Pedestrian Bridge by

Morphosis sought to physically link Union Station via El Pueblo and Olvera Street with the Civic Center/LA Mall area to the south. This solution, though occasionally (and erroneously) compared to Steel Cloud's aesthetics, was a much smaller, more direct scheme utilizing a billboard-like form as a joining wall between the historic and the commercial city centers. Text art by Jenny Holzer supplemented the sign-as-unifier concept; a restaurant suspended over the freeway provided for theater between drivers and diners.

The analysis of these two failed projects was cross-examined by the analysis of a success case that met the same criteria yet was also constructed and is now in public use. This second phase utilized a variation on the "primary case informed by multiple secondary cases" method introduced by Vinit Mukhija in his essay "N of One plus Some: An Alternative Strategy for Conducting Single Case Research" (2010). The intention of the cross-examination was three-fold: to corroborate findings in the failed cases; to identify gaps in the initial analysis; and to interrogate assumptions and preconceptions that may have emerged from the critical case. Obviously, no success case exists on the still-empty 101 trench site itself nor does one exist in all of Los Angeles that meets the case criteria. This could support an argument that the City of Los Angeles might yield an overly problematic context for such public works innovation. Many of the city's most meritorious architectural successes are at the scale of the single-family house or the individual icon -- single owner and single jurisdiction opportunities. Divisive politics and weak leadership are known difficulties. All of which, however, make the further argument for the 101, as a critical case of extreme circumstances, worthy of extended study.

The primary success case was the Olympic Sculpture Park in Seattle designed by Weiss/Manfredi architects. The award-winning project connects the Belltown neighborhood of Seattle with Elliott Bay bridging over an active BNSF railway and four-lane through street. Much of

its inspiration comes from the mobility lines it bridges; the project is a successful hybrid of architecture, landscape, and infrastructure and works from a diagram based in movement, pause, and view directly related to the road and railroad. NL Architect's A8ernA project in Zaanstad, the Netherlands, serves as a minor secondary success case. This hugely successful project links the two sides of the city separated by the A8 freeway by transforming the ground plane beneath the elevated roadway and inserting public, recreational, social, retail, and arts programming.

Archival records, media analysis, interviews, and historical research are the primary sources of evidence in the cases. The Community Redevelopment Agency (CRA), Metro, Caltrans and City Council archives have sporadic documents tracing the review of the projects at the city and agency levels. The lack of official documentation, in some cases, revealed as much information as their presence (i.e. -- no consideration of the project at the government level). In the Los Angeles proposals, several of the stakeholders and many of the agencies carry over from one project to the next. A primary example is Nick Patsaouras (MTA board member, 1993 Mayoral candidate, and transit advocate) who served as project organizer, fundraiser, and champion of the West Coast Gateway competition as an advisor to Mayor Bradley. A decade later, he worked with MTA to generate the 101 Pedestrian Bridge competition. His personal archive, utilized extensively in the West Coast Gateway analysis in particular, includes original documents, videotapes, meeting minutes, correspondences, media clippings, budget information, and alternative plans and proposals -- much of which is not public record. Designers such as Michael Rotondi and Neal Denari were interviewed in multiple capacities. Rotondi served as a juror for the initial competition and for the P/A awards that granted Morphosis an honorable mention for the 101 Pedestrian Bridge, but also as a design tastemaker, teacher, and formative figure in the city of Los Angeles. Denari was a finalist for

the first competition, and a juror for the second, while serving as the director at SCI-Arc, an influential position in the leadership of the Los Angeles architectural discourse.

The original competition briefs and Requests for Information (RFIs) along with proposals and interviews from runners-up as well as finalists (amassed for this research), built a multi-faceted view of a city's and a discipline's urban ambitions from the varying lenses of project originators, disciplinary participants, and the design gatekeepers of the jury. Similarly, the lineage of adopted city plans concretized an official, if unenforceable, set of desires for the built condition. These documents substantiate the ongoing and unwavering commitment towards creative urban freeway reinvention projects despite the struggle for their implementation.

A Matrix for Evaluation: Six Categories of Investigation plus Eight Necessary Conditions

Preconceptions surround the failures of such famous projects as Asymptote's Steel Cloud. Numerous informal interviews revealed presumptions that the competition was entirely speculative or that public naïveté towards such a formally avant-garde solution was to be blamed for its downfall. The question arose early on: What responsibility did the architecture itself warrant for the success or failure of the project? To evaluate the solutions as formal, aesthetic, or material responses to physical conditions proved far too limited. Unlike a traditional architectural commission with a more constrained site and limited stakeholders, these projects were complicated by the involvement of multiple public agencies, long time frames, broad constituencies, elaborate financing needs, multi-faceted contextual forces, and the tricky ambition of bringing design vision to historically resistant sites. Accordingly, the framework combined a set of six inductively derived categories of investigation (the *what* of the cases) with the conditions necessary to improve the likelihood of

successful implementation (the *how* of the cases). Both qualities and processes, therefore, were investigated to understand the reasons infrastructure reinvention projects are more likely to fail.

Six Categories of Investigation: the *what* of the cases

The six categories of investigation derived from the data gathered included:

1. Project Objectives: Problems and Solutions

In the case of competitions, the project objectives are established in three, often differing, phases -- the competition brief, which represents the formalized objectives of the initiators and original stakeholders; the jury makeup, which establishes a particular set of decision-makers and design values; and the finalist and winning solutions, which represent the ideals (or perhaps the utopian visions) selected by the jury and expressed in physical form by the selected design team.[8]

The formulation of the 'problem' as framed in the competition brief establishes moments of needed 'repair' deemed solvable through urban design intervention, while the 'solution' (the winner, and sometimes finalists, of the competition) represents ideals, objectives, or even utopian visions as imagined by the participants and promoted by the jurors. The critique of those chosen solutions in the design professions, the media, politics, and the public further defines the perception of a city's current problems and future visions.

2. Politics: Agency collaboration, project champion, and political will

[8] For an extensive discussion on planning and urban design competitions see the special issue of the *Journal of Architectural and Planning Research*, Ernest Alexander and Lawrence Witzling, eds. vol 7 (2), Summer 1990.

Politics involve the overt or covert negotiated relationships among individuals, agencies, institutions, and the public. The scale of infrastructure projects generally means great spans of time, space, and capital, meaning numerous agencies, political leaders, and stakeholders across years if not generations. Transcending any single jurisdiction, a multi-purpose infrastructural project might fall under local, regional, and state interests while at the same time bridging multiple agencies such as power, water, parks, and transportation. Some form of project champion -- a political leader willing and powerful enough to risk his or her political capital for the sake of the project -- generally emerges to propel the project through agency conflicts, funding battles, and public relations.

3. Stakeholders

The stakeholders of any project can be significant contributors or detractors to its success. In addition to political leaders and project champions (mentioned above), constituents, users (current and future), local residents and business owners, secondary agencies, consultants, funders, adjacent institutions, design professionals, activists, and journalists all play a role in the interpretation, development, and promotion of the project. Who is invested in the project and their degree of investment can say something about where the priorities are coming from and who influences the agenda.

4. Context: physical, political, social, and economic

Here context implies the physical, political, social, and economic conditions of the place and time surrounding the project under consideration. For example, the economic downturn of the late 80s and early 90s and the 1992 riots in Los Angeles established a social volatility and a risk-averse economy in downtown that endured well into the 1990s. Social context includes direct user groups

but also issues of equity, distribution, and history. Physical context refers to both the qualities of the site defined by project parameters and the degree to which the surrounding site supports, requires, or affects the possibility of project success.

5. Finances

Finances include both existing funds available for the project (from initiation through implementation) and economic climate surrounding the particular project under consideration (rather than the larger economic context considered above). Few projects begin fully funded, meaning access to additional funding, ability to secure that funding, resources devoted to fund raising, project priority (to stakeholders, government agencies, or private funders), and public/private partnership possibilities are key. In addition, considerations like project efficiency (management, processes, expediency) affect both budget and schedule.

6. Discourse

Two types of discourse surround the cases, the first being the public discourse documented through popular media such as newspapers; the second being the disciplinary-specific conversations surrounding the projects held by designers, scholars, and critics. The selected cases are explicitly part of the design canon, partially because they are recognized through such accolades as publications and scholarly writing, and reverberate in the design disciplines -- despite their failure to be implemented. This relationship between the cases and the design discourse is part of exploring the role urban theory plays in project success. The persistence of these projects and their architects in the design discourse implies an architectural significance beyond their possibilities as built forms.

Eight Necessary Conditions for Implementation: the *how* of the cases

"People now appear to think that implementation should be easy; they are, therefore, upset when expected events do no occur or turn out badly. We would consider our effort a success if more people began with the understanding that implementation, under the best of circumstances, is exceedingly difficult. They would, therefore, be pleasantly surprised when a few good things really happened." (Pressman & Wildavsky, 1973, p. xix).

Pressman and Wildavsky's research on implementation coalesced a set of hypotheses regarding the relationship between the making of policy and its implementation. In their work the distinction between the goal (the policy) and the means of achieving that goal (its implementation) is dissected, with several theories as to the divisibility between the two. They simplify the relationship as follows:

> Policies imply theories. Whether stated explicitly or not, policies point to a chain of causation between initial conditions and future consequences. If X, then Y. Policies become programs when, by authoritative action, the initial conditions are created. X now exists. Programs make the theories operational by forging the first link in the causal chain connecting actions to objectives. Given X, we act to obtain Y. Implementation, then, is the ability to forge subsequent links in the causal chain so as to obtain the desired results. Once the funds are committed and the local agreements reached, the task is [in one example] to build facilities to create new jobs so that minorities will be hired." (Pressman & Wildavsky, 1973, p. xxi)

As stated, in the case of policy, the solution (the Y condition) includes both the implementation of programs and the expectation that those programs will result in desired social change. Yet what is that relationship between X and Y from the beginning (they ask)? Does the successful

accomplishment of Y require its structure to be inherent in the formulation of X? In other words, are the two co-dependent, so much so that they may be inseparable? Pressman and Wildavsky expose the many ways the path between the two can go astray or be severed altogether.

Though their research is technically about *policy* implementation, their theories (and subsequent versions) are worth considering for insights into the failure of *projects*. If 'project' is substituted for 'policy', then the design solution is the X and its fully completed condition the Y; failure to implement is defined by the lack of a completed project.[9] Three issues from Pressman and Wildavsky's research seem most pertinent -- the relationship between policy and implementation process (as mentioned above), the "complexity of joint action" theory, and the results of delay and diversions. What appears at first as a simple initiation and outcome (X then Y) becomes more and more complex, the scholars conclude, as the chain of causality gets longer and reciprocal relationships become more numerous. This "move from simplicity to complexity" is characterized by what Pressman and Wildavsky call *decisions points* and *clearances*. A decision point is "each time an act of agreement has to be registered for the program to continue"; a clearance is "each instance in which a separate participant is required to give his consent." (Pressman & Wildavsky, 1973, p. xxii). In the purest form of their theory, the more clearances involved and more decision points needed, the more complicated -- and unlikely -- implementation becomes.

Complication also means an extended timeline, and delay can be detrimental to project outcome. Extended time frames often reveal what the authors call a "slow dissolution of agreement" (Pressman & Wildavsky, 1973). Whether stakeholders change or their stances do, collaborative

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[9] If, however, instead we substitute project 'objectives' (i.e. the policy before the program -- connecting the area north of the freeway to downtown as a strategy for social cohesion), then the 101 projects become two initiated yet failed program attempts with the possibility of success for the greater objectives still intact. The former is the direct question at hand in this research, the question extrapolated to impact the implementation of other physical infrastructure reinvention projects. This is a question regarding the practice of architecture and urban design; the intentions are to affect the urban environment through physical and formal alterations. The latter, the objective to cross the 101, is ongoing and still being attempted through new proposals.

agreements are tenuous and can be lost or need renegotiation over time as conditions evolve. That renegotiation extends the time line even further, and the further apart the positions, the longer those negotiations take (the highly partisan 2011 US Federal budget is a clear example of this). Each participant's position and each decision are so much more complicated than initially imagined (hence initial optimism in the project's success), that Pressman and Wildavsky believe that implementation is doubtful unless agreement among participants begins inordinately high.[10] This "complexity of joint action" is substantiated by their statistical calculations which drive the severity of this point home: A group with 99% agreement at each clearance point -- a fiction at best -- can almost maintain a 50/50 chance of project success after 68 different agreements. After 68, the chance of success falls below 50%. If stakeholders agree only 80% of the time, after only four agreements the probability of project implementation drops below 50%. After 70 clearances, that same group has just over a 1 in 1 million chance of project success (Pressman & Wildavsky, 1973).

"Delay, then, is a function of the number of decision points, the number of participants at each point, and the intensity of their preferences." (Pressman & Wildavsky, 1973, p. 118) Hence, the greater the decisions points (generally implying greater complexity and/or more time) and the more profound the disagreements among players (either initially or through dissolution), the longer the delay and the less likely the project is to come to fruition.

Additionally, say Pressman and Wildavsky, the explicitly defined relationship between the project and its implementation process affects its chances of success. When X includes within it the structure for accomplishing Y, then policy and strategy are seamless extensions of each other. The process can then accept greater flexibility and even cyclical iteration without necessarily disastrous

[10] The authors list seven reasons why participants, even those in support of a project, may still play a role in its opposition. In summary, these include: direct incompatibility with other commitments; preference for other alternatives; simultaneous commitment to other projects; dependence on those who lack a sense of urgency in the project; differences of opinion on leadership and organizational roles; legal and procedural differences (Pressman, 1973, 99-100).

results. By considering the difficulties of implementation simultaneously with the project objectives rather than as a post-facto addendum, a path to success is built into conception. "Means and ends" say Pressman and Wildavsky, "can be brought into somewhat closer correspondence only by making each partially dependent on the other" (Pressman & Wildavsky, 1973, p. 143). As may seem obvious, the inverse can lead to collapse. If there is such segregation between the project and its implementation that an incongruity of goals exists, then either the project is doomed, or implementation is of something else entirely.

The critique of Pressman and Wildavsky's implementation theory

Pressman and Wildavsky's theories, which emerged primarily from the study of a single (failed) case with which they were heavily involved (the Oakland Project), were further tested and critiqued particularly by Daniel Mazmanian (Mazmanian & Sabatier, 1983) and Paul Sabatier (Sabatier, 1986), who considered the initial assumptions pessimistic and over-simplified. Through an extensive review of the post-Pressman/Wildavksy implementation literature, they noted two opposing strategies of implementation analysis, the top-down and the bottom-up models. In addition, they realized that Pressman and Wildavsky's 4 to 6 year time frame of evaluation was likely resulting in premature judgments, whereas 10 to 20 years allowed for observation of policy learning and the slow evolution of goals and strategies.

Keeping Pressman and Wildavsky's initial conditions in mind, Mazmanian and Sabatier analyzed twenty-one cases, both in the U.S. and Europe, from a variety of scholars. They determined that the top-down approach (where policy starts from a government initiative then is implemented through agencies or other actors) has six necessary conditions for effective implementation:

1. Clear and consistent objectives.

2. Adequate causal theory.

3. Implementation process legally structured to enhance compliance by implementation officials and target groups.

4. Committed and skillful implementing officials.

5. Support of interest groups and sovereigns.

6. Changes in socio-economic conditions which do not substantially undermine political support or causal theory (Mazmanian & Sabatier, 1983; Sabatier, 1986).

In their research, the first three are relevant during the development of the policy itself, the last three during the complications of implementation. Their evaluation confirmed in particular the importance of the structure of the implementation process. The most successful cases, they found, were those in which sympathetic agencies were sought out to guide the process or brand new agencies were developed with the new policy implementation as a primary task; the clear structure of that implementation process was also key. In addition, Pressman and Wildavsky's minimization of veto points (a variation on decisions points) and support of adequate causal theory were confirmed as significant factors towards successful implementation. The best institutions "structured the process to provide reasonably consistent objectives, a good causal theory, relatively few veto points, sympathetic implementing officials, access of supporters to most decisions, and adequate financial resources" (Sabatier, 1986, p. 28). In addition, the extended time frame of evaluation from a 4 to 6 year range to a 10 to 20 year range showed how projects initially judged as failures later went through a series of reformulations that allowed for greater implementation success. In the end, implementing agency support turned out to be the most consistently significant of the six

conditions, though all except "clear and consistent objectives" repeatedly appeared in successful implementation.

This research revealed some faults in the hypotheses. First, the fact that clear and consistent objectives were not as important as originally thought was a surprise. The idea of an "acceptability space" meant that a range of objectives might overlap and create an acceptable set of accomplishments, even if they weren't necessarily exactly equivalent to the original goals. In addition, the assumption that success is inversely related to the degree to which the policy veers from the status quo also proved incorrect. What they found was that incremental change often was too minor to generate commitment, while comprehensive change was too major. "[Those reforms] which are ambitious enough to arouse intense commitment from proponents but rather limited in their effects on the entire... system stand the best chance of success" (Sabatier, 1986, p. 29).

In opposition to the more typical top-down method, Mazmanian and Sabatier also investigated policy inspired through bottom-up initiation. Bottom-up projects start not with government policy but with goals, strategies, and actions of local players. Those goals then have a variety of venues through which they can be achieved, the pursuit of policy being one but not the only alternative. The 'bottom-uppers' (as Sabatier calls them) find strength and flexibility in their intersubjectivity but rely heavily on the skills and commitments of individuals. The clarity of their objective is preeminent, and all other factors are adjusted in service to that priority.

Taking into account the research of Pressman and Wildavsky and the analysis of the twenty-one additional cases, Mazmanian and Sabatier's resulting conditions for effective policy implementation adjusted for their implied order of relative importance include:

1. Committed and skillful implementing officials.

2. Structured implementation process.

3. Adequate causal theory.

4. Minimized decision points and delays.

5. Relatively clear and consistent objectives.

6. Support of interest groups and sovereigns.

7. Adequate financial resources and changes in socio-economic conditions which do not substantially undermine political support or causal theory.

8. Projects impactful enough to generate commitment, but not so large as to have widespread, comprehensive effects.

In addition, they supported bottom-up models as potentially equally successful as the top-down models of their previous research and continued to suggest an expanded time frame of analysis.

Six Categories of Investigation plus Eight Necessary Conditions

My analysis of the cases utilized a combination of the six factors and eight necessary conditions translated from policy to project applications.[11] In an ideal scenario based on this initial analysis, one leading to the likeliest possibility of implementation, the project objectives would be consistent beginning with those developed in the competition brief, those prioritized by the jury members in their selection of a winner (as well as those perhaps less obvious objectives implied in assembling the jury), and those continually embodied in the physical expression of the winning proposal and its revisions. The political process would include a strong project champion willing and able to negotiate and hold consensus. Agency representatives would be experienced, capable, and

[11] See the diagrammatic, graphic notational system I developed in Appendix A to show relative variations of the criteria from case to case and allow for analytical comparisons and projective conclusions.

collaborative, and, first and foremost, committed to project success. Stakeholders, including locals, would be engaged early on. The process through which the project would move from initiation to successful implementation would be apparent, ideally built into the initial project phase. Time frames may be longer than expected, but diversions and delays would be minimized. The physical, social, political, and economic context would be consistently strong enough to support the scale, program, and type of project proposed at that site and in that time.

What does it mean, though, to seek a design project (rather than a policy) based on "adequate causal theory"? Is it enough to ask: does the project as proposed seem likely to accomplish the agreed upon objectives? The general objective in these cases is to alter the infrastructural priority from pure high-speed automobility to a collage of uses, scales, and modalities. In the most pragmatic sense, the problem at the 101 "trench" site as described in both competition briefs is to provide greater pedestrian linkages between the north and south sides of the freeway, reconnecting the city's origins and transit center with its growing cultural and business development to the south. The larger objectives -- explicit or implicit in the competitions -- include healing the social divisiveness of self-segregating immigrant populations, creating urban identity, developing an avant-garde design presence for a city still seeking a civic design identity, and revitalizing north downtown -- a less than vital commercial, residential, and service zone. In addition to such site specific objectives, though, these projects also attempt to regain (or reinvent) complicated and highly contested public space and, in the process, resignify the role of the urban freeway. Chapter two traces the history of theorizing those efforts and creates a critical and historical context for the argument that our urban freeways are, in fact, our largest public spaces in America.

Chapter 2. INFRASTRUCTURE AS PUBLIC SPACE: A LITERATURE REVIEW

There is no established design-based discourse for infrastructure per se, but a combination of literature that draws on texts within the literatures of public space, planning, urban design, architecture, landscape architecture, and urbanism. Infrastructural elements -- the street and the freeway in particular -- have certainly been evident in thinking about human habitation and city development from its earliest forms. As JB Jackson (1994) observes in *A Sense of Place, A Sense of Time*, the house and the road are the dichotomous origins of settlement -- the farmer versus the herder, the settler versus the nomad. Hannah Arendt (1958) equates them to the public and private realms, the space between houses -- the *infra*-structure -- being the zone of the *polis*, the political cartilage of public life; the house itself being the disconnected space of de*priv*ation. Unlike the modern era conceptualization of infrastructure as networks of organization or vectors of dispersion, Arendt and Jackson frame the road not as public works but as public space.

Reclaiming infrastructure as public space in the contemporary design discourse includes the exploration of four cumulative ideas: the establishment of infrastructure as public space through historical distinctions between public and private realms as mentioned above; the demise of public works and rise of infrastructure as systematized networks that shifted the emphasis to efficiency over culture; the alternative design discourses of the 1960s and 70s that used either analytical observation of "ordinary" conditions or utopian schemes to attempt a design-based appropriation of infrastructure; the "death of public space" that occurred mostly as a result of federal disinvestment and capitalist priorities that impoverished the public realm; and the emergence of alternative postmodern urbanisms as responses to both modernization and privatization, seeking new options

to lost inclusivity, instrumentalism, and productivity. The argument is that infrastructure, once the totality of the public sphere, lost its collective role when first, it was relegated to the realm of pure engineering through the demands of modernization and, second, its "public" was sanitized and limited. Although utopian and analytical models brought infrastructure back into the architecture and urbanism discourse, they failed to produce successful new models of implementable infrastructure as public space. The latest urban design strategies understand infrastructure as an intensive public investment, both spatially and financially, and hence see a unique platform for reclaiming it as collective territory. Their methods also prioritize flexibility and open-endedness that combat the rigidity of myopic design solutions and, ideally, provide alternative ways to conceptualize the overlap of infrastructure and public space.

Public and Private Space

J B Jackson (Jackson, 1980, 1994) wrote extensively about the archetypal road and advocated, not unlike Reyner Banham, for its deserved position in the study of the built environment. For Jackson, the question "Which came first, the house or the road leading to the house?" is both a historical and a symbolic one (Jackson, 1994, p. 189). The house represents power and individual sovereignty, where the road is, simultaneously, a common territory and a no-man's land. Choosing the house as 'first' represents an emphasis on stability, "a sense of place", or, in settlement terms, a land-based, agricultural society. On the other hand, prioritizing the road emphasizes exploration, "a sense of freedom", or a society of hunters, herders, or pilgrims (Jackson, 1994, pp. 189, 190). If the house stands for -- and is -- the private kingdom, the road stands for -- and is -- our first public space. The road is not only a simple shared conduit linking one private realm to another (in other words - a left over in-between), but also a worthy construction in its own

right -- the *infrastructure* of (i.e. the very structure beneath) social and political life. More broadly, the parable Jackson sets up represents a dichotomy fundamental to the understanding of the city -- the relationship between public and private space and the way, over time, the theorization of the two has evolved.

The historical conceptualization of the relationship between public and private space, with explicit ramifications for the consideration of infrastructure, is explored in the work of three scholars in particular: Pier Vittorio Aureli (2008), Richard Sennett (Sennett, 1992, 1994), and Hannah Arendt (1958, 2000). Following Jackson's lead, if the history of urbanism can be framed as a story of infrastructure and settlement, and of the very complicated relationship between public and private space, then Aureli establishes several significant points for this new infrastructure discourse. First, that there has always been both a functional and a political aspect to urban infrastructure. In the Roman city, the former was the *urbs* and the latter the *civitas*. The urbs was the material cartilage between aggregated homes, the *infra* space that bridged multiple private realms and connected those private realms to the larger public.[12] In Greek society, this public space was made political by the actions and interactions of its citizens outside domestic life. For Romans, the civitas was the a priori political space of the state, the space which by definition brought together difference and, by the very nature of that difference, served as a territory of negotiation. The Greek version was spatially, socially, and politically limited -- internally focused, both physically and sociopolitically -- homogeneous and with definitive legal boundaries. The Roman version was spatially, socially, and

[12] Aureli regularly uses the term "infrastructure" to refer to the space *between*. For example, "The structure lies in the space *infra*, or in between them; it is *infrastructure* ...the infra of the urbs is the space of connection and integration" (p. 95, italics in the original). Though the Latin prefix, infra-, is typically translated as "below" (The New Oxford American Dictionary, 2001), Merriam-Webster also includes the less common "within", typically indicated by intra- instead. I would argue that the public space both Aureli and Arendt are referring to is physically between the private realm but serves as support beneath political society -- in other words, its infrastructure. For the Romans, more than the Greeks, the road was expansive and structural and would therefore exist both between and beneath in the same way the American grid would later undergird the concept of democracy as it spread west. This, in essence, is why I argue the Roman road is the first infrastructure -- it is both the space of engagement and the network of political reification.

politically expansive, utilizing infrastructure as operative and active in building the empire through the spread of civilization. Further, the constructed Roman road -- what one could argue is the first real infrastructure -- served as a kind of multi-branched city network, where a particular ideology of civilization was not only distributed, but reified through the standardization of form. This allowed the road to serve as a consistent reference to its origins (Schreiber, 1961, p. 126), and an a priori ground for the socio-political engagement of its occupants, as well as a datum able to hold together a vast diversity of cultures.

Second, Aureli introduces Cerda's concept of *urbanization*, what he terms the drastic result of the subsuming of the public (the political) by the private (the economic). In this scenario, infrastructure -- the space previously defined by its very *infra* nature as political, as a mediator of difference -- was now propelled by new forms of work and exchange. The paradox of this new version of infrastructure is evident in the bourgeoisie public sphere -- that Habermassian zone that is simultaneously public "because it concerns the primary source of the function of the modern city and modern state: the exchange of commodities and the social domain of work" and private "because it is in the economic interest of only one part of the entire social body" (Aureli, 2008, p. 96). The public sphere is that space according to Habermas where "the sphere of private people come together as a public" (Habermas, 1991, p. 28) or, in Aureli's terms, where the civitas is eventually absorbed to the point if disappearance by the urbs -- *urbanization* (96). Cerda's urbanization goes further, defined by "the condition of limitlessness and the total integration of movement and communication brought about by capitalism." For Cerda, the bourgeoisie way of life -- what he saw typified in the pure suburban development of mobility, infrastructure, and individual dwellings -- was the ideal new paradigm of living. Exemplified in his expansion plan for Barcelona (1859), Cerda's regularized, isotropic grid with even distribution of services and roads, essentially

geometricized the economic order of the city while implying its infinite extension, limited only by its inhabitants' ability to produce (Aureli, 2008, p. 98). This "infinite continuity of movement propelled by production" defined an urbanization process that was itself defined by infrastructure. In urbanization, however, infrastructure becomes devoted to the service of the economy.

Arendt further explores the historical differentiation between public and private realms and deepens the argument that infrastructure supports and shapes sociopolitical relationships. The public realm was the space in which people were seen and heard, their ideas and their identities as individuals explored and expressed. The polis was first "the sphere of freedom" where "equals" were given the opportunity to interact with those unlike themselves through action and, more likely, speech "as a means of persuasion" (Arendt, 2000, pp. 184, 186, 188). To withdraw to a private life -- to be de*priv*ed of a public existence -- meant to loose visibility, to loose a voice.[13] Secondly, the public realm was the space held in common. Arendt is less direct in her propositions regarding infrastructure, though we might project that the public realm she refers to is the origin of all infra-structure, the political cartilage of urban life. What happened in public, she argues, was shared, held in common and distinctly separate from individual, private existences (Arendt, 2000, pp. 199-201). It is easy to imagine in this quotation that she is referring to infrastructure as the "table": "To live together in the world means essentially that a world of things is between those who have it in common, as a table is located between those who sit around it; the world like every in-between, relates and separates men at the same time" (Arendt, 2000, p. 201). The success of the public realm relies on both the *gathering together* and the *holding in common* of something separate from each, yet shared.

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[13] The issue of visibility and voice in the public realm recurs in Don Mitchell's work (2003) on the rights to the city. Homeless people are trapped in a position of deprivation without the advantages of privacy, as they simultaneously have no public voice and no private refuge.

The loss of collective investment in public life has further perpetuated the loss of a collective investment in public works. As Arendt explains, "What makes mass society so difficult to bear is not the number of people involved, or at least not primarily, but the fact that the world between them has lost its power to gather them together, to relate and to separate them" (Arendt, 2000, p. 201). If each of us is sitting at separate tables (over-invested in our private identities rather than our public ones), she argues, the common *idea* of table-sitting is not enough to bind us; we must act and think accordingly -- sit at the table together and recognize that it is held in common. In addition, this "table" -- infrastructure, the public sphere -- must span spatially and temporally beyond the lives and interests of individuals. "If the world is to contain a public space, it cannot be erected for one generation and planned for the living only...it transcends our life-span into past and future alike...For the *polis* was for the Greeks, as the *res publica* was for the Romans, first of all their guarantee against the futility of individual life, the space protected against this futility and reserved for the relative permanence, if not immortality, of mortals" (Arendt, 2000, pp. 202-203). The loss of infrastructure as public space is the loss of the physical framework of the public sphere and the sociopolitical expectation of diverse exchange (civitas, citizenship, civility); it is also the loss of transcendent common ground that extends beyond the interests of the individual (be they social or economic) in the creation of a civic legacy for future generations.

This loss in particular is explored extensively in the work of Richard Sennett (1994, 1992). Sennett argues that the visibility and interactivity so necessary in the public sphere of the *res publica* was supplanted by psychologies, technologies, and economies that greatly favored individualization and isolation. The ideal public figure of the early eighteenth century, the "cosmopolite", was one who "move[d] comfortably in diversity", who preferred the "ineluctable contact" of strangers in complex and unfamiliar social groups to the limited intimacies of the private circle (Sennett, 1992,

p. 17). Cosmopolitan cities of the 18th century provided numerous opportunities for such interactions with strangers; these sites (written about extensively by Habermas as defining spaces of his public sphere) included cultural centers like opera houses and theaters made newly available to those outside the urban elite, streets for strolling, public parks, and coffee houses (Sennett, 1992).

Yet, changes in the public and private realms grew throughout the 19th century. The public realm, instead, became the space of Baudelaire's flâneur, wandering the boulevards simultaneously "to be away from home and yet to feel oneself everywhere at home; to see the world, to be at the center of the world, and yet to remain hidden from the world" (Baudelaire, 1995, p. 9). This apolitical distance marked a change from the kind of public space which served as framework for a unifying, collective public realm -- a discursive space -- to that which found individuals in proximity yet detached and non-participatory. The rise of industrial capitalism, the reformulation of secularism, and the seeming resilience of public life, which served to mask the social changes eating away its core, ultimately led to a public space full of economic exchange but lacking the meaningful political exchange that initially defined the public sphere (Loukaitou-Sideris & Banarjee, 1998; Sennett, 1992).

Prior to this emergence of the individual in the public realm, the space outside of the home was devoted to a collective identity, where citizens defined themselves through relationships with each other and in relationship to the state. Aureli's use of the term "infrastructure" in regards to the civitas refers to the physical space between houses, but only in that it serves to structure and support political society. That political society was created by the occupation of or interaction between citizens in the public sphere. The former relied on limited urban scale and the latter on limited speed. Variations of the civitas are still fought over in the public realm of the sidewalk which, due to its more contained speed and scale (see Loukaitou-Sideris & Ehrenfeucht, 2009), acts more like the

ancient street than the street itself. The eventual increase in pace and scope that came with the new communication and mobility technologies of the nineteenth and twentieth centuries meant this linear agora disintegrated. Modernization, as Le Corbusier celebrated, changed the man in the street to the man in the car.

From Public Works to Infrastructure

The actual term "infrastructure" appeared in Europe around the time of the first World War. Dating to the 1920s, it had its origins in France where it was first used in reference to various components of railroad engineering.[14] The term was imported to America following World War II, where it remained attached to concepts of strategic military support and international alliances, particularly those related to the North Atlantic Treaty Organization, or NATO. In the 1940s, 'infrastructure' referenced military installations and national security investments; not until the 1970s did it begin to refer to the massive capital investments we now associate more readily with the term -- roads, bridges, tunnels, subways, utility lines, etc.[15] [16]

The term 'public works' was widely used prior to the term 'infrastructure.' Those working in the vast range of public works industries -- from water engineers to planners -- were unified professionally in 1937 when the American Society for Municipal Engineers and the International Association of Public Works Officials (founded in Chicago in 1919) joined to form the American

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[14] A French publication by Auguste-François-Xavier Moreau from 1898 appears to be the earliest on record using the term formally as its first chapter title. Moreau, A.-F. (1898). *Traité des chemins de fer: Par Auguste Moreau.* Paris: Fanchon et Artus. Miriam-Webster online lists the origins of the term as 1927. http://www.merriam-webster.com/dictionary/infrastructure (accessed 1 August 2012) Stephen Lewis in "The Etymology of Infrastructure and the Infrastructure of the Internet" uncovered the French railroad connection and further etymology. His site can be accessed at http://hakpaksak.wordpress.com/2008/09/22/the-etymology-of-infrastructure-and-the-infrastructure-of-the-internet/ (Feb 23 2010).

[15] Stephen Lewis, "The Etymology of Infrastructure and the Infrastructure of the Internet", September 22, 2008. accessed at http://hakpaksak.wordpress.com/2008/09/22/the-etymology-of-infrastructure-and-the-infrastructure-of-the-internet/ (Feb 23 2010)

[16] See also Dana Cuff's article "WPA 2.0: Working Public Architecture" published in the Harvard Design Magazine, Fall/Winter 2010-2011 (Cuff, 2011).

Public Works Association (APWA).[17] The term 'public works' was also perpetuated by the depression-era WPA initiatives (1935-1943), where make work projects for the public were the primary objective.[18] Far beyond bridges and roads, those original WPA projects heavily engaged the skills of architects, writers, sculptors, painters, photographers, cartographers and other crafts people and visionaries in the rebuilding of a struggling public realm. As much a project in human morale and nation building, the physical products of the WPA, from dams to guidebooks, advanced an optimistic, creative vision of a country in recovery. The phrase 'public works' implied both the government-sponsorship component and a sense of collective ownership. Public works were as much about producing a culture as producing the means through which that culture thrived. The more utilitarian 'infrastructure', from the Latin root *infra-* meaning 'below' or 'beneath', emphasized, instead, the support, order or organizational role, both functional and formal, rather than the social or collective. Modernization shifted the priority from the production of cultural artifacts to that of technocratic systems (D'Hooghe, 2010).

Le Corbusier's *Vers une architecture* (*Towards an Architecture*) first published in 1923 was a manifesto heralding the purity of form and function made possible through mass industrialization. His emphasis on subways, airplanes, and traffic patterns signaled a fascination with the machine age indicative of the vast modernization that was to come. His exposition on the street captures this transition endemic of the change from public works to infrastructure:

> I think back twenty years, when I was a student; the road belonged to us then; we sang in it and argued in it, while the horse-'bus swept calmly along.
>
> On that first day of October, on the Champs Elysees, I was assisting at the titanic

[17] APWA reporter, May 1994. http://www.apwa.net/Documents/About/APWAHistory.pdf (Feb 22 2010)
[18] The WPA began May 6, 1935 as the Works Progress Administration established by Executive Order 7034 as part of the Emergency Relief Appropriation Act of 1935. In 1939 it was renamed the Works Projects Administration after being incorporated into the Federal Works Agency.

> reawakening of a comparatively new phenomenon, which three months of summer had calmed down a little -- traffic. Motors in all directions, going at all speeds. I was overwhelmed, an enthusiastic rapture filled me. Not the rapture of the shining coachwork under the gleaming lights, but the rapture of power. The simple and ingenuous pleasure of being in the centre of so much power, so much speed. We are a part of it. We are part of that race whose dawn is just awakening. We have confidence in this new society, which will in the end arrive at a magnificent expression of its power. We believe it. " (Le Corbusier, 1987, p. xxiii).

Le Corbusier's new city -- the modern city (or what he planned as the "contemporary city of three million inhabitants") -- was one based on efficiency and order. His plans were efforts to rid the city of rising chaos and congestion through rationality and geometry; considerations for infrastructure were pervasive. Sites were to be regularized through a gridded geometry; the river was a kind of "liquid railway" (165); traffic was to be separated by speed and function, one road for heavy goods, one for lighter goods, and one for longer distances. The road for lighter goods would be a transformation of the previously messy and chaotic street into a linear "workshop", one that should reveal and celebrate rather than hide its new mechanisms: "The modern street in the true sense of the word is a new type of organism, a sort of stretched-out workshop, a home for many complicated and delicate organs, such as gas, water, and electric mains...The modern street should be a masterpiece of civil engineering and no longer a job for navvies" (167). The making of this street required expertise, and the expert of the modern city was not the architect of the past, whom Corbusier called "a twisted sort of creature" (176) in love with irregular sites and original ideas, but the efficient, logical and unemotional engineer. The advantages of the machine age meant that a "city made for speed [was] made for success" (179).

Marshall Berman (1982) captured the moment on the verge of vast urban modernization, too, but with trepidation rather than outright revelry. American modernization came with the construction of the highways, and the antagonism between the old city and the new played out most visibly in New York's boroughs. Watching the demolition of his neighborhood necessary for the construction of Robert Moses's Cross-Bronx Expressway, Marshall Berman is struck with the grief of a lost past, while marveling at the coming of the future:

> To oppose his bridges, tunnels, expressways, housing developments, power dams, stadia, cultural centers, was - or so it seemed - to oppose history, progress, modernity itself. And few people, especially in New York, were prepared to do that...Moses struck a chord that for more than a century has been vital to the sensibility of New Yorkers: our identification with progress, with renewal and reform, with perpetual transformation of our world and ourselves...Moses was destroying our world, yet he seemed to be working in the name of values that we ourselves embraced (294-5).

Moses himself straddled that metamorphosis between public works and infrastructure. His parkways, beaches, zoos, pools, and playgrounds of the 30s and 40s were planned and executed with little resistance. Most were well-received contributions to a largely under-served and under-represented population lacking healthy public space. But his work in the 50s, modeled more directly after the utopian modernist urban vision, lacked the sensitivity of design and human scale of the earlier work. The later mega projects were "made to overawe and overwhelm" and projected the indifference to the needs of the people he would later become known and so aggressively criticized for (308).

As Corbusier observed in the 1920s, the streets of the modernizing city -- once a primary,

slow-paced public sphere -- were becoming conduits and vectors of high-speed movement. "The man in the street will incorporate himself into the new power by becoming the man in the car...The perspective of the new man in the car will generate the paradigms of twentieth-century modernist urban planning and design" (Berman, 1982, p. 167). The replacement of the man in the street with the man in the car represented far more than a functional alteration. The implication that technology automatically provided a social salve, that segregation was better than integration, and that master planning 'cured' urban ills, became the core arguments that guided the development of the modernizing city in the post-war period. Previously, the individual engaged in the form and space of the city as a slow-paced, observing, interacting, sensual being; the modern city -- based on a totalizing vision, a homogeneous 'public', and rational solutions all executed through a master plan -- was abstract, distant from daily experience, and focused on priorities like efficiency over experience. Yet, modernization promised progress, and progress promised vast improvements in the quality of life for millions of urban inhabitants.

Far beyond Moses's New York, expanding automobility and rampant modernization meant drastic changes in the forms of cities across the country. Though cities like Los Angeles had grown in dispersed, multi-centric ways since the 1920s, efforts at weaving the country together for access and defense after World War II shifted the emphasis from local to national concern. With the full funding by Congress in 1956 of the Eisenhower National System of Interstate and Defense Highways, America truly became a united union of states. Sold through a combination of Nazi competition, war preparedness, and a unique predestined right to unfettered mobility, these 42,000-plus miles of limited access freeway concretized that burgeoning sense of modernization. Though cross-country routes existed prior to that time, the contiguity and speed of the Interstate system embodied a kind of democracy of progress -- at the scale of the country -- that made it our greatest

public works project ever. That right to speed and the freedom and possibilities for reinvention it represented, imbued the American system, due to its utter vastness, with a collective utopianism. David Brodsly in *L.A. Freeway* (1981) said, "Every time we merge with traffic we join our community in a wordless creed: belief in individual freedom, in a technological liberation from place and circumstance, in a democracy of personal mobility. When we are stuck in rush-hour traffic the freeway's greatest frustration is that it belies its promise" (5). Particularly in the west, the freeway is inseparable from the identities of place and the spatial practices of daily life.

Alternative Design Discourses of the 1960s and 70s

The fascination with mobility, mechanization, and communication was pre-eminent in the urban design discourse of the 1960s. Reyner Banham (1960) had resurrected the role of the Futurists in the history of modernism with the publication of his graduate work in *Theory and Design in the First Machine Age*. A decade and a half before Le Corbusier's city of tomorrow, the Futurists were touting their own city of tomorrow with the motorcar and its empowered driver as a central force. Antonio Sant'Elia's dramatic, monumental designs for central train stations, airship hangars, and electric power stations showed a prominent role for the pragmatic yet monumental infrastructure of the Futurist City.

Team 10, the offshoot of CIAM which included such notable modernists as Aldo van Eyck, Erskine, and the Smithsons, saw the role of infrastructure as a way to return a kind of comprehensibility and identity to the city (Smithson, 1968). Using the term "infra-structure" for the first time in the design discourse, Smithson identified the "Urban Motorway" in particular for its ability to mobilize and order both the physical and social city simultaneously (48). "Mobility is the key both socially and organizationally to town planning, for mobility is not only concerned with

roads, but with the whole concept of a mobile, fragmented community. The roads (together with the main power lines and drains) form the essential physical infra-structure of the community" (52). Infrastructure -- roads and services -- are then fixed, shaping the structure of both space and human relations, yet allowing for fluidity and adaptability. The road was no longer a slow public sphere, but a unifying, geometric network. This new "comprehensive net" was intended to provide equal distribution of traffic, but also a comprehensive sense of connectedness without rigidity (56).

A slightly different conversation was going on regarding the American road. Steeped in a radical ideology and mythology unlike the slow evolution of the European city, American infrastructure, at least in part, reified the much more recent story of the colonist turning citizen, the commonwealth becoming a democracy. The lines of order and movement originally shaping the country were both metaphorically and literally hacked through the landscape, expanding link by link with the frontier-type exploration of the territory. The grid division system came about through the Land Ordinance of 1785, creating what Denis Cosgrove called "the cartographic foundation of American social space" (Cosgrove, 1996, p. 8). A product of the Enlightenment, a lover of the rationality of science, mathematics, and measure, Thomas Jefferson saw in these infinite grid lines and mile-square lots the equality and fairness at the heart of democracy. Each 640-acre segment held within it the seeds of the original American Dream – the right to property ownership and self-determination, opportunities equivalent and available to all other citizens, and the means for a rational, civilized, and enlightened existence (Cosgrove, 1996).[19] Unlike the top-down strategy implied in the Roman network, intending to reach out to the existing 'barbarian' rural population in an effort to 'civilize' them, or the medieval formalization of a preexisting informal cartilage, the

[19] This concept is gorgeously illustrated in James Corner and Alex S. McLean's *Taking Measure Across the American Landscape* (New Haven: University Press, 1966) where Denis Cosgrove's essay "The Measure of America" is published.

American grid arrived before its populace, setting a ready stage for the autonomy of the democratic citizen and his relationship with both his neighbors and the rational world at large. A sense of infinite expansion, equitable access and entitlement to mobility was built into the American psyche around infrastructure, particularly outside the colonial east coast. Modernization found a willing ally in the pre-existing grid of the union, rampant automobility, and post-war expansion.

The American condition of mobility in the 1960s and 70s, though, generated three strains of urban discourse that sought a more critical view of modernism and its sprawling offshoots of dispersed development. The first two were analytical, inserting observations of "ordinary" conditions into the typically highbrow discipline. The third was utopian, grounded in an exuberance for all things automobility tainted with a growing sensitivity towards environmental consciousness. Each appropriated infrastructure as a constitutive component of the design discourse.

Venturi, Scott Brown, and Izenour's (1972) studio-based analysis of the Las Vegas strip introduced an immersive and uncensored obsession with the detritus of suburbia writ large. Ignored by a generation of urban scholars, *Learning from Las Vegas* bestowed a certain degree of academic credibility to the cultural iconography and spatial conditions of a road-based design culture. Their rigorous analysis of the sign- and symbol-centric communication system of strip architecture proved the existence of an alternative kind of order evident in the seeming aesthetic chaos. The "strip" was not just the road but the entire zone of communication visible from the car; the discursive experience was one predominated by the thick and thin billboards of ducks and decorated sheds. Their populist reading of the city demanded recognition that the modernist vision of pure infrastructure was one, very limited variety. Las Vegas, with its aggressive juxtaposition of public road and private interest embraced "continuity *and* discontinuity, going *and* stopping, clarity *and* ambiguity, cooperation *and* competition, the community *and* rugged individualism" (Venturi, et al.,

1972, p. 20). As car-centric and commercially-oriented as it was, the strip embodied the heterogeneity and juxtaposition of a linear public realm if not a true public sphere.

Reyner Banham in his more popular text, *Los Angeles: The Architecture of Four Ecologies* (originally 1971), also deployed the freeway as an alternative ordering device. The rhythmic, non-periodized structure of the book formulated a topographical rather than a chronological understanding of Los Angeles. Like his alternative take on modernism in *Theory and Design in the First Machine Age*, *Four Ecologies* takes an atypical stance on place and history; Vidler calls it "a freeway model of history, one that saw the city through movement and as itself in movement" (Vidler, 2001b, p. xxv). Like Venturi, et al., Banham turns a critical eye on the previously overlooked. He calls attention to the freeway as one of four equally significant ecologies -- Autopia, The Plains of Id, Foothills, Surfurbia. His alternative structure contrasts the ecological with the architectural, the network with the object, even the lowbrow with the high. These are palimpsests of vectors and planes, but also of cultures and identities; it is a movement and pause understanding of the city. By the time he reaches Autopia (after a dismissive chapter on LA's diminutive downtown), he has reached the heart of the city. As he famously wrote -- a playful jab at generations of scholars before him -- "I learned to drive in order to read Los Angeles in the original." (5)[20]

Banham's attention gives credibility to the freeway as a place worthy of architectural study in its own right. Intentionally mixed in with architectural and historical landmarks like the Case Study houses or nineteenth century Spanish missions, the infrastructure of Los Angeles is as crucial -- if not more so -- an aspect of its built form and human ecology. Water, as much as roads, oil, and rail, dictated the growth of the city; the politics of that infrastructure dictated its development. The

[20] Part of Banham's charm is the real awe he seems to maintain over the condition of Los Angeles and its unique attributes. It is easy to read his text today and imagine instead that he is being sarcastic, even ironic at times, but the film version in all its quirky humor and naïveté, proves that position misguided.

freeway, however, is the most spatially pervasive and socially participatory. Banham likens the freeway to Los Angeles's "exterior"; exiting is akin to "coming in from outdoors" (195).[21] The totality of the freeway system is "a single comprehensible place, a coherent state of mind, a complete way of life, the fourth ecology of the Angeleno" (195).

That way of life holds within it a great paradox of modernization, that between individual freedom and public order. The infinite flexibility provided by such individuated mobility is tempered by the necessary "willing acquiescence in an incredibly demanding man/machine system" (199). The price paid for the flexibility of individuated mobility "is the almost total surrender of personal freedom for most of the journey" (199). Driving is both democratic mobility and submission to a highly demanding, highly structured -- some formal, some informal -- set of operations and expectations. Banham resists calling this state "existential" or "situational", as he finds those terms stylistic rather than substantive, and instead calls this state of individual choreography and collective rule following "a higher form of pragmatism" and an "approved mixture of enlightened self-interest and public spirit" (199) (it is all of the above). Freeway driving is also the "most sacred ritual" of Angelenos (203) and, at least through the fresh British eyes of a 1970s interloper, "the place where they spend the two calmest and most rewarding hours of their daily lives" (204).

The third urban discourse of the 60s and 70s focused on the uniquely American relationship with infrastructure comes from the alternative architectural collective, Ant Farm. Founded in 1968 by architecture graduates Doug Michels and Chip Lord, they entered the profession at a time when general anti-establishment sentiment met a heightened fascination with new media, communalism,

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[21] Los Angeles is also home to the world's largest eruv, which is a spatially defined zone used in Orthodox Judaism to metaphorically extend the interior of the home out into the city to allow for certain activities on the Sabbath. The LA eruv is partially defined by the 405 to the west, the 10 to the south, and the 101 to the north, making these freeways the boundaries to the observant Jew's interior space.

and creative exploration.[22] They and future partner Curtis Schreier brought to that ripe time a fascination for all things automobility -- cars, speed, style, and pop culture. Though decidedly playful and witty, their work transformed their obsessions (including their architectural interests in materiality and craft) into a commentary on the risks American society was taking by conceding to these very infatuations. Never traditional practitioners, Ant Farm operated in the "expanded field" of architecture, conceptual art, landscape, and consumption producing a kind of "oppositional architecture" that was both humorous and scathing (Sorkin, 2004). Even though much of their subject matter dealt with private obsessions -- driving, television watching, sex -- their aims were to create public commentary through the creation of an expanded architectural/infrastructural public sphere. The inflatables (like the one at Sproul Plaza on the UC Berkeley campus) were occupiable symbols. In every way -- form, materiality, permanence, accessibility -- they stood in juxtaposition to their institutional contexts. The Media Van on its Truckstop Network took those ideas and their physical forms on the road to universities across the country. In addition to its plastic domed roof for videotaping people's interaction with the custom Chevy van, it hosted two inflatables -- a solar-heated shower and a gathering space for five people. Their "nomadic truckitecture" was a beacon for engagement. This roving, itinerant public sphere was part of Ant Farm's larger effort to "see knowledge loosed from privilege" (Sorkin, 2004, p. 9). So was their book, *Automerica*, which traces the country's mobility love affair from Norman Bel Geddes' 1939 Futurama to the "gas wars" of the 70s (Ant_Farm, 1976). Part autobiography part comic book, *Automerica*, is somehow both sanguine

[22] The founding of SCI-Arc (Southern California Institute of Architecture) in 1972 was one manifestation of the rejection of staid design institutions in favor of experimentation and avant-garde aesthetics. Several of its early participants -- Michael Rotondi, Thom Mayne, Neil Denari -- play prominent roles in the cases studied in this research.

and cautionary. Like their inspiration, the *Whole Earth Catalog*, their audience was not a select few but a vast public.

When not actually mobile themselves, Ant Farm used media as a documentation and distribution tool. Projects like Media Burn (where a customized Cadillac-as-spaceship crashes through a wall of burning television sets) were all about capturing the spectacle of obsession and re-distributing it. Real members of the media invited to cover the piece were themselves active participants in its self-perpetuation. Of the Phantom Dream Car used in the project, Chip Lord wrote in *Automerica*:

> "It is the myth that the automobile created and the myth it destroyed, in the same car. It is all these things from our immediate past; it is the future, too, because it is a car that was built to be driven only once, but which had an abundance of entertainment value. It got a lot of mileage out of a couple of gallons of gas. It was fun to build and drive, but its message should be underlined: Our collective technology, our media matrix, our love of cars, the myth of the machine have the potential to end it all fast, not with a whimper but a big, greasy BANG" (Ant_Farm, 1976, p. 136).

Ant Farm, like Banham and the Las Vegas team, captured a short time in American history where possibilities of the infrastructural landscape seemed futuristic yet foreboding. After the vacuous post-war bliss of the 50s but before the authoritarianism and anger of late 70s urban renewal, Ant Farm created a kind of conceptual architecture, where the restrictions of site, place, rules, and institutions were challenged by an intellectual nomadism of experimentation. Though linked by a handful of compelling obsessions, the work of Ant Farm traversed theater, sculpture, video, architecture, land art, even urbanism. Their most famous work, Cadillac Ranch, is more than

a roadside mecca (Lewallen calls it "arguable the best-known public artwork in America", p. 3), it is a historical monument, an environmental commentary, and a palimpsest of public interaction. Sorkin calls Cadillac Ranch "that primal icon of gathering" (Sorkin, 2004, p. 10), and though it started as one more obsession among boys with cars and form (one a rich Texas patron), it quickly became, and still remains, collective at the scale of the country.

Infrastructural Utopias

Ant Farm's international counterparts shared their obsession with infrastructure if not their American attachment to wanderlust, critique of media and fetishism of the automobile. Constant Nieuwenhuys (New Babylon), Yona Friedman (Spatial City), and Archigram (Plug-in City among other proposals) in particular took Team X's theories of a new urban order through infrastructure, which were now feeling reserved, and radicalized them further. The "megastructure" proposals invested little in the archeology of the historical city and instead suggested ground-up utopian alternatives intended to challenge both the old physical and social structures (Banham, 1976). The new city was more flexible and adaptable than the old one, infinitely expandable, and often in a perpetually sustained state of disassembly and assembly (Sadler, 2005b).

Many of these radical utopianists used infrastructure as a generator of form or, like Archizoom's No-Stop City and Superstudio's Continuous Monument, its only form. In the former, the fascination with mechanization, fluidity, and modularity meant infrastructure operated as a liberating agent. Massive frameworks were a stage activated by occupation and intended to free up individual opportunity for customization and social collectivity at moments of intersection. The latter, on the other hand, appropriated the endless grid as a representation of inchoate globalization;

the grid created a “single continuous environment, the world rendered uniform by technology, culture, and all the other inevitable forms of imperialism” (Ringen, 2004) (quoting Superstudio).

Archizoom's No-Stop City was one such infinite grid. Modeled after such production and distribution necessities as the factory and the supermarket, its vast and seemingly endless gridded space was filled with open bars of spatially interchangeable program -- restaurant, cinema, school, library -- themselves distributed in a universal grid (Archizoom_Associates, 1971). "The metropolis was envisioned as a vast interior: a single space, climate-controlled and artificially lit -- like a huge factory or department store, organisms completely in tune with the standardizing logic of the market, impassive containers within which the possibilities are endless" (Branzi, 2005, p. 181). In No-Stop City, the totality of the city was absorbed by infrastructure.

Archigram's Plug-In City and Walking City (both 1964) were more direct extensions of a Futurist position -- a sanguine belief in technology, mechanization, speed/flow/fluidity, and the art and awe of engineering (particularly the power plant).[23] One of their Futurist models, Antonio Sant'Elia, as mentioned previously, was known for his urban visions where infrastructure commanded a civic role (Banham, 1960). In his *Citta Nuova*, multi-level circulation, electric generating stations, and aircraft landing strips all housed in highly geometricized concrete monoliths argued for the technological city that would replace its slow, crowded, and unhygienic predecessor. The new city was to be "active, mobile, and everywhere dynamic" (Banham, 1960, p. 129). Archigram, some fifty years later, took Futurism and freed it from the weight of its materiality, adding to the manifesto lightness and flexibility, a more refined obsession with mobility, and a

[23] Archigram's name comes from the merging of two terms -- architecture + telegram. The name embodies the interest in merging a design sensibility with the unifying networks of communication and technology.

continued use of publication as a form of architectural persuasion.[24] The diagonal exoskeleton of service and communication tubes supported roads and railways between them and apartments hanging from their exterior; all modules were movable and removable by cranes on tracks at roof level. If the free space of the modern grid represented the ubiquity of infrastructure in No-Stop City, Archigram's Plug-In city was infrastructure exacerbated.

Unrestricted movement, a near obsession of Archigram's (and the Futurists and the modernists before them) represented in Plug-In City an anticipated kind of freedom (through production automation) from the physical bonds of labor. Both Plug In City and Constant's New Babylon "unstick social space, through the disestablishment of social order." The flexibility intentionally supported a society of individuals in flux, coming together for efficiency and, in the new social order, leisure. The public realm, therefore, was amorphous, even ephemeral. In addition to providing a sense of freedom, though, the lack of spatial fixity signaled a lack of spatial hierarchy for a public realm. Though collective in scale, the urban intentions of these projects celebrated the unprecedented freedom infrastructure provided primarily for the individual. Publicness was generally considered a by-product of these cities rather than a focal point. Opportunities for interaction would occur through the proliferation of movement. This "glorious life support machine for a culture in perpetual flux" meant the dematerialization of Arendt's table (Sadler, 2005a, p. 61).[25]

But it was also, in theory, a highly operational city. Traffic, which Archigram took quite seriously as it surged to near chaos in British cities, would remain a touchstone of realism for what

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[24] The Futurists expounded their urban philosophies and attempted to incite followers through published manifestoes, particularly Fillipo Tomaso Marinett's *Foundation Manifesto*, February 1909 (Banham, 1960). *Archigram* started as the title of the magazine that published the more radical work from architecture schools that was being overlooked by the establishment. Its later publications included a much broader range of radical work and served to create the illusion of a rising, international megastructure movement (Banham, 1976).

[25] Archigram's renderings, though, particularly collages for projects like Instant City, seem to be suggesting some kind of public roadside alternative. These images, full of balloons and banners (in addition to rather ominous screens suggesting the ever-present eyes of surveillance) presage festival marketplaces or megamalls -- those bastions of uber-capitalism that would substitute for a real public sphere two decades later.

seemed otherwise science-fiction. In their schemes, traffic was not an urban blight seeking elimination, but an opportunity for radical urban, and social, revisioning. Their conviction that "surging mobility was commensurate with good living and with democracy" obviously harkens to the modernist agenda as expressed in Le Corbusier's ideal city schemes (Sadler 2005a). "A city made for speed," he believed, "is made for success" (Corbusier, 1987, p. 179).

One final of the 60s infrastructure-based utopian schemes worth noting is Yona Friedman's Paris Spatial. His calls for an "indeterminate city planning", made possible by the superimposition of a new three-dimensional infrastructure overlaid on the pre-existing city, were an effort to combine what he deemed the inherently disparate "city for isolated individuals" and "city dedicated to public life" (Friedman, 2005, p. 14). This superstructure, literally hovering above the old city, is a modular space frame filled with housing, industrial areas, agriculture, 'traffic zones', and public space. Program can be temporary and flexible allowing the greater accommodation of population and increasing the density of the city while at the same time freeing up space for transportation and agriculture. Combining the climate control and spatial flexibility of No-Stop City's infinite interior with the technological expression of mobility in Plug-In City, the Friedman project adds infrastructure as a solution for the impending increase in population density by literally doubling the area of the ground plane.

In these future cities, infrastructure is inseparable from architecture, and vice versa. What is often invisible in the city today was intentionally concretized. Flow, distribution, technology, communication -- all allowed the utopianists to use "the formless as progenitor of form" (Sadler, 2005a, p. 78), and compelling form at that. Though few of these proposals found derivations in constructed form, their visions were part of a critique of modernism and combined resistance and fascination with the new post-war context.

Aureli brings these utopian projects back into the conversation on urbanization. The vast grid of No-Stop City is nothing less than a commentary on full urbanization, the taking over of the public realm by private economic interests. There is no center or periphery, just a constant condition of production, accumulation, and consumption (Aureli, 2008) He ends his essay with a call to counter the spatial neutrality and economic power of urbanization through a reassessment of the political through the formal. To reclaim the *civitas* and the *urbs*, we must reconsider infrastructure, the relationship between the city's parts. Using Arendt's theories again, Aureli makes a direct relationship between individuals and individual objects of architecture: "The space in-between is a constituent aspect of the concept of form, found in the contraposition of parts. As there is no way to think the political within man himself, there is also no way to think the space in-between in itself" (Aureli, 2008, p. 109). Politics is never autonomous, but arises in the confrontations between people and in the way, through those confrontations, we understand ourselves. Seeming a rather one-to-one application of an abstract and very complicated idea to the physical form of the city, the actual consideration of such a theory is quite complex. The question is nothing less than "What is the form of the city that incarnates the political composition of its parts?" (112). The answer is certainly not a totalitarian or formulaic master plan, which might provide unity but at the sacrifice of spatial differentiation; the possibility of conflict is lost, or, in Mitchell's terms, such extreme order overly minimizes the chances for disorder. Architecture, he says, must be chosen over urban planning. The transformation of *urbs* into *polis* relies on "a city evoked not through its totality but through the confrontation of its parts" (115). In addition to this condemnation of the master plan, he condemns the contemporary iconic building because it too stands apart from urban conversation; its uniqueness is not a product of the public realm but of the

forces of the market. It separates from the city not as a political move but as an economic one.[26] This is not at all a nostalgic position, a call to a time of pre-urbanization, but a call, instead, "to sharpen the ways in which we critically approach the political in order to define a possibility for the formal" (112). Rather than a site of uniformity or elitism, the re-politicized city is a site of coexistence and confrontation. He closes with a paragraph that is incredibly opportune for this study, so I will include it in total:

> ...architecture is a constructive and theoretical apparatus whose 'public-ness' consists in its possibility of separating and thus forming, the space of coexistence within the city. By public space I mean a shared space that, given its collectiveness, defines a form of political coexistence among individuals. For this reason, architecture's only option is to express itself through a language that is radically and consciously appropriate, that is clear in its goals and its cause, able to represent and institutionalize the business of living as a value at once universal and singular. Architecture cannot have any goal apart from that of relentless inquiry into the singularity of finite parts -- the very singularity by which it constitutes the city. Architecture must address the city even when the city has no goal for architecture (119).

The cases of this research are very much about rethinking the architectural agenda of infrastructure.

The Infrastructure Crisis and the Death of Public Space

The relationship between infrastructure and the city changed rather drastically in the 1980s. The publication of Pat Choate and Susan Walter's document, *America In Ruins: The Decaying Infrastructure* (1983) brought popular attention to both the term 'infrastructure' and the dire

[26] Frank Gehry's Bilbao Guggenheim is the perfect example of this. The building is an expression of both an aesthetic and a personal autonomy -- that logo of form and personality that Gehry buildings have come to represent. Though it has had great economic impact on the region in terms of tourism and immediately surrounding development, its reverberant economic effect is uneven at best.

condition a lack of adequate investment in public works had brought about.[27] Popular press coverage of the report was robust, making the cover of *Newsweek*, *Time* and the *New York Times* (Choate & Walter, 1983, p. v). Undertaken as policy analysis under the auspices of the Council of State Planning Agencies, their concise book (less than 100 pages) was a terse and incisive call that foresaw Reagan's disinvestment policies as the death blow to an already shaky federal relationship with infrastructure funding (Wise, 1984, p. ixxi).

Definitions of 'infrastructure' published by the government in the 80s and 90s were so broad as to include the "framework of interdependent networks and systems comprising identifiable industries, institutions (including people and procedures), and distribution capabilities that provide a reliable flow of products and services essential to the defense and economic security of the United States, the smooth functioning of government at all levels, and society as a whole."[28] A further shift in the definition occurred in the mid-1990s due to issues of national security. Lists of "critical infrastructure" and related "key assets" were developed to determine where protective resources should be allocated.[29] These definitions were clearly monopolized by the understanding of infrastructure as a pragmatic, functionalist component of urban life driven largely by demands of efficiency, defense and economic security. What little stake the design disciplines had sustained in infrastructure were eradicated by the same militaristic and capitalistic concerns that were challenging the broader realm of public space.

The American city of the late twentieth century operated unlike even its own democratic ancestry. Spatial dispersion, brought about by unfettered access to mobility and technological

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[27] Interestingly, the 1981 report distributed to government officials and planners was entitled *America in Ruins: Beyond the Public Works Pork Battle* but by its publication in book form in 1983, the title was changed to *America in Ruins: The Decaying Infrastructure,* marking, perhaps, a more institutionalized change in accepted terminology.

[28] Moteff and Parfomak, CRS-3.

[29] The President's Commission on Critical Infrastructure was signed in July 1996 under President Clinton. This Executive Order recognized that infrastructure also had a strategic security component in a world increasingly threatened by terrorism. See Moteff and Parfomak, "Critical Infrastructure and Key Assets: Definition and Identification" *CRS Report for Congress*, October 1, 2004.

advancements which made propinquity quaint if not obsolete, meant the binding agent of the urbs (much less the subsumed civitas) was growing stretched and sparse. The late 1980s and early 90s saw a plethora of scholarly research on changes in urban spatial relationships that emphasized the loss of real public space (M. Davis, 1990; Dear, 2001; Garreau, 1988; Morse, 1990; Soja, 2000; Sorkin, 1992b). Brought about by technological transformations, economic restructuring, and federal policies of spatial and social public disinvestment, places that looked -- and acted -- like money (sterile, commercialized, homogeneous, elitist) became more and more commonplace. Geographical specificity was one of the characteristics lost in this new city, along with the sense of order and hierarchy that clearly defined formal relationships once provided. This "generic urbanism" meant once territorially specific signals were reproduced ad infinitum regardless of their locale (Sorkin, 1992a, p. xiii). Two other symptoms defined this city -- its obsession with security and its artificiality. The former resulted in places made physically exclusionary by boundaries or fortifications, or segregated through alternative routes and limited access (Boddy, 1992; M. Davis, 1992). The latter resulted on one hand in the "theme park" city, where places were packaged and sold through imageability, thematization and branding (Boyer, 1992; Crawford, 1992; Loukaitou-Sideris & Banarjee, 1998; Soja, 1992). On the other, it resulted in the city as a kind of technological simulation, where the suspension of real and lived experience was replaced by one not so unlike that of television (Morse, 1990; Soja, 1992).

What Sennett (1992) called "dead public space" began to define the majority of our politically vacuous pseudo public realm in the 1990s. Rather than being empowering, visibility became isolating and exposing; random, even pleasurable, interactions in public were missed due to the sheer speed by which we pass strangers by or the mores of the "right to silence" that became a defense measure against over-exposure of private feelings in public (Sennett, 1992, p. 27). Through

its subsumption by private economic interests, such dead public space resulted in a built environment that "look[ed] like money...composed of homogeneous, interchangeable units of value" (Sennett, 1994, p. 60). The expectation of constant speed and the increase of surveillance without really being seen made the public realm one of anxiety and segregation. In addition, a third component -- the literal lack of physical touch in addition to not being truly seen and heard -- rounded out the triumvirate of factors that made public spaces dull, passive, and numbing (Sennett, 1992).

John Portman's Bonaventure Hotel is often cited as a paragon of the condition with its fortified exterior, circuitous entry, and internalized shopping mall substituting as public realm (Jameson, 1984). The "hyperspace" it created was either a miniaturization or magnified substitute for the city outside. The Bonaventure was one in an increasing series of sterile, introverted buildings in downtown Los Angeles -- or any downtown like it in the world. The strangeness of its own mobility infrastructure -- glass elevators, long escalators, disorienting walkways -- intentionally and unnecessarily produced the isolating visibility, space of speed, and lack of touch identified by Sennett as detrimental to real public space. The irony was that a real public space still thriving in LA's Latino and Asian sectors just outside the walls of the slick Bonaventure hotel (M. Davis, 1985).[30]

Sorkin calls this new city "a city without a place attached to it" (xi), a city whose connective tissue is so dissipated as to be unreadable, so controlled as to be inaccessible and so artificial as to be unidentifiable. To return to Arendt in particular, Sorkin describes this "city of bits" as "a lie,

[30] Loukaitou-Sideris and Banerjee (1998) look extensively at this juxtaposition between LA's rich and thriving ethnic sectors downtown and its corporate capital takeover in the 80s and 90s.

simulating its connections, obliterating the power of its citizens either to act alone or to act together" (xv). This theme park city:

> "...presents its happy regulated vision of pleasure -- all those artfully hoodwinking forms -- as a substitute for the democratic public realm, and it does so appealingly by stripping troubled urbanity of its sting, of the presence of the poor, of crime, of dirt, of work. In the 'public' spaces of the theme park or the shopping mall, speech itself is restricted: there are no demonstrations in Disneyland. The effort to reclaim the city is the struggle of democracy itself." (Sorkin, 1992a, p. xv).[31]

That struggle for democracy was not just the struggle to maintain the shared table of the civitas, but also the struggle for those often elbowed out to get a seat.

The broad strokes of the public and private realm as explored by Arendt, Aureli, and Sennett presumed the existence of an equitable society vying, en masse, for representation in the public sphere. In the 18th and 19th centuries, this public sought representation in opposition to the "state" in its various guises (be they aristocratic, political or economic regimes). We know, of course, that even in ancient times, "the public" excluded a variety of groups considered unqualified to participate in such rarified discourse (slaves, women, etc). Sorkin, Davis, and other scholars redefine the death of public space to specifically the death of *democratic* public space. While the modern bourgeoisie maintain full access to the corporate plazas or elevated walkways of the neoliberal city (no matter how apolitical), these spaces excluded a vast range of economic, ethnic,

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[31] Disneyland was not always held up as a model of denied public space. Charles Moore in his 1965 essay "You Have to Pay for the Public Life" celebrates the aspects of Disneyland that do seem to be providing the missing or broken aspects of the public realm of the real world. He goes so far as to call the experience of the Matterhorn or the swings of Tomorrowland "immensely exciting...like looking at a Piranesi prison or escalating in the London Underground." (C. W. Moore, 1965) (65)

and racial others who lack voice and visibility even in these sanitized public spaces.[32] While this literature takes issue with the lack of a real, discursive public sphere due primarily to pervasive economic ambitions, the "right to the city" literature (Lefebvre, 1991; Lofland, 1998; Loukaitou-Sideris & Ehrenfeucht, 2009; Low & Smith, 2006; Mitchell, 1995, 2003) takes issue with the disempowerment of participants -- particularly the poor and disenfranchised -- in the production of their own public space.

According to Henri Lefebvre (1991, 2007), the production of space is a continuous and ongoing active process, a part of what he calls the *oeuvre*, or the city as a creative work. This creative work is not instantaneous, but produced through long-term contentions, externally constructed representations, and the daily living in the city itself. This was particularly true during the era of urban industry that brought increasing immigrant populations downtown, when urban cores were dense, heterogeneous sites of struggle. According to Don Mitchell, "The city is the place where difference *lives*...Different people with different projects must necessarily struggle with one another over the shape of the city, the terms of access to the public realm, and even the rights of citizenship. Out of this struggle the city as a work -- as an oeuvre, as a collective if not singular project -- emerges, and new modes of living, new modes of inhabiting are invented" (Mitchell, 2003, p. 18). The rights to the city, in other words, go far beyond the right of simple occupation, or even work, and include active participation, the right to identity, ownership, investment, even play (Lefebvre, 1991). Moreover, these rights do not extend only to limited populations, but to anyone and everyone. If the city is the place where difference lives, then the active inhabitation (rather than the

[32] There is a difference between not being engaged in the public sphere and being intentionally silenced, though ultimately both result in a lack of public discourse.

passive existence) requires appropriation and execution from a vast range of occupants, even the seemingly powerless.

Mitchell argues that public space plays a unique role in both activism and social justice; public space is the ground upon which liberties are contested and the geographical location within which publicness is practiced. The right to public space, the right to the city -- particularly in a post-9/11 environment -- is territory fought for rather than guaranteed. Mitchell (1995) discusses varying degrees of acceptable order and disorder. There is a dichotomous relationship between the two where order is frequently affiliated with 'civilized' and 'safe'; and disorder with anarchistic, dirty, and dangerous. Disturbingly, order is often equated with homogeneity (those who look like us, those behaving properly, those dressed appropriately, and those participating in acceptable uses), while disorder with heterogeneity (those who are not like us, are contesting our views or values, who might act out or participate in 'inappropriate' uses). More 'ordered' spaces tend to host planned activities (like recreation, shopping, or entertainment) with limited or controlled access. In contrast, spaces with greater tolerance for disorder have less structured forms of interaction, an absence of coercion, and, as mentioned, a higher degree of diversity.[33] Accepting, even promoting, a higher degree of disorder allows for the unmediated interactions that create a healthy public sphere. Loukaitou-Sideris and Banerjee (1998) suggest that spontaneity should be part of a strong public realm and exclusion based on clothing and appearance should not. Having to seek permission for entry, either through formalized or implied measures, limits the publicness of a space (Loukaitou-Sideris & Ehrenfeucht, 2009). Overly ordered space might create the comforts many now find in

[33] Mitchell's primary case study is Berkeley's People's Park, but the Occupy Movement, particularly in New York and LA, would make for an excellent current discussion of this line between appropriate order and disorder and their interpretations.

sameness, but repress and sanitize diversity and dissent. Active, interactive spaces allow for exposure to a range of diverging opinions, hashed out through speech and action.

Lefebvre argues, however, that there are forces beyond the activities of daily life that influence the production of space. He calls these spatial practice (or perceived space), representations of space (or conceived space), and representational spaces (or lived space) (1991). Mitchell argues that *representations of space* like formal plazas, public parks, and courthouse squares become *representational spaces* as they are appropriated by the public and transformed through their non-sanctioned or non-traditional variety of uses. The public sphere relies on both heterogeneity and participation -- but also on perception and conception. Lefebvre's implication is that the triad exist in a dialectical relationship (Lefebvre, 1991). In other words, the production of space relies on an amalgam of ideas and theories, structures and symbols, and reality of experiences. If the public sphere is dissipating if not dead, then the ability to understand this range of forces could conceivably inform a counteraction to revive it.

The need for a degree of disorder is both a social and a spatial argument worth fighting for. The design of the city, Anthony Vidler argues, "must retain the dense and vital mix of uses critical to urban life, rethinking the exclusions stemming from outdated zoning, real estate values and private ownership" (Vidler, 2001a). Real public space is decidedly and intentionally insecurable: "The street as a site of interaction, encounter and the support of strangers for each other; the square as a place of gathering and vigil; the corner store as a communicator of information and interchange. These spaces, without romanticism or nostalgia, still define an urban culture, one that resists all effort to 'secure' it out of existence." (Vidler, 2001a).[34] He continues, paraphrased by Mitchell, "true

[34] A sad and ironic twist to "securing" publicness out of existence is the very publicness that has lately sprung up spontaneously after tragedies, such as the random mass shootings in locations like Columbine or Colorado (during a midnight showing of *The Dark Knight Rises*). These locations become sites of gathering and vigil, and in some instances, like post-Katrina New Orleans, also sites of

security -- or at least an urban life worth living -- consists in publicness itself." (Mitchell, 2003, p. 3).

This is a position not unfamiliar to Jane Jacobs, who began arguing half a century ago that great urban environments are products of diverse and interconnected neighborhoods making active use of their infrastructure (Jacobs, 1993). Yet the slow speed, small scale infrastructure of the street, stoop and sidewalk retain a familiarity to the ancient street that large scale, high speed urban infrastructure lacks. Though freeway access is open to those who have driver's licenses and operating vehicles (already two degrees of exclusion), their narrowly restricted use means behavior is highly regulated, interaction is limited, and meaningful appropriation is nearly impossible. The exclusive dedication of the freeway to interests of economy and efficiency further restrict its ability to perpetuate alternative values, such as environmentalism or social justice.

The broader infrastructural deficit has played out particularly in post-catastrophe scenarios, where access to infrastructure has separated the haves and have-nots often resulting in life and death situations. New Orleans during and after hurricanes Katrina and Rita was one such example. The nearly 100,000 inhabitants unable to evacuate the city were triple victims of infrastructural inequity. Those without access to cars were unable to join those evacuating on Interstate 10 and found themselves stuck in the drowning city. When alternative transportation failed to materialize, those who tried to walk out of the city on the freeway were stopped at gunpoint and turned back, as such "inappropriate behavior" remained unacceptable in the restrictive space of the freeway. Finally, members of the city's poorest population were also victims of the faulty levee system, infrastructure

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information exchange and support. The wall surrounding the World Trade Center site after 9/11 became the go-to public site for those still searching for the missing and those memorializing them. The resultant visibility reverberates politically by generating public sympathy and/or outrage that results in individual activism or pressure on politicians for policy changes. One example is the ongoing conversation regarding gun regulation that recurs each time a mass shooting happens. Another way to imagine this is that we seem to be making our public space where we need it at times, rather than where it necessarily is provided for us.

inserted in the city that ultimately failed to protect the low-lying territory occupied mostly by the city's poor, African-American population.

These inequities were perpetuated after the disaster as well, but now provide opportunities for model infrastructure reinvention. I-10 over Lake Ponchartrain, which leads out of the city center, was fully repaired within four months of the hurricanes, while less than fifty-percent of public transit was up and running two-and-a-half years later. The homeless population began to grow in the city, with over 200 people seeking shelter under I-10. As part of the recent trend in evaluating infrastructure alternatives, I-10 at Claiborne Avenue is being considered for removal with the hopes that the once vibrant African-American population of the Treme neighborhood can reclaim the space of its former main corridor. Even if razed, the Claiborne/I-10 corridor is contested territory transformed by the overlay of representational spaces the tragedy of the hurricanes brought and inconsistent repair perpetuated. The physical, spatial acknowledgment of coexistent perceived, conceived, and lived spaces would provide an opportunity for the reconceptualization of that corridor as a model of more equitable infrastructure as public space. Rather than falling victim to the regressive options offered in other New Orleans locations, this site provides a real chance for radical experimentation in publicness.

New Urban Discourse

As mentioned in the introduction, the concept of infrastructure as a relevant conversation for architects reemerged in the first decade of the 2000s for many reasons. One is the plethora of highly visible disasters of the first decade such as those in New Orleans, another is the disciplinary shift away from the "death of public space" framework towards new forms of more inclusive urbanism. These include Everyday Urbanism, Multiethnic Cities, New Urbanism, Landscape

Urbanism, and Infrastructural Urbanism. Sorkin's plea for alternatives to the sterility of the over-commercialized neoliberal downtown began to find fertile soil in the postsuburban landscape. On the one hand, sprawl and globalization finally seemed a pervasive, default condition that needed its own design visions; new generations of urban thinkers -- many who grew up in suburbia -- turned towards this territory with productive, even optimistic minds, leaving the cynicism and pessimism of the 90s behind. On the other, urban discontent, like the 1992 LA riots, seemed to recharge the public space debate and indicate greater structural shifts in urban relationships across the country (Soja, 2000).

Everyday Urbanists turned the framework of Lefebvre, Debord (2006), and de Certeau (1984) toward the ordinary routines, informal exchanges, and everyday spaces of the city. New definitions of both "public" and "space" argued against the totalizing, normative, and hegemonic view of the public realm. Informal economies in particular, like the street vending and garage sales studied by Margaret Crawford, brought attention to active and extensive microeconomies with their own informal networks and "social reterritorialization" through the inclusion of "counterpublics" (Crawford, 1999, pp. 24-25, 35). These zones produced a kind of "practical politics" that provided a degree of empowerment through the creation of alternative spatial and economic practices (Rojas, 1993, p. 53). Such reterritorialization occurred in sanctioned forms as well, particularly by Latino and Asian retailers who appropriated common strip malls and transformed them with ethnically-specific goods and aesthetics (Loukaitou-Sideris, 2002). These appropriations pointed to bottom-up practices as powerful alternate strategies for producing a non-hegemonic public realm.

Architects also attacked the suburban context with new fervor. Dolores Hayden offered early proposals for densifying the suburbs through reconfiguration of single family houses to multi-unit living scenarios with shared laundry, kitchen, and cars (Hayden, 1980). The colonization of

nonplaces like malls and big box retail stores attempted to transform them into more authentic versions of a public realm. A National Endowment for the Arts (NEA) competition in 2002 sought to "redress the mall" by seeking alterations to inner city suburban shopping centers with the high aims of mimicking the objectives of a place like New York's Central Park -- a place with no entrance fee, with multiple simultaneous activities, where political speech can be exercised, and for people of all types and ages (Robbins, 2002). An LA Forum competition of the same year, the Dead Malls competition, received numerous entries reimagining the privatized mall as a densified, self-sustaining community replete with schools, parks, religious institutions, markets, and housing (Techentin, 2004). Vast parking lots and abandoned anchor stores provided extensive square footage for experimental programming like alternative energy production or rainwater capture. That square footage also filled in for shortages in other public amenities like sports fields or health clinics. The New Suburbanism proposals of architecture firm Lewis Tsurmaki Lewis (LTL) captured other under-utilized square footage. Their projects sought to urbanize suburbia by co-opting neutral spaces like the roofs of big box stores for single-family housing or spaces for recreation. Joel Garreau proposed the renovation of high-end malls into universities with vacant hotels serving as dormitories (Garreau, 1995). [35]

New Urbanists took a very different stance. Their official charter, written at the fourth Congress for New Urbanism in 1996, prioritized aspects of the traditional pre-modern city including a focus on walkability, community-oriented development, and a "sense of place" (Duany, Plater-Zyberk, & Speck, 2000). Though many urban planners and designers have sympathy for ideas of density, scale, and diversity called for in New Urbanism, their neotraditional emphasis has alienated

[35] These projects are all variations on what I call "insertion urbanism" See my article "Stitches and Insertions" in *Fast-forward Urbanism*, Dana Cuff and Roger Sherman, eds. Princeton Architectural Press, 2011. Other variations of fast-forward urbanism fall under the discourse of infrastructural or landscape urbanism (Cuff & Sherman, 2011).

both those with alternative design aesthetics and those who see the quaintness of their solutions as regressive and overly conservative. In addition, most of the developments under the New Urbanist umbrella have not lived up to the environmental or social objectives the charter originally stated. Instead, free-standing new towns developed on untapped property in exurban locations have contributed to the very sprawl and waste they claimed to oppose. Rather than feeling like real places, these mixed-use developments are often themed, commercialized centers that attract a highly homogenous, affluent crowd. The vocal, visible New Urbanists -- primarily Andres Duany, Elizabeth Plater-Zyberk, and Peter Calthorpe -- have, at the very least, succeeded in contributing to an energized conversation about history, preservation, outreach, power, and the postmodern future of the American city.

Landscape Urbanism was one loud and compelling response to that conversation. Discontent with the effect of neoliberal policies over urban environments and the hegemony of New Urbanism as an option, Landscape Urbanists saw an untapped opportunity to reconsider the form of the city by pulling from the faltered environmental movement of the late 1960s. Like Everyday Urbanists and those studying the multi-ethnic city, Landscape Urbanists also saw the top-down totalizing plans of urban planners and urban designers as limiting and obsolete. In addition, they felt a need to focus on the postsuburban condition unique to North America rather than an outdated, Euro-centric ideal of the 19th century city. Inspired by Ian McHarg's canonical *Design With Nature* (1971), Landscape Urbanism saw the design of the built environment as emerging from ecological relationships rather than being imposed on top of them (Waldheim, 2010).

When James Corner published *Recovering Landscape* (1999b), the Landscape Urbanism label had not yet materialized. Though Charles Waldheim had organized a symposium and exhibition two years earlier, the practices tied to both landscape architecture and urban design were just developing

as part of the larger postmodern response to the shortcomings of the modernist paradigm. Still referred to as "landscape architecture", Corner's book started to describe the inchoate movement that was both a resurgence and a renovation of the discipline that was gaining renewed interest. First was the idea that the field was not defined only by scenery or gardens (decorations or backdrops for architecture proper) but also embraced planning, urbanism, infrastructure, and speculation as well as nature and the environment. Second was the idea that landscape had a certain kind of agency and could contribute to the production and enrichment of culture. Landscape design had the possibility to "implicate a larger field of forces and possibilities over time" and ought to be viewed as strategic rather than scenic (5). Thirdly, landscapes held within them, and were the expression of, ideas, which were both culturally and temporally specific. Landscape, unlike environment, "relies on a collective form of subjectivity" and should be understood and leveraged as such (6). Fourth, scale and scope implied an inherent inclusivity. This "bigness... serves as a metaphor for inclusive multiplicity and pluralism" and though it certainly provides sensual experience "its full efficacy is extended to that of a synthetic and strategic art form, one that aligns diverse and competing forces (social constituencies, political desires, ecological processes, program demands, etc.) into newly liberating and interacting alliances" (Corner, 1999a, p. 2).

Within seven years, the term "Landscape Urbanism" was widely recognized as a multi-disciplinary field that sees itself as a conglomerate of architecture, landscape architecture, ecology, urban design, and planning. Waldheim staked the claim in his Landscape Urbanism reader (2006) that this new disciplinary branch is not a supplement to those other disciplines, but a replacement for failures in architecture and urban design's attempts at responding to contemporary urban conditions. Landscape urbanism, therefore, is intended to be "a disciplinary realignment in which landscape supplants architecture's historical role as the basic building block of urban design."

(Waldheim, 2006, p. 37). Unlike the traditional city made of adjacent objects, the horizontal plane becomes the new architectural datum that organizes the forces, events, and operations of the city through an ecological literacy.

Corner identifies four consistent themes of Landscape Urbanism in his essay "Terra Fluxus" (2006): "process over time, the staging of surfaces, the operational or working method, and the imaginary" (28). The first is a shift away from objects and towards processes. Unlike ideas of spatial order perpetuated in modernism and sustained in New Urbanism, Landscape Urbanism seeks to understand the flows and forces of a place over time. Maps and field diagrams are employed to represent these dynamic relationships and provisional conditions. The second theme proposes that surface is a form of urban infrastructure. Like the historical American grid which operated as an open-ended formal instigation, "urban infrastructure sows the seed of future possibility, staging the ground for both uncertainty and promise" (31). Unlike architecture, which is decisive and determinant, the surface is "strategic, emphasizing means over ends and operational logic over compositional design" (31). There is a sense of possible negotiation, of tactical choreography. The third theme, involving conceptualization and representation, is a bit undercooked by Corner, perhaps rightly so. Since 2006, visualization, videographic, and geographic technologies have become more integrated into the expressive language of landscape urbanists. Representations of complex, overlapping data and ephemeral, evolutionary design have instigated new ways of explaining spatial projects, including more complicated diagrams, analytical video, and archeological drawings. The final theme, the imaginary, claims a design and public space aspect of landscape urbanist projects. Where planning relinquished these opportunities in the name of rationalization or commercialization, landscape urbanists reclaim a responsibility towards public space as more than space for recreation. "Public spaces are firstly the containers of collective memory and desire, and

secondly they are the places for geographic and social imagination to extend new relationships and sets of possibility. Materiality, representation, and imagination are not separate worlds; political change through practices of place construction owes as much to the representational and symbolic realms as to material activities" (32). Harkening to Lefebvre and others, the construction of the new urban plane is as charged, contested, and opportunistic as the previous version based in building.

More simply, landscape urbanism projects are also defined by their relationship to ecological knowledge and principles as generators of urban form. In some cases this is metaphorical, but more typically site specific data dictates the forces in any field that may demand or provide an opportunity for an architectural response. These layered networks of forces have inherent infrastructural implications -- circulation, hydrology, energy, remediation, habitats, canopy, wind, sun, flora, fauna. Efforts to suppress or remove these forces are replaced by an interest in not just indexing them, but in formulating an urbanism that heightens ecological concerns through high design (Waldheim, 2010). Bernard Tschumi's winning entry for the Park de La Villette competition was a nascent landscape urbanist solution. This competition began a reconsideration of post-industrial sites through a large scale spatial restructuring linking infrastructure, green space, programmed, and unprogrammed spaces.[36] OMA's Downsview Park, a more recent version, embodies a new kind of indeterminacy, flexibility, and lack of hierarchy characteristic of landscape urbanist projects (Waldheim, 2006).

High design -- with material, architectural, emphasis often reflecting prominent design authorship -- is another quality of these projects that differentiates them from previous generations of landscape-only work. In addition to the awarded projects listed above, the High Line

[36] In "Landscape as Infrastructure" Pierre Belanger (2009) looks at catastrophic environmental accidents as instigators of infrastructural and landscape urbanism. These conditions are derived, he claims, from the evolved co-dependent relationship between the environment and the economy distinguished by the following characteristics: wasting is natural, globalization is irreversible, urban systems are regional, sprawl is inevitable, and ecologies are constructed (90).

collaboration between Corner's Field Operations and Diller, Scofidio, and Renfro is lauded in all the collateral design disciplines. The High Line exemplifies an additional role Waldheim sees for landscape urbanist work, the opportunity to take back the public realm from that neoliberal stranglehold or at least work around it. Increasingly the public realm is a product of private development plus philanthropy recruiting the services of a celebrity designer. This recipe, which often includes a landscape urbanist team, is one way to bypass the neoliberal economic conundrum and the debilitating bureaucracy (and bankrupt coffers) of public works (Waldheim, 2010). Such partnerships are often generated from the community or private institutions and funded by patrons now seeking their own version of the High Line effect.[37]

Infrastructural urbanism is a partner project to landscape urbanism. Less focused on the overt theme of ecology and more on the networks and forces of infrastructural systems, Stan Allen, its primary protagonist, argues that architecture has lost its power by becoming overly insular and emphasizing meaning over materiality. The postmodern focus on communication and representation has made architecture more a reflection of the human condition than its producer. This marginalization, he points out, happens to coincide with the general disinvestment during the postmodern era of cities in their urban infrastructure. Though in no way causal, he sees a potential opportunity to solve the deficit in material practices by architects through engagement in the questions of urban infrastructure.

Infrastructural urbanism focuses on the large scale, but not as a tool of predetermined control. It focuses on realistic strategies of implementation and finds "the heroic ego of the

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[37] Like the "Bilbao effect", where the combination of star architect (Frank Gehry) and signature building (the Bilbao Guggenheim Museum) is credited for the rebirth of its derelict neighborhood, the High Line is a groundbreaking landscape urbanist project by a star team of architects (Diller, Scofidio & Renfro) and landscape architects (James Corner Field Operation) whose reinvention of an abandoned elevated rail line has sparked mass redevelopment in the formerly gritty meat packing district of the lower east side of Manhattan. The surrounding property values have risen twofold since its initial opening and inspired a line of new, high design buildings and popular restaurants and bars.

individual architect" suspect. Infrastructural urbanism seeks an instrumental rather than a representational role for architecture in the city (Allen, 1999, p. 52).

Like landscape urbanism, infrastructural urbanism engages not in the production of autonomous objects, but in fields that support events and program that are flexible and evolving. The projects also have a temporal quality and emerge from extended processes; they are "less concerned with what things look like and more concerned with what they do" (53). In other words, performance beats style. Allen developed "seven propositions" regarding the possibilities of infrastructure for the city: infrastructure constructs the site rather than the buildings on the site; infrastructures are simultaneously precise yet indeterminate, flexible yet anticipatory, changing over time to adjust to shifting conditions; infrastructural work is collective and collaborative rather than individualistic and ego-driven; infrastructure accommodates local variation but is determined primarily by pragmatic continuities; infrastructures "organize and manage complex systems of flow, movement, and exchange" not all of which are linear or equal; "infrastructural systems work like artificial ecologies" managing the resources and flows on a site; and, lastly, infrastructural designs are operative even above aesthetic (Allen, 1999, p. 57). These projects are about reclaiming a role for architects in the infrastructural problems of territory, communication, and speed. In addition to performance, where form matters is between things, the field condition, the infrastructure. (Allen, 1999, p. 17).

Even before Stan Allen's treatise, *Points + Lines*, though, Gary Strang published an article in Places titled "Infrastructure as Landscape" (Strang, 1996).[38] In this article he traces the lamentable loss of architecture's engagement with the civil realm of infrastructure. After the "heroic period" of

[38] This article seems to be derived from a paper he gave of the same name at the Council of Educators in Landscape Architecture conference in 1992. (http://www.glsarch.com/authoredPub.php)

engineering -- from bridge and dam building of the industrial revolution through the WPA and the "crusade for health in progress" concurrent with European modernism -- emerged an engineering era of "biological complexity" (Strang, 1996, p. 12). Infrastructure became messy, hidden, tangled, and complex; it was unpredictable, which generated unexpected faults in a rapidly expanding system. It was also massive, where layers of pipes, lines, and wires were stacked hundreds of feet deep and their support mechanisms -- meters, transformers, grates, access -- began to take up coveted pedestrian space in busy urban streets. Infrastructure was no longer heroic, but utilitarian. Much like cityLAB's WPA 2.0 competition, Strang twenty years ago called for a reconsideration of the role architects might play in reimagining this infrastructure through cross-disciplinary collaboration among architects, engineers, landscape architects, and biologists. Infrastructure, he argued, should be visible, even prominent, to mark its value to society, multi-functional rather than mono-functional, and co-existent with the systems of nature. The relationship to landscape and infrastructural urbanism is apparent.

Interestingly enough, the most recent work of Mario Gondelsonas (2011), another protagonist of infrastructural urbanism, harkens back to Sennett's call for real physical encounters -- contact, touch -- as the quintessential urban element extracted from the city by the disassociating speed of the automobile. Combining the rising technologies of social media, a resurgence of interest in real interactivity, and an optimism towards federal investment in public transit, he sees the answer in what he calls "slow infrastructure" (129). New inter-regional public transportation networks would work as "mobile bases" for "body-terminals" (technologically plugged-in people) as well as connecting to parks, providing alternative energy, and managing various other utilities. Though sounding a bit cyborg sci-fi, the idea that the existing network be transformed through an intentional reduction of one kind of efficiency (speed) for a gain elsewhere (human interaction),

provides a novel way of thinking about spatial alternatives. What is already happening in landscape urbanism -- the delayed gratification of an ecologically based design that changes over a highly extended time frame -- would be artificially created in the landscape of transportation. The emphasis on transportation networks is a key aspect of infrastructural urbanism.

JB Jackson in his debate between the competing value of the road and the house said we would know the answer when we stop seeing the road as a route *between* places and understand instead that roads *are* places. This last article by Alexander D'Hooghe (2010) is making a similar argument. Rather than understanding roads and other infrastructure as purely systems of distribution, the alternative sees "infrastructure not as a system but as an object; not as a logic but as an artifact; not as a tube but as a space. From this point of view, infrastructures of mobility are the prime candidates to become a public space, or, better yet, a public form that is true and proper to the exigencies and demands of a modern urban society" (D'Hooghe, 2010, p. 78). The three attempts to objectify infrastructure discussed in his article, all fall short in some regard. The first is a superimposition of an infrastructural metaphor onto disassembled architecture. In other words, the expanded building-as-system. The second, based on Kevin Lynch's, Donald Appleyard's, and John Myer's *View from the Road* (1965), reinforces the scenographic quality of driving *from* the road with little effect *on* the road. The third are what Cuff might call catalytic interventions. These are sparks of change, but often, if in isolation, too small or site specific to have expansive effect. In the end D'Hooghe takes two different paths: 1) the road should maintain its pure, modern form, allowing it to serve as a tabula rosa of interpretations for the collective imagination (D'Hooghe, 2010, p. 83); 2) criticality should be reinserted into the project of mobility with disruptive yet thought provoking consequences. Currently expected levels of flow, directionality, and access would be hijacked to alter

the mobility experience. These strategies may still be easier said than done, as the case studies that follow will show.

The Return of Infrastructure as Public Space

"The only thing that is radical is space we don't know how to inhabit. This means space where we have to invent the ways to act and to live." (Lebbeus Woods, *Future City*, 2007, p. 7)

In 2010, two alternative public events happened on the 101 freeway. The first went mostly unnoticed. Artist Joel Kyack created a mobile puppet theater using the back of his pickup truck as a stage. Roving around the Los Angeles freeway, he entertained slow moving drivers with performances of his show "Superclogger". In October, the relatively unknown local band "Imperial Stars" parked its concert truck across three lanes of traffic on the Hollywood Freeway, climbed to the roof, and started to play their latest song "Traffic Jam 101". The highway patrol officer that first responded to the massive traffic disruption was quoted in the newspaper as saying "This type of behavior is not acceptable" (Molina, 2010). Though temporary tactics of occupation, these actions brought a degree of intentional "disorder" to the highly ordered condition of the urban freeway. These were unplanned, unexpected activities with free, open access. They altered the preestablished, limited functionality of the space and slowed the pace of movement enough to allow for some form of interactive experience. Though in no way as politically direct as the immigration or marriage rights protests that have taken over portions of LA freeways, these actions all recognize the prominence of such infrastructure in the public sphere of Los Angeles and attempt to reclaim it from its limited, symbolic system of individualistic efficiency and economic conduit.

The infrastructure reinvention projects evaluated in the following cases all occur while architects and urban designers search for their most instrumental role in the city after modernism.

The death of public space has left us at the mercy of poorly funded and often less than visionary public agencies on the one hand, and private developers seeking maximum growth and profits on the other. The disaster decade and subsequent renewed interest in infrastructure has coincided this time with a wave of environmentalism and social justice that has catalyzed a design focus on public space. In Lefebvrian terms, the question of infrastructure is how to enrich the discursive argument from one so stuck in the myopic rigidity of conceived space to the additional accommodation of perceived and lived space. To be part of the public sphere, infrastructure must be understood and activated like Arendt's table -- the place we hold in common, through which we create our unique identities as part of the larger collective. In that space, we must also all be seen and heard.

In terms of implementation, this means opening up the decision making processes over the city's large scale assets so that more people are engaged in the production and perpetuation of urban values. In terms of equity and social justice, it means finding ways to make infrastructure inclusive rather than exclusive, heterogeneous rather than homogeneous, slightly less ordered and slightly more disordered. It also means finding a way to shift infrastructure back towards public works -- prioritizing cultural artifacts over abstract systems. One way may be to slow down infrastructure, as Gandelsonas might suggest, but in the service of the civitas rather than the cyborgs. Until we acquiesce to the distracted space of technology completely, the sensuality that Sennett demands of our public realm will remain what tips the scales from distracted to engaged. A good city is one that "lets people confront all of life, its pains as well as its pleasures, its difficulties as well as its comforts" (Sennett, 1994, p. 68). The High Line is not successful because it has generated a real estate boom in the old meat packing district, but it has generated a real estate boom in the meat packing district because it is so successful. Many of the attributes of landscape urbanism and infrastructural urbanism -- materiality, ecology, palimpsests of archeological layers, an engaged process, an extended

time frame -- incite complex, textured places attuned to slow, sensual experiences. But they also incite complex processes across collaborative relationships. Right now the structure of our cities and public agencies are far too rigid for the cross-pollination necessary to make these projects happen successfully on a regular basis.

The three proposals that follow -- Steel Cloud, the 101 Pedestrian Bridge, and Olympic Sculpture Park -- all utilize different means toward related ends. The goal was to transform mobility infrastructure from its limited urban role as conduits for automobility to active and productive components of the public realm. This intellectual lineage is two-pronged. In some ways, it claims territory within the discipline for architects to retake -- proof that we are not new to this game. Yet it also is a particular slice of architectural history that is still in some ways marginalized. Banham's work on the Futurists and on LA was, at its time, an open contestation to accepted canon, as was Venturi's work on the city of signs and strips. Archizoom, Superstudio, and Archigram in particular took great efforts to work against the established boundaries of design, production, and education, partly by maintaining mobility, ephemerality and nomadism as central to their work. Le Corbusier's model of the freeway is rarely lauded now for providing easy access or knitting together a vast country (which it still does), but is instead blamed for sprawl, pollution, and auto-reliance. Modernism's repercussions are still questioned, even though the ubiquity of speed and technology is inseparable from the production and prosperity of today's city.

These architects and scholars have since found a resurgence in the contemporary discourse. New publications on Ant Farm by Lewallen and Seid (2004), Archigram by Sadler (2005a) and Reyner Banham (Whiteley, 2002) substantiate the relevance of their ideas on cities and infrastructure today. Exhibitions do as well, like the Museum of Contemporary Art's (MOCA) small but packed survey of original work from the Learning from Las Vegas studio; a twelve-year world

tour of the work of Archigram that ended in 2010; and Future Cities at the Barbican Centre in 2007 which exhibited the work of over fifty architects, including Archigram, Archizoom, and Superstudio plus three from the cases in this research -- Denari, Morphosis and Asymptote. Yet, our experience at inhabiting this "space we don't know how to inhabit" in any other way is still limited, so designers must invent new visions for that occupation, leaders must craft new ways for their implementation, and the public must be convinced (or they must demand) these are valuable contributions to their shared space. As the analysis that follows shows, getting these projects built is not a rapid nor an easy process, yet it grows less and less a marginalized pursuit. Perhaps the infrastructural revolution under study needs an entirely new form of space.[39]

[39] "A revolution that does not produce a new space has not realized its full potential; indeed it has failed in that it has not changed life itself, but has merely changed ideological superstructures, institutions or political apparatuses. A social transformation, to be truly revolutionary in character, must manifest a creative capacity in its effects on daily life, on language and on space -- though its impact need not occur at the same rate, or with equal force, in each of these areas." (Lefebvre, 1991) (54)

Chapter 3. DECONSTRUCTIVISM ON TRIAL: ASYMPTOTE'S STEEL CLOUD

Setting the Stage: 1980s Los Angeles

The reformulation of downtown Los Angeles that started under Mayor Tom Bradley in the 1970s hit its stride in the 1980s. These changes, particularly the high-rise developments at Bunker Hill, still largely define the trajectory for the northwestern area of downtown Los Angeles. The completion of Isozaki's Museum of Contemporary Art (MOCA) and One California Plaza (both in 1986) marked a paired interest in high-brow culture and privatized, corporate development (Loukaitou-Sideris & Banarjee, 1998). In 1987, the Grand Avenue plan caught traction with Lillian Disney's initial $50 million gift in support of the Music Center expansion (what would ultimately become Walt Disney Concert Hall, completed 16 years later). The expansion of public transportation through a sales tax approved in the 1980s marked the beginning of the modern metro system. The opening of the first segment of the Blue Line occurred in 1990, followed by other segments and other lines throughout the 90s. The Olympics in 1984 initiated a particular kind of branding of the city as well as an emphasis on private, for-profit investment in public amenities. Mayor Bradley continued to transition from a reformer to a more pro-growth Mayor with the aims of reinventing Los Angeles as a globalized city. Los Angeles also became the peak location of immigrant entry on the west coast in the 1980s, hastening its move towards the majority minority city it is today.

In the 80s, LA was also emerging as the prototype of postmodern urbanism, a city (and a condition) immortalized in Frederic Jameson's seminal essay "The Cultural Logic of Late Capitalism" first published in *New Left Review* in 1984. Portman's Bonaventure hotel (completed in 1976) and the redevelopment of Bunker Hill were used to substantiate Jameson's arguments for the

city as a place produced by the forces of late capitalism. This era also marked the emergence of the L.A. school of urban thinking which, among other theories, reframed the polyglot Los Angeles as the prototypical rather than the exceptional American city (Dear, 2001). As immigrant populations rose -- particularly Latin American and Asian -- a two-tier economy began to further divide the city (Gottlieb, 2005; Loukaitou-Sideris & Banarjee, 1998).

As those landmark moments might imply, the neo-liberal LA was in conflict with its naturally growing heterogeneity. Mike Davis wrote what was in essence a rebuttal to Jameson's piece, "Urban Renaissance and the Spirit of Postmodernism" published in *New Left Review* in 1985. Rather than marveling over the internalized and fortified city that monoliths like the Bonaventure and Bunker Hill at large represented, Davis (along with Sorkin, Margaret Crawford, M. Christine Boyer, and others) wrote extensively about this time period in Los Angeles as an urbanity of sterility, exclusion, inauthenticity and urban aggression. Exponential growth (Garreau's *Edge Cities,* 1992) and the death of public space literature (namely Sorkin's edited *Variations on a Theme Park*, and Sennett's *The Fall of Public Man*, both also 1992) summed up the urban condition of the era.

In the mid-1980s Mayor Bradley commissioned the *LA 2000* report, produced by a team of 150 civic and business leaders in Southern California and informed by a Rand Corporation community survey. At a time of expansion and change, the LA 2000 Committee self-proclaimed the study not a contest between growth and no-growth, but a set of guidelines for managing the inevitable expansion of an already incredibly vast urban territory and populace.[40] Though ultimately not a very influential document, it does represent a certain pulse in the leadership of the city in the 1980s by outlining what this hand-picked team recognized as five primary areas of focus: livable

[40] Mike Davis framed it as merely an effort to appease the elitist status quo of homeowners and environmental groups angry over Bradley's support of unrestrained development and as a public relations move to placate voters prior to his 1986 run for Governor (M. Davis, 1990).

communities, environmental quality, individual fulfillment, enriching diversity, and a crossroads city (their phrase for globalization) (Committee, 1988; Gottlieb, 2005). Though it emphasized transportation, basic education, diversity, and at least bureaucratic environmentalism, its slant was clearly pro business -- economic development, individual interests, and growth markets. LA 2000 may be demographically diverse and highly mobile, but, according to this collection of stakeholders, it is not particularly oriented towards design, physical urban qualities, experience, public realm, or civic distinction.

The 'trench' site appeared at this particular time in LA growth as a potential location for both a literal and figurative connection between the immigrant story of Los Angeles represented by Chinatown, Olvera Street, Little Tokyo, and El Pueblo and the globalization aspirations of big business continuing on Bunker Hill and Grand Avenue. As economic relationships with Pacific Rim businesses were increasing in Los Angeles, it made sense that investors like the Shuwa Corporation, a Japanese development company that already owned two skyscrapers in downtown, would be originating donors of the West Coast Gateway competition.[41]

1988: West Coast Gateway Competition

As a response to LA's simultaneous globalization and emergence as the primary west coast entry point for immigrants, and spurred by the centennial celebration of New York's Statue of Liberty, Mayor Tom Bradley first developed the idea of a west coast gateway to America in the summer of 1986.[42] In March of 1987 he charged a committee led by Nick Patsaouras, an immigrant himself and President of the Southern California Rapid Transit District (RTD) Board (as well as an

[41] The Shuwa Corporation gave the first and only financial gift, $100,000, towards the West Coast Gateway competition.
[42] Nearly 8,000 immigrants arrived in LA each month of 1982, for a record total of 95,864 for the year according to Scott Barkan's essay "Los Angeles and the New Immigration Gateway to the American West" included in the West Coast Gateway competition brief.

engineer, developer, investor, and local politician), to guide the process of finding a site and refining the project parameters. Originally, this "west coast version of the Statue of Liberty" was conceived as a traditional monument -- a static structure, sculpture, or statue overlooking the common urban entry points of either L.A. harbor or LAX airport (Patsaouras, 1988). The conclusion of the committee was, instead, to suggest:

> a living, utilitarian reminder of our diverse cultural heritage; a continuous, evolving source of learning and appreciation for our collective national identity. It should be a rallying point for the community, a place that brings people together in a renewed spirit of pride and cooperation and it should reflect all the values and institutions related to America's traditional hospitality towards immigrants, refugees, foreign visitors, foreign students and international events. ("West Coast Gateway: Design Competition Program," 1988)

In an article Patsaouras wrote for the *LA Times* on November 28th, 1988, he imagined the connective tissue between downtown's ethnic islands as the monument itself. "Inexpensive ideas, such as banners, posters, the painting of existing street and alleys through these areas, awning designs, landscaping, fountains, play zones and performance spaces would actually and symbolically link the ethnic roots of Los Angeles" (Patsaouras, 1988). The 101 Freeway, as it dipped below Grand Avenue to the west and Alameda Street to the east, bifurcated his connector plan (See Figure 3.4). He called for a bridge connecting the "north and south sections of our city" and imagined this bridge -- the West Coast Gateway -- to be "the crown jewel of the 'monument'" (Patsaouras, 1988) (See Figures 3.1 and 3.2).

The presuppositions of the West Coast Gateway as expressed by Patsaouras in particular and science fiction author Ray Bradbury (a jury member and public figure for the project) recall a

rather classical and romantic vision of dense urban public space. Said Patsaouras, "We will be able to relax, reflect, learn about other cultures or meet other people in the open and shaded plazas. Art lovers will be able to enjoy the works of visual artists, sculptors, ceramists and artisans of all kinds....Ethnic festivals, naturalization ceremonies, and greetings for heads of state, international dignitaries, diplomats and citizens of distinction could also be conducted at the Gateway" (Patsaouras, 1988). On several occasions, Patsaouras referred to the potential new space as a "place of serenity", with the "strategic use of fountains" as a tactic for masking the freeway noise below. The supporters imagined the Gateway would promote a new era of increased pedestrian activity throughout downtown and encourage interaction among the growing Chinese, Latino, and Japanese communities in its open public spaces (S. Harris, 1988b).

Metapolis: the Next New LA

The departure from a traditional, and limited, monument was encouraged (or perhaps initiated) by Aks Runo (Bahram Shirdel, William Taylor, and Andrew Zago), the firm hired by the West Coast Gateway Committee in 1987 to create a master plan for the 24 square block site that included the Civic Center area and the trench.[43] Being the first designers included in the project, new to Los Angeles, and fresh from Harvard's Graduate School of Design (Shirdel as faculty, Zago as graduate student), Aks Runo's influence shifted the project away from these kinds of generic, conservative, preconceived notions. "We set ourselves against the obvious strategies of connecting the jumbled pieces of the district with arcades, paseos and planted paths," said Shirdel in a May

[43] The hiring of AKS Runo was a stroke of good luck for both Patsaouras and Shirdel and Zago (Taylor would soon leave the firm). Patsaouras came across an article on Aks Runo's first project in LA and his interest in architecture and their non-traditional vision inspired him to invite them to work on the project. They ultimately developed the Metapolis master plan with a group of students at SCI-Arc. They did not enter the competition themselves, though their model of the site with the design work in the trench was shown in the video, much to the confusion of participants (Zago, 2010).

1988 interview with the *LA Times*. "We also talked Nick (Patsaouras) out of putting up a huge and static monument upon a decked-over section of the freeway. If the ambition is to create a focal point for Los Angeles, a true destination that can be called the center of the city, you need to study its intrinsic urban forms, not impose an alien idea copied from New York and Saint Louis."[44] (Whiteson, 1988).

Aks Runo participated in the competition in two significant ways -- in the production of a (very unconventional) downtown master plan and as a consultant to Patsaouras in guiding the direction of the competition and selecting the final jury. The jury, which included such internationally famous designers as Sverre Fenne of Norway and Juhani Pallasmaa of Finland as well as Michael Rotondi, founder of Morphosis and director of SCI-Arc, attracted highly skilled up-and-coming architects who recognized both the jury's international prominence and the visionary role such a group of decision makers would play.

According to Aks Runo, the master plan reframed the historically-prominent, block-centric idea of downtown into one of interstitial connected public amenities and events. ("Four projects of Aks Runo," 1990 June). Along with a small team of students, they created a low relief model with a base of etched aluminum that served as the "design field" on which they orchestrated this series of urban events intended to "create a new awareness of Los Angeles as a totally new form of a city" (Whiteson, 1988) (See Figures 3.6 and 3.7). This project for a new city, which they called Metapolis, was intended to be a manifestation of experience over form, where heterogeneous spaces generated by such experiential activities would subvert the power of the historical urban grid. ("Four projects of Aks Runo," 1990 June). Their article in the SCI-Arc publication, *Offramp*, takes the idea

[44] Zago remembers this article written for the *LA Times* as documenting a not entirely accurate portrayal of who inspired whom. Patsaouras was apparently somewhat unhappy with the portrayal of the project by Aks Runo in the article and felt their statements were premature if not naive.

further by imagining Los Angeles as the site of first resistance to the subjugations of a rigid form- and geometry-based urbanity. Metapolis was the radical reinvention of the city, intent to capitalize on Los Angeles's unique paradox between the built, which is understood rationally and in relation to other historical models, and the experienced, which is vital, heterogeneous, simultaneous, discontinuous, and uniquely LA. Patsaouras credits the young designers with "free[ing] up the whole concept of the Gateway, and so releas[ing] a flood of possibilities" (Whiteson, 1988). Likely influenced by the Metapolis plan, the Gateway was framed in the brief as one event in a sequence, rather than one object in a field.

The influence of the Metapolis plan on the West Coast Gateway competition brief includes the translation of abstract objectives for occupation (not so unlike Tschumi's concept of event-space) into broadly interpretable program, seeking, by necessity, somewhat open-ended urban visions.[45] Asymptote's winning entry ultimately speaks a language far more related to Aks Runo's Metapolis than to the picturesque implications of the original press and those traces implied in the brief. This points to Aks Runo's real impact on the selection of the winners or, likewise, the degree to which Aks Runo, the jury, and Asymptote all saw the problematics of downtown LA (and the shifts in contemporary urban theory) similarly. As is possible in competitions that seek inventive solutions, their answers deviated widely from Patsaouras's and the committees initial preconceptions propagated to the public via mass media. The brief, in the end, provided the vague outline of program needed to connect the urban fracture with a radical solution, as did Aks Runo's influence in selecting a jury compassionate to such contemporary visions.

[45] Based on interviews with both Zago and Patsaouras, it's unclear which came first -- the multi-nodal link plan in the brief or the new event space idea of Metapolis.

WCG: Gateway, Monument, Bridge, Symbol

Synthesizing the program narrative in the competition brief, this new "facility" was asked to serve three primary yet overlapping objectives: to be a link, to be a space for new public activities, and to be a symbol. As a symbol it was officially intended to "celebrat[e] the spirit of immigration and migration", be a "living monument", and "reflect the bringing together of many peoples and the welcoming and celebration of cultural diversity." Its role as a link, also partially symbolic, was to bridge both people and place. The gateway would literally bridge the governmental, cultural, and commercial zones south of the 101 with the historical, ethnically diverse and smaller scale zone on the north side (See Figure 3.5). Ideally, it was to become the catalyst for a series of pedestrian links connecting a loop of eight primary nodes downtown -- Gateway plus El Pueblo and Chinatown north of the 101 with the Civic Center, Little Tokyo, Spring Street Historic District, the Music Center and Bunker Hill to the south (See Figure 3.3).[46] New public activities to be accommodated at the site centered around the idea of the Gateway as a global gathering place. Multi-national festivals, cultural ceremonies, offerings of international foods, goods, and even plantings were intended to encourage a sense of unity, diversity, inclusion, and comfort for the wide variety of immigrant groups present in LA's demographic.

The program narrative as written in the competition brief is a collection of abstract, rather idealistic notions of a heterogeneous city center. Perhaps following the sentiment of the Metapolis concept, that the Gateway should be a place of experiences, the brief describes each of the program elements in terms of performance rather than quantities. Competition respondents were encouraged to "interpret WCG's goals, objectives and desired functions in whatever way they see fit" ("West Coast Gateway: Design Competition Program," 1988). Intentionally open for interpretation, the

[46] This idea seems to be the seed for what later became the Angel's Walk information stanchions for pedestrians in downtown.

broadness of such terms as "global village," "festival of nations," and "garden of peace and unity" left the program vaguely defined. The examples provided in the program encouraged a reading of a massive development with theater space for thousands, a research center, markets and retail areas, plus extensive exterior plazas, gardens, and gathering spaces. What started as a monument grew into the scale of a small city center -- one tucked tightly into a long strip of literally groundless territory.

What also remained unclear in the brief was the hierarchy of project objectives -- which, exactly, were the urban problems this competition was trying to solve? The idea of a 'gateway' seemed neglected, as the competition brief failed entirely to mention this location point as an entry into either the city or the country. The 'living monument' was also described in numerous, potentially incongruous, and possibly physically indefinable ways -- to immigrants and immigration, to LA's historical diversity, to multi-culturalism, to a spirit of welcoming, as a reminder of freedom. Those criteria vacillated between the one-liner of a straight monument to hopeful social qualities impossible to construct through a single change in the built environment.

Winner: the Rising of the Steel Cloud

In August of 1988, the five finalists in phase one of the two-phase competition were announced. Though not selected as one of the finalists, two projects -- a giant dollar bill running the full length of the four block site and an oversized baseball glove with what appears to be an amphitheater in its palm -- received extensive press coverage. Descriptions of several other projects -- a Buddha, a jet-adapted Conestoga wagon, 12 balloon-like sculptures that would mark the hours in the day -- implied that many of the entrants did in fact opt for solutions more sculptural (and humorous) than the competition brief seemed to encourage (Pringle, 1988a). The press seemed to gloat in these cartoonish, one-liner projects that appeared to ridicule the very idea of a building over

the 101. The five finalist teams, presenting much more serious and capable work, were: Neil Denari and Alex Kobyashi of Los Angeles; Vilen Kunnapu, Ain Padrik and Adres Siim from Estonia; Irmfried Windbichler from Austria; Dagmar Richter and Shayne O'Neil from Cambridge, MA; and Asymptote, the team led by Hani Rashid and Lise Anne Couture, which would go on to win the second round.[47]

Unlike the sculptural qualities of the Kunnapu and Windbichler teams, the solutions of the three other finalists shared a particular architectural sensibility. Paul Pringle of *The Dallas Morning News* summed them up this way, giving some indication of support for Patsaouras's claim that both the public and the press were illiterate to such an avant-garde architectural language: "In addition to the bird, the designs selected as finalists include a structure that looks like a grinding machine affixed to one end of a vise, another whose sleek lines bring to mind an airliner fuselage, and one whose stark sequence of planes resembles the patchy silhouette of a shantytown" (Pringle, 1988a). Sandy Wilson, a juror from the UK, defended the panels' resistance to facile solutions: "The site is unique. No other great city has a major freeway going right through its center. We had to clean our minds of Nelson's Column, of the Eiffel Tower, of statues, and confront the contradictions of this site. We were looking for a place to meet, a way to pass through and connect. But it must also be memorable, something to go on postcards...And it must offer a view from the freeway" (Zasada, 1988).

Proposals by the Denari, Richter, and Asymptote teams tended towards the mechanical, high-tech, abstract, and complex. The form of their solutions seemed to respond directly to the specificity of the urban freeway condition where technology, speed and intensity converged. Denari's

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[47] The network of those finalists included direct connections to such well-known names as Daniel Libeskind (who taught both Rashid and Shirdel at Cranbrook), Lebbeus Woods (who produced renderings for Steel Cloud), and Frank Gehry (who Couture had worked for prior to founding Asymptote).

solution, published in his 1999 Monograph, *Gyroscopic Horizons*, was a response to his self-professed obsession with the freeway as an architectural site, utilizing giant video screens facing the 101 showing local and global activities simultaneously (Harvey, 1988). Richter's scheme, published both in *a+u* (February 1990) and *assemblage 14* (April 1991) emerged from an archeological reading of the site where historical "sedimentation" suggested certain relationships between the layers of the site and the required new program of public spaces. The team created various maps derived from pre-existing paths, irrigation channels, building outlines, boundaries, and fields. These multiple layers of the abstracted and interpreted landscape were then stacked above the freeway space "on a repetitive scaffolding, at once structure and infrastructure" (Richter, 1991).

Jury member Sverre Fehn praised Asymptote's solution, called Steel Cloud, for its sense of putting "the visitor on the stage" and its "theaters, galleries, and general use of open space" (Harvey, 1988). Like Denari and Richter's proposals, Steel Cloud also captured a kind of locational synergy where the vitality of the freeway, the promise of a complicated yet wide open program, the compressed nature of the physical site and the mandate to be simultaneously bridge, symbol, and place of public action demanded a complex response (See Figures 3.8, 3.9, and 3.10).

In November of 1988, Asymptote's revised solution produced for phase two of the competition was announced the winner of the West Coast Gateway competition.[48] The formal explanation of the selection stated the following reasons for choosing Steel Cloud:

> The relation between the pattern of movement established at ground level (connecting the Pueblo area to Temple Street) and the structures suspended over the freeway takes

[48] In a letter dated September 19, 1988 Patsaouras summarized the directions for phase two development. Generally the semi-finalists were encouraged to prioritize the north/south connection through visibility, simplify (even shrink the project) where possible, and pay special attention to the difficult task of linking the civic center (institutional LA) with El Pueblo (historical LA). (Letter complements of the archive of semi-finalist Irmfried Windbichler)

maximum advantage of these two types of movement - one at ground level relating to the structures of the past and adding to them the amenity of substantial new areas both for planting and areas of public assembly; the other inventing a new kind of architecture that takes positive advantage of air rights.

This architecture, in which the underside of the structures is as important as the facades and the roof, not only relates well to the movement of cars in the freeway, but also produces forms that encapsulate and give form to the qualities of movement, energy and innovation for which Los Angeles is uniquely celebrated.

This project is the realization of a current avant-garde exploration in architecture. In the view of this selection jury, it provides the first occasion upon which that exploration has produced the appropriate solution to a major public occasion.

The sheer boldness of this project is sustained under close inspection, not only by the integrity of its strategic decisions, but also through the poetic force of the images, metaphors and sensual experiences that it offers to the visitor (Jury, 1988).

Michael Rotondi, cofounder of Morphosis architects, director at the time of SCI-Arc and competition juror, said of Steel Cloud: "It will show what our aspirations are, what we're capable of achieving. The significance of a project like this is it's going to show everybody around the world that Los Angeles is a place of innovation, that Los Angeles is a place where you can pursue your ideas and be very passionate about it" (S. Harris, 1988a). The public and the press either loved it or

hated it, mostly the latter. One camp believed it represented a Los Angeles that was daring and futuristic, the other that it was an exaggeration of all of Los Angeles's worst traits, or the creation of a new identity they found defeatist, unappealing, and dark. Originally called 'Bridge of clouds', the name 'Steel Cloud' was derived from a statement by Hani Rashid and stuck.

The Metapolis plan by Aks Runo which was included in the video distributed to competition participants, encouraged a rereading of the urban environment as a set of collected fragments and the architectural opportunities as site-specific, grid-defying event space. The jury primarily selected proposals that recognized the positive opportunities of a relationship between the city and the freeway, even an inspirational relationship between the two. Steel Cloud most successfully took that to a pinnacle, becoming itself an architectural extension of the freeway condition. Rather than simply reclaiming the literal square footage, Steel Cloud remade the experience of driving, of speed, of freeways. The jury praised its encapsulation of the "movement, energy and innovation for which Los Angeles is uniquely celebrated", particularly the way its form responded on all sides, including the underside, to the uniqueness of the site (Patsaouras) (See Figures 3.13, 3.14, and 3.15). Then, utilizing the program given in the brief, the Asymptote proposal also interpreted the components not to stage acts of diversity on, but to be acts of diversity in themselves. In that way, it was architecture as infrastructure -- a constructed paradigm of publicness inclusive of the complexity of the context that actively appropriated the 101 into a new, variegated, human-made landscape of event space (See Figure 3.11).

Media: the Press Takes on the Cloud

Announced as the competition winner on Monday, December 5th, 1988, the coverage of Steel Cloud kicked off with the next day in the *Los Angeles Times*, the *Daily News*, the *New York*

Times and *USA Today*. The very earliest coverage was generally optimistic, even idealistic at times. Patsaouras was quoted as calling Steel Cloud "the beginning of something great" (Pringle, 1988b), the move that would place Los Angeles on "the cutting edge of being a world-class cultural city" (Larsen, 1988). "We are going to make history in Los Angeles" he said (Pringle, 1988b). Asymptote's Rashid called the Park of Peace and Unity sandwiched between the Pacific and Atlantic aquaria "a metaphor for America". The sound bytes in *USA Today* claimed the project "breaks new ground" (Rotondi) while reflecting "a very popular current style of architecture" (Diana Thater, one of the five semi-finalists). The only reservation, and on this day it served as a somewhat inspiring uncertainty, was the risk afforded by difference itself. If "anything that breaks new ground is [controversial]," as Michael Rotondi said of the winning scheme, then Steel Cloud had the potential to draw attention to its home city and its supporters as forward-thinking risk-takers. The avant-garde nature of the project began as an advantage: it marked the project as innovative and the city as progressive. Supporters believed LA both needed and demanded a radical idea and a contemporary aesthetic to represent its complexity, uniqueness, and creativity. "I don't expect everybody to like it," said Patsaouras of Asymptote's solution "Obviously it's going to be a debate... But I truly believe it will happen and happen quicker than anybody thinks" (Becklund, 1988).

There was immediate dissent, however, in terms of public opinion. The maelstrom of criticism that followed in the press was heated. The headline in the *Los Angeles Herald Examiner* on December 7th said "They are snickering at the 'West Coast Gateway' -- that, well, that... lovely thing that looks like a mile of bad road, that structure designed by a couple of New Yorkers and chosen by an international jury to serve as a symbol of Los Angeles" (Conklin, 1988). Those particular criticisms would continue to emerge in various guises -- the scheme's incomprehensibility, the design by 'outsiders' (non-Americans) or even 'competitors' (New Yorkers), the selection being

made by 'elites' who had perhaps never even been to Los Angeles, and the willingness to relinquish local identity to such an obtuse, perhaps even negative, symbol.

By December 11, not even a week after the winning project was announced, Scott Harris's coverage of Steel Cloud on the first page of the Sunday Metro Section of the *Los Angeles Times* was covering the debate as much as the project itself (See Figure 3.12). Paired with a *New York Times* article published in the National Edition on the same day, "Monument Meant as Bridge Creates a Gulf Instead" by Robert Reinhold, the pros and cons of the competition and its winner were placed under nation-wide, high profile scrutiny.

The *LA Times* article painted Steel Cloud as a lofty design dream, buoyed by a profession prone to fantasy. The "audacious design" for an "improbable location" had no financial support, no governmental support, and, according to Harris, was likely to never be built even before the efforts began. In Harris's article, the undercurrent of the debate centers not on the competition's objectives, but on an emerging divide between public opinion and the architectural polemic. Rotondi recognized the competition as a critical moment in the architectural maturity of Los Angeles (even the jury process itself, he stated, was one of his earliest conversations with non-locals that framed LA as a mature city on the international stage) and Steel Cloud as its proof (in Reinhold, 1988). The first possible built work of an emerging deconstructivist discourse, Rashid contended that the disciplinary significance of the work outweighed its pragmatic viability. Harris quotes Rashid as saying, "the whole world [of architecture] is watching. Whether its built or not built, it will go down in history as a kind of important work" (S. Harris, 1988a).

Reinhold's article, on the other hand, looked more closely at ideas of monumentality, diversity, and identity. His critique focused on the expectations of this project to embody traditional monumentality, a concept subsumed by the scale and form of Steel Cloud (and one rejected by

project stakeholders and jury members). Christopher Knight, art critic for Los Angeles's Herald Examiner, though an ardent and vocal supporter of the project, felt the objective to create an instant city symbol was improbable if not impossible. This same position was expounded by Thomas Hines, professor of history of architecture at UCLA and John Pastier, contributing editor to *Architecture* magazine (Martin, 1989).

Others questioned the very basis of the entire competition, as well as, inadvertently perhaps, bringing attention to the indeterminate use of the terms ethnic, ethnicity, immigrants, and immigration. With growing immigration numbers, this time in Los Angeles was also a growing period of unrest between minority communities (and, in other ways, between whites and minorities), one that would continue to increase with the weakening economy and come to violent fruition with the riots of 1992 -- only four years later. For some, the increasing influx of minority residents was generating social antagonism rather than an appreciation for diversity. It likely did not help matters that local residents and business owners -- members of those supposedly served populations -- had not been consulted in the planning stages of the competition, in the writing of the brief, or in the selection of finalists and winners.

To the architecture community, represented in two professional generations by the commentary of Rotondi and Rashid, Steel Cloud embodied a resistance to the homogeneity of the postmodern city, a reinterpretation of diversity over homogeneous globalization, and an embrace of technology, mobility, and multi-culturalism. The project was intentionally disruptive, symbolic, and monumental. Like Tatlin's unbuilt Monument to the Third International (the project most commonly referenced in conversations about Steel Cloud), it captured its own technological and revolutionary era. Non-architects interviewed in the newspaper rejected this mirror of their own hyperactive society, preferring instead a sanitized and comprehendible version. Inflammatory

coverage by the press instigated letter writing campaigns; though mixed for and against, the respondents tended to read the project as superfluous, antagonistic, or academic.

Though the media message does represent a degree of resistance to the project's imagery, the deeper content exposes more complicated incertitudes. The objectives of the project and what they potentially meant to the people of Los Angeles emerged in various forms in the public conversation: What is a symbol, a monument -- even an immigrant -- and how are they each (or all) represented in space? Who decides what groups deserve recognition and what happens in the civic realm (in other words, whose public is it)? What is our identity as a city, particularly on the verge of such demographic change, or as a downtown, on the verge of such urban change? The media discourse reinforced the bafflement over project objectives, from what originally seemed a simple sequence of public spaces to what gradually became something very different. Steel Cloud threw open the question of civic readability, identity, and risk. Finally, it spotlighted the extensive spectrum between avant-garde and pragmatic architecture. Not that the former is necessarily impossible to construct, but that it demands recognition of the city as a place of intellectual and creative risk taking, often requiring the support of civic visionaries and the guidance of project champions.

1989-1994: the Continued Controversy and the End of the Steel Cloud Era

Had Steel Cloud been the product of an ideas competition (as is generally misconstrued), efforts towards revising the scheme and its persistence in the public eye would have been negligible. Instead, it was exhibited at San Francisco's Art & Architecture Exhibition Space in May of 1989, revised and slightly simplified, and later that year reviewed by the Los Angeles Cultural Affairs Commission. Those who saw the model displayed in San Francisco generally found the project a valid reaction to the experimental nature and pluralism of Los Angeles, though the pragmatics of its

construction remained uncertain. Patsaouras claimed the project was initially misunderstood but was now "moving very fast" and that public support was building. Rashid felt the initial, "shallow" criticism had finally passed and that the project was being taken more seriously (S. Harris, 1989). Yet, the Downtown Breakfast Club, a group of real estate professionals who met regularly to discuss development in downtown Los Angeles, gave Steel Cloud its Lemon of the Year award in 1989 for being "out of touch with downtown values" (McGraw, 1989). A disparagement most certainly, but also an indication that the project remained present in the public debate of actual downtown stakeholders.

The members of the Los Angeles Cultural Affairs Commission voluntarily conducted an early review of the project on September 28, 1989.[49] The Commission's initial review was more supportive than that of the general public. Commission President Merry Norris was intrigued by its conceptual nature and supportive of its controversial vision. David Simon agreed: "The project is very exciting and worthy of strong support by this commission. The project will be attacked from all angles... It may have to be built and people live with it for a while before they get comfortable with it." At no point did they treat the project as speculative or utopian. Suggestions to increase public acceptance were made, particularly to present the project more openly and frequently to the public and to focus on discussing the functions rather than the aesthetics (Commission, 1989) (Oliver, 1989).

Over a year later, though, the project seemed to have made little progress. A December 3, 1990 article in the *Daily Breeze* claimed financial resources and City Hall approvals were still not

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[49] According to Cultural Affairs Commission meeting minutes of September 8, 1988, this voluntary review was initiated because of phone calls received by commission board members expressing concern over the competition an entire year before the review, even before the announcement of the winning proposal. Commission president, Merry Norris initiated the meeting between Patsaouras, members of the Mayor's Design Advisory Council (which included Michael Rotondi), and UDAC. According to the minutes, Norris "elaborated that the project has the potential to make a fabulous statement in Los Angeles, and she does not want to see it fall on its face."

forthcoming. The design was slightly simplified over those two years, and support for the project in art and architecture circles continued to grow. Rashid selecting his words perhaps more strategically than in earlier interviews, described the revised project as "knitting the city together through urban space" and "closing the wound that is the freeway" (Perez-Pena, 1990). Though still determined that the project's first phase would be complete by October 12, 1992 -- the 500th anniversary of Christopher Columbus's discovery of America -- Patsaouras was quoted in this article as designating mid-1991 as the start of fund-raising. In addition, he stated his own rationale for the project's delay, which he claimed had nothing to do with its controversial reception, but with the ongoing, undecided alterations in the immediate context of the trench site.

The next time Steel Cloud appeared in the *Los Angeles Times* was January 13, 1994, just four days before the Northridge earthquake (which William Wilson compared it to the week later).[50] The city had, since the project's last appearance, been through a dire economic downturn and an even more dire racially and economically motivated week of deadly and destructive riots. James Rainey's article title sums it all up, but also leaves hope for future resurrection: "Gateway Monument Killed; No 'Steel Cloud' for LA Architecture: Council abandons $33 million structure over Hollywood Freeway. More modest plan to be sought". His explanation:

> In the boom and bravado of the 1980s, Los Angeles' big thinkers felt good enough about their town to propose construction for a grand monument to welcome the world, something like New York's Statue of Liberty... But on Wednesday the Los Angeles City Council took a final wrecking ball to the whimsical and grandiose concept known as the 'Steel Cloud'. The action made official what hard times and inattention had already assured (Rainey, 1994).

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[50] The brief commentary by William Wilson (well-regarded *LA Times* art critic from 1965-1998), "LA Symbol Needs Heart, Not 'Steel'" (Wilson, 1994) spins a witty argument for the Watts Tower as the true symbol of Los Angeles. the city that he calls the capital of the Ephemeral Empire, home of the fickle and anonymous, whose self-selected isolation is guaranteed by the automobile.

In the same article, Patsaouras, for the first time, finally admitted that a post-Steel Cloud era was upon us. "The realities of where the economy was going stopped fund raising," he said "It would be unwise to solicit money when we had not resolved the homeless issue and other social problems" (Rainey, 1994). Perhaps caving a bit to political correctness or simply worn down by the events of his Mayoral run let down the year before, this seems his only moment of admitted doubt in the project, even through current-day interviews.

The original $100,000 donated by the Shuwa Corporation in support of an immigrant monument (worth $144,000 at the time the project was canceled) seems most likely to have reemerged back at the port of Los Angeles, one of the earliest sites of consideration for a gateway to the city. A suggestion was made at the council meeting where Steel Cloud was officially shelved to contribute the funding towards an in-process lighting project for the Vincent Thomas Bridge in San Pedro. Coverage in the *LA Times* in August of the same year makes an inconclusive reference, saying "The cost [of lighting the bridge] is expected to be $300,000, so the committee continues to lobby city officials for $144,000 set aside for a harbor monument." Endemic of the bureaucratic blockades that would affect the next attempt on the 101, the lighting project took seventeen years to be completed and cost over a million dollars. The San Pedro website calls the bridge "the official landmark welcoming visitors to Los Angeles."[51]

The Non-monument Monument: Steel Cloud and the Design Discourse

In 1991, architect Peter Cook and historian Rosie Llewellyn-Jones published a collection of works of 40 promising new architects. The preface in *New Spirit in Architecture* defines their work as "beyond the limits of 'structure,' 'construction,' 'deconstruction,' or 'neo-modernism,'" defined by

[51] http://www.sanpedro.com/sp_point/vtbrdg.htm (26 September 2010).

"a certain spirit." Further, "[t]heir architecture uses form, placement, and aesthetics in a more thrusting, forward-looking way than the work of other practitioners, which tends to be calm, contemplative, even cautious" (Cook & LLewellyn-Jones, 1991, p. 5). Aks Runo's Metapolis plan and Asymptote's Steel Cloud are both included; Neil Denari's semi-finalist competition entry is also mentioned. The company they are in is impressive: Morphosis, Coop Himmelb(l)au, Lebbeus Woods, Zaha Hadid, Eric Owen Moss, Frank Gehry, Daniel Libeskind, and Bernard Tschumi. Cook also includes his fellow Archigrammers -- Ron Herron and Michael Webb -- as well as British visionary, Cedric Price. Cook directly relates the work of Bahram Shirdel (Aks Runo) with that of Hani Rashid due to their tutelage under Daniel Libeskind at Cranbrook. He references Steel Cloud as "Daniel Libeskind's notation drawings translated into action...the proposed structure is an original attempt to promote a linear, not vertical, monument, perfectly adapted to its context" (Cook & LLewellyn-Jones, 1991, p. 133).

Steel Cloud appears again in *Urban Revisions: Current Projects for the Public Realm*, the catalog from the 1994 exhibition initiated by the Museum of Contemporary Art (1994) with stops at CCA in Montreal (1995), Berkeley (1995), and the Des Moines Art Center (1996). With essays by Richard Sennett, Mike Davis, and Gwendolyn Wright, Steel Cloud is framed as part of a larger transformation of public space and reconsideration of the urban master plan. Interestingly, instead of placing Steel Cloud in the "Transportation Corridors as Urban Fabrics: Creation and Reclamation" section of work, Elizabeth A. T. Smith in her introduction sorts Steel Cloud into "The District -- Arts, Culture, and Recreation". Though a minor issue on the surface, the attempt to categorize the project exposes the issue of typological expectation. Steel Cloud could have been conceived of differently in the imagination of the public had it been imagined as an infrastructure reinvention project rather than an 'ugly' or simply unexpected version of a cultural center. Having a wide open

image repertoire unweighted by preconceptions of 'monument', 'museum', 'cinema', 'garden', 'theater', that already fill the memory palaces of Los Angeles inhabitants, the project might have been less expected to follow Smith's culture center category and more free to be a really radical reinvention of the space of the freeway.

Steel Cloud is also Asymptote's representative in the "Future City: Experiment and Utopia in Architecture" exhibition at the Barbican in 2006 and subsequent publication. Included in the "Deconstruction" chapter with Tschumi's Parc de la Villette, Libeskind's City Edge competition entry, Morphosis, Eric Owen Moss, Lebbeus Woods, Zaha Hadid, Neil Denari, and Wes Jones, this young firm claims their location in the torrent of the design discourse with this single project as their only offering. Inclusion in this particular exhibition places Steel Cloud in a lineage of radical urban revolutionaries, from New Babylon of the late 50s to late 90s OMA. Yet Steel Cloud is anything but utopian. In the end, it has none of the abstraction of Libeskind's City Edge project nor the sociopolitical ambition of Tatlin's. It does not fantasize the combination of mobility and technology the way, say, Archigram's Walking City did. Steel Cloud is rarely represented as an abstract idea, but is drawn in near-construction document detail and modeled at a massive scale that, when studied, implies complete believability and buildability from the curve of the outdoor screens to the pedestrian ramps and palm trees. Unlike its peer projects, Steel Cloud is not at all represented in a way that is abstruse; it is not actually hard to understand, it is hard to believe. There is a convincing pragmatism to the model that makes it real, but not expected. As Asymptote say, the structure "is as liquid as the ground that it occupies, confronting its own inevitable demise, it struggles for permanence and infamy amid the illusory and transient desires that comprise this place" (Rashid & Couture, 1993, p. 31). It is the non-monument monument, the collection of difference, the line of resistance, the invasion of technology, and the framework for reinvention.

Like many works of architecture, the architect's construction of the project differs radically from public perception. Ultimately, Steel Cloud developed three lives -- as an essential early example of the inchoate era of deconstructivism and along with that, a critique of the modernism discourse; as a competition winning design opportunity that promised a creative and highly visual radicality to Los Angeles; and as a divisive symbol of LA's most contentious problems -- segregation and inequity; traffic and pollution; private interest over collective good; and a crisis of identity and future direction. The discordant project could easily engender a natural resistance, yet for architects and high-design sympathizers, Steel Cloud was and still is a project that uniquely captures the theoretical and intangible metamorphosis from the capitalist city to the city of the real information age. It is a project impossible to judge in terms of territory, ownership, discrete space, or figure/ground. Denari's entry, for example, which shares some of the same project components (screens, ramps, etc), is, quite differently, a comprehensive and comprehensible collection of well-fitted programmatic parts that happened to land in the air rights of the Hollywood Freeway. Steel Cloud, on the other hand, is a manifesto for a new kind of city. In meticulous architectural detail, it attacks the very questions asked by the West Coast Gateway competition brief about the collection of diversity, the interactivity of technology, the reinvention of an inhospitable site, bridging, arrival, memory, visuality, and recreation. It is not an architectural fantasy in that it does not pretend to be something other than what was asked of it -- a complicated collection of unrelated programmatic pieces for a complicated collection of unrelated people on a site not yet accepted as appropriate for architectural intervention in a place unsure of its own identity and at a time where innovation was both destabilizing and reinventing the very way we live.

Conclusions: What Went Wrong with the West Coast Gateway?

Project Objectives

The objectives of the West Coast Gateway competition were highly inconsistent; the brief was ambiguous, the program grandiose, and the social objectives utopian. The radicality of the deconstructivist solution was not just too aesthetically complicated, but too divergent from the idealized romantic notion of public space -- paseos and plazas, banners and cafes -- perpetuated by populist stakeholders looking to build a European version of a pedestrian Los Angeles.

Sam Hall Kaplan (1988) claimed the flaw in the process started with the translation of the program by the designers, but I would argue that the program itself was flawed by its sheer vastness of scale and vagueness of intent. Originally emphasizing urban design, landscaping, pedestrianism, and visual unity, most of the serious first round solutions (encouraged by the language in the brief) transformed those more landscape-based, experiential intentions into massive square feet of construction. The original idea for a traditional monument was scrapped before the brief was even written, influenced by the Aks Runo Metapolis plan and the academic perspectives of Shirdel, Taylor, and Zago. The initial aims of a symbolically and physically more unified, walkable city instigated by a bridge project linking two sides of the freeway metamorphosized entirely. Instead, the brief was expansive, lofty, and intentionally vague, meant to inspire actions and events more than specify program or square footage. Asymptote responded accordingly, with a radical, avant-garde solution that celebrated the dynamic of the extreme freeway condition and the simultaneity of speed and technology. The jury responded extremely positively, further diverging from the original aims of a west coast Statue of Liberty. Designers and scholars believed Steel Cloud would reframe LA as a

risk-taking city with big design vision; locals, when later asked by the press, mostly felt it exacerbated the city's worst features.

Terms central to the proposal, like 'monument', raised preconceptions that were inevitably put into question by Asymptote's winning entry; 'Ethnicity', 'immigrant', and 'diversity' are loaded, meaningful, and not necessarily amenable concepts. They were also somewhat divisive at this time in Los Angeles history, where separate was more common than integrated and unified. For some, the growth of immigrant populations was threatening rather than celebrated. Steel Cloud as a symbol or an expression of identity provoked insecurity and uncertainty: Is *this* who we really are? Is this who we *want* to be? Is it even possible to create an instantaneous symbol?

Context

Reflecting during one of our interviews, Patsaouras said he would change three things in the project were it possible, one of which would be to make the scope "doable, believable, and financeable in our lifetime". In retrospect, he felt starting with one block of the span rather than four might have made a solution palatable and affordable. Including the requirement to allow 30 feet above the street surface for a possible second level of freeway, Steel Cloud reached a height of twelve stories in some locations and extended the entire four blocks of the trench length. Though quite delicate in some ways and primarily void space, it more than dwarfed Olvera Street with its single alley of themed, kitschy shops. Though it valiantly tried to mediate between the massive scale of the Civic Center buildings, the freeway, and the street scale to the north, the aesthetic contrast overwhelmed any attempted contextual relationships other than the freeway network at the scale of the city.

Though promising initially, the context ultimately proved problematic. Though Patsaouras

believed infrastructure systems and their financing should be contributing more fully to the life of the city, utilizing the narrow airspace of the 101 seemed foreign, cost-prohibitive, even unnecessary, to many critics. Progress on Disney Concert Hall began optimistically, but stalled. A new city plan (with uncertain consequences) was in the works, the now-defunct Children's Museum expansion was lagging, and the renovation of Olvera Street was uncertain. Patsaouras claimed to be waiting for final resolution of site issues so that the project could be revised appropriately and fund-raising could begin in earnest. None of that ever happened. In addition, the surrounding neighborhood had low residential and commercial density, translating into limited daily demand for the practical amenities offered by the project. In addition, the physical development that did surround the 101 was aggressively introverted. The Civic Center complex of government buildings and the new corporate and even cultural centers of Bunker Hill were of Mike Davis's fortress mentality -- cut off from the street either as a remnant of earlier ideas of planning or as an intentional barrier to the unwanted or unworthy.

The economic context also started out strong but declined steadily. The boom of the 80s turned into the real estate recession of the early 1990s, and Pacific Rim corporations (among others) disinvested in downtown by the millions of square feet. The social unrest of struggling minorities grew into the massive justice riots of 1992. Planners, scholars, and investors lost hope for a revitalized downtown (and many for improved racial relationships) claiming it would be a decade or longer before interest returned in LA's urban core.

Finances

The Shuwa Corporation made the initial and only investment in the West Coast Gateway competition -- $100,000. Though Patsaouras had assured city agencies and the public that Steel

Cloud would be privately funded, the economic downturn and real estate recession of the early 90s truncated any fundraising efforts before they even began. The social problems plaguing LA at the time seemed more pressing, he said. Though the project never reached the fund-raising stage, the commitment to private funding exclusively would have limited the range of available funding options, likely limiting resources far too severely for its size.

Politics

Politics most certainly played a role in the project's failure. After the announcement of the finalists, Mayor Bradley disappeared from the process. In February of 1989, two months after the announcement, his office claimed he had yet to see the winning project and therefore was unable to offer any comment (Smith, 1989). Knowing that Patsaouras had regularly scheduled lunches with Mayor Bradley, the Mayor's silence was surprising and its implication both for the project and the balance of political power was increased. Though Patsaouras remained a champion for the West Coast Gateway project, Asymptote, and Steel Cloud throughout its tenure, and had leveraged his political influence previously in advancing LA's subway interests, this project was outside his immediate circles of influence. His second regret was actually that he was not enough of a political insider at the time Steel Cloud was progressing. Being outside of the process, even though he was highly connected, meant he was relegated to public comment rather than real political persuasion (Patsaouras, 2010).

As mentioned, the Cultural Affairs Commission went out of their way to provide support for Steel Cloud by initiating a voluntary early review. Though Steel Cloud never progressed through real agency review phases, the West Coast Gateway project was actually granted lease rights to the airspace over the 101 Freeway from Broadway on the west to Alameda Street on the east by Senate

Bill 1127, March 8, 1991. These rights were technically in effect until January 1, 2000, but were obviously never exercised. Though directed by the Senate Transportation Committee, it's uncertain if, when called to task, the Department of Transportation would have been able or willing to follow such an order. They certainly posed barriers to the second project a decade later.

Speaking at Zocalo Public Square in September 2010 regarding the ongoing efforts to revitalize the LA River and surrounding industrial sites, Mia Lehrer was asked why projects such as Millennium Park or the High Line seem impossible to implement in LA. Her answer was two-fold: because the city lacks visionary leadership and at the same time suffers from district Balkanization. There is no public vision for the whole, no budget for the whole, she claimed, because there is no priority on collective public improvements. This lack of collective emphasis and political leadership was certainly dire in the 1980s, when the neo-liberal attitudes first brought on the "death of public space" and private development and private wealth boomed and then busted.

Stakeholders

At no point in the West Coast Gateway competition process were agency leaders, politicians, local business owners, residents, workers, or commuters actively consulted. The brief was written, finalists selected and winner unveiled without input from anyone other than the Mayor's original committee and the jury. While Patsaouras blamed the controversial media coverage on mismanagement of the press from his side, there was also the simple shock of a radical proposal unveiled in the press with no warning and no buy-in. Only the initiators, jury, and project architects really felt ownership of this project, and they found themselves representing a creative elite, standing in opposition to those who felt Steel Cloud was an alien imposition.

Discourse: Media

Patsaouras's third self-realized mistake was mismanagement of the press. From the beginning he felt the project was misunderstood because first the press misconstrued the materials provided then the public was riled with those same erroneous interpretations. He and others also contributed to that misinformation by making statements about the competition, semi-finalists, and finalists that may have blurred rather than clarified the design intentions. Most politicians that were vocally opinionated on the project saw only its image in the newspaper with little understanding of the real architectural or programmatic content of the design. A few allies in the press came forward, but generally the newspapers precipitated outrage over Steel Cloud based on hard to read photographic representations. Though the Cultural Affairs Commission suggested repeat showings of the model to a variety of populations in the city, that kind of outreach never occurred. This was not a surprise, as local stakeholders were not consulted at any phase of the project.

When the project was finally cancelled in January of 1994, the City Council said that the era of 1980s bravado had passed, along with confidence in the city to build such a civic gesture. The social, political, and economic context was weakened; the project never progressed to the testing point of an implementation structure or collaboration amongst acting agencies.

Discourse: Disciplinary

Steel Cloud and its fellow deconstructivist projects captured the zeitgeist of the late 80s and early 90s -- a moment of intentional rupture intended to expose and extol the inherent dilemmas of the city rather than mask its impurities or decorate its commodities. Steel Cloud, like other deconstructivst works on paper, perpetuated an alternative critique on modernism's aging order, economy, and rigidity. Inserted in the very volatility between progress and decay, the

deconstructivists, descended from the radicality of the Russian avant-garde, used motion to intentionally unsettle structure. They sought to expose disruptions in each site, celebrating rather than hiding imperfections and discord. No project did this quite as well as Steel Cloud was intended to. Libeskind's City Edge project for Berlin of the same era accomplished (speculatively) a related infrastructural subversion by fragmenting and recomposing the city's most stoic infrastructure -- the wall between east and west Berlin -- into a new, floating public street connecting the disparate territories. Few of these projects, particularly those which directly ambushed the urban infrastructure, were built, though its earliest practitioners -- Frank Gehry, Daniel Libeskind, Zaha Hadid, Thom Mayne, Michael Rotondi, Rem Koolhaas, Peter Eisenman, Bernard Tschumi -- all contributed heavily to the discourse that surrounds the cases included here.

The urban dilemma the West Coast Gateway competition ultimately points to is a historical moment of rupture in both the city and the design discipline. The ideas of the postmodern city on the one hand, and deconstructivist architecture on the other, frame conflicting interests between globalization and architectural predictability and site specificity and experimentation respectively. Steel Cloud was ultimately as opposite to the Bonaventure hotel (known for its introversion, fortified exterior, and high-end blank facade) as any two projects might be. The West Coast Gateway competition had originally sought the traditional and picturesque, but Steel Cloud, instead, attempted the subversion of the intransigent modern city with the vital, heterogeneous, simultaneous, discontinuous, and unique. Steel Cloud reified -- and magnified -- those objectives. The critical case of the 101 freeway -- like the Berlin wall site of Libeskind's City Edge -- ignited the latent potential of the previously constricted chaos of the 101. To cap and cover the freeway would have been to squelch its possibilities. Here, Asymptote offered a framework filled with motion and possibility, unfinished, unbalanced, and ambiguous. In the way it fed off an obsession with mobility,

media and technology, it was a descendant of Archigram, Archizoom, and Superstudio. Yet Steel Cloud was in no way an expression of the kind of infinite infrastructural condition of No-Stop City or the utopian infrastructural conglomerate of Plug-In City. It was, by comparison, apolitical. It is hard, then, to imagine Steel Cloud being appropriated for conceived, perceived, and lived experiences beyond the insular symbolism of its architectural message much less logistically accommodating the improvisations of a broad civic realm.

Figure 3.1
Los Angeles Freeway System (partial map), subject site identified in center
from West Coast Gateway Competition Program

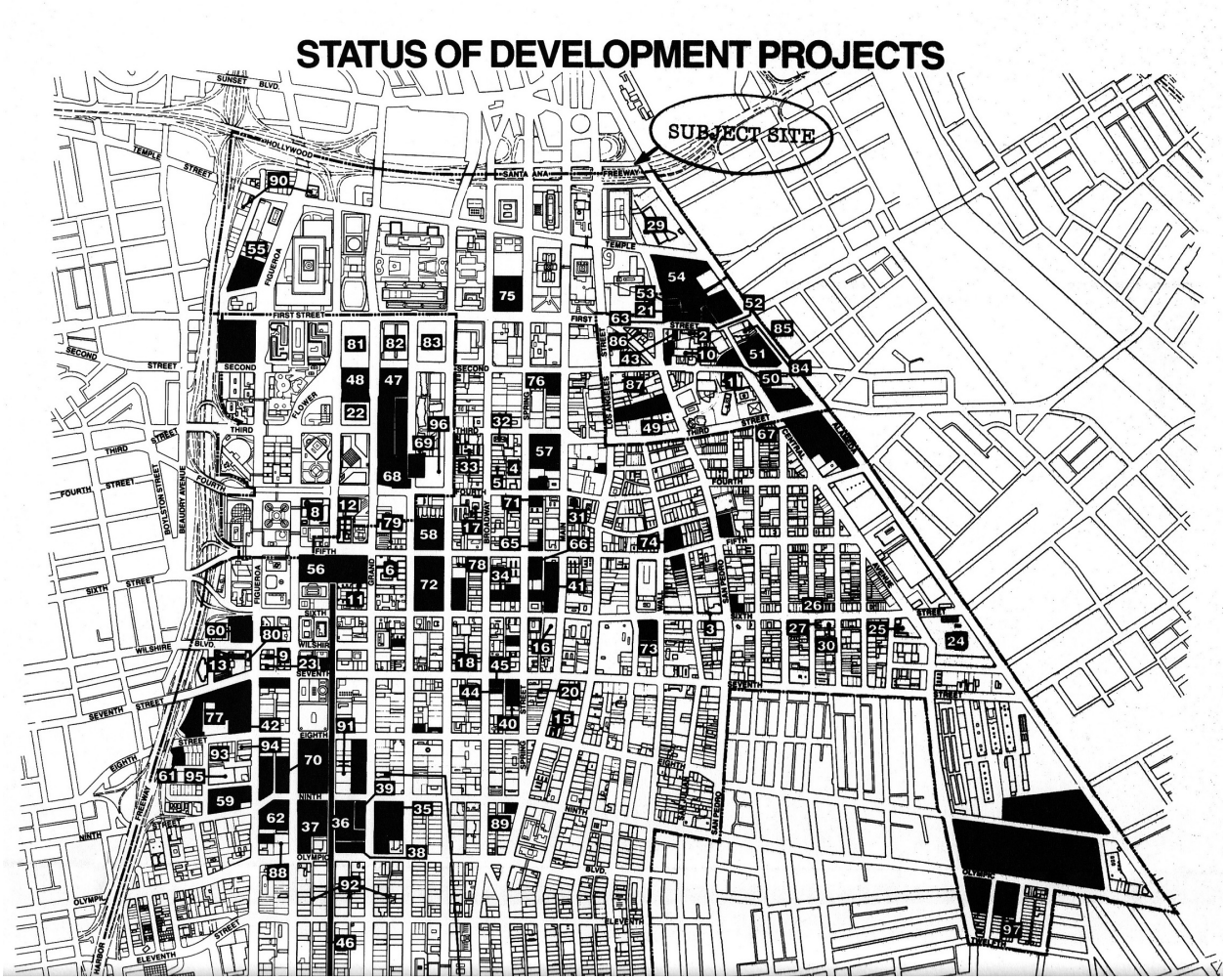


Figure 3.2
Status of Development Projects, subject site identified at top
from West Coast Gateway Competition Program

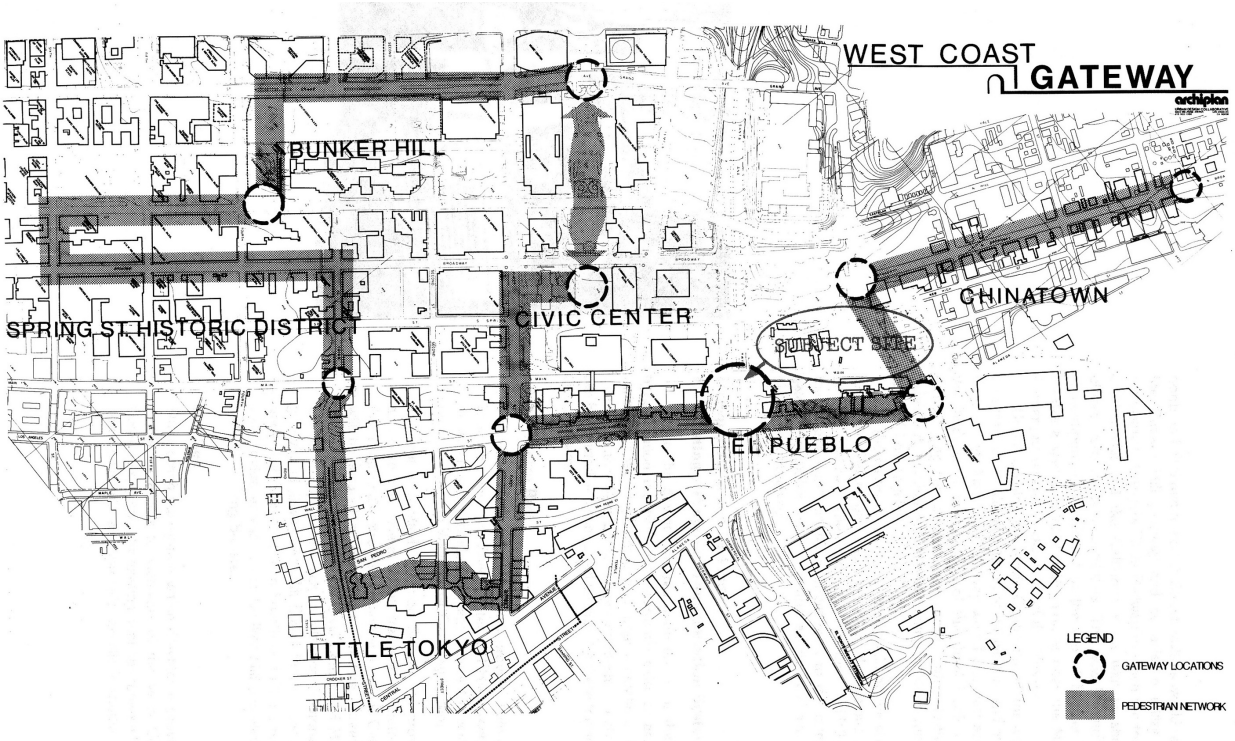


Figure 3.3
Proposed linkages, subject site as primary node
from West Coast Gateway Competition Program

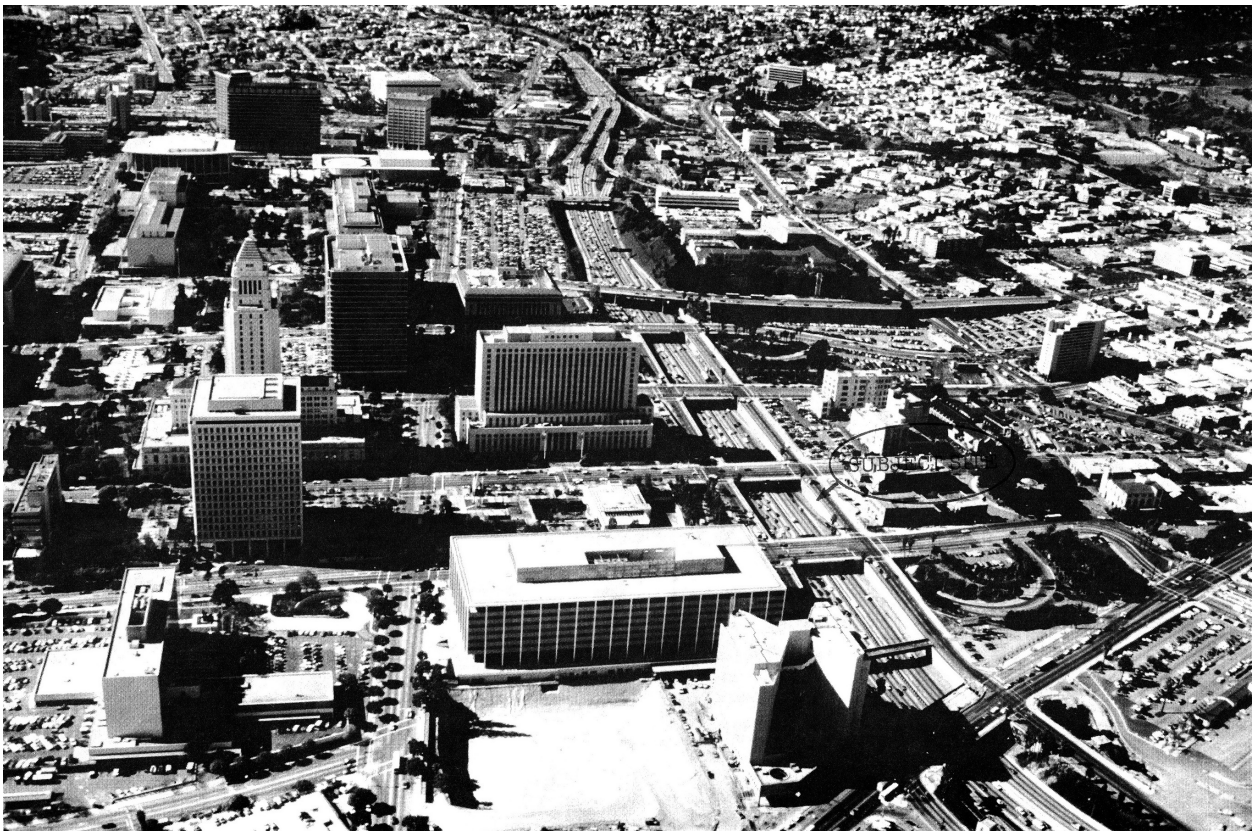


Figure 3.4
Aerial photo of site from southeast
from West Coast Gateway Competition Program

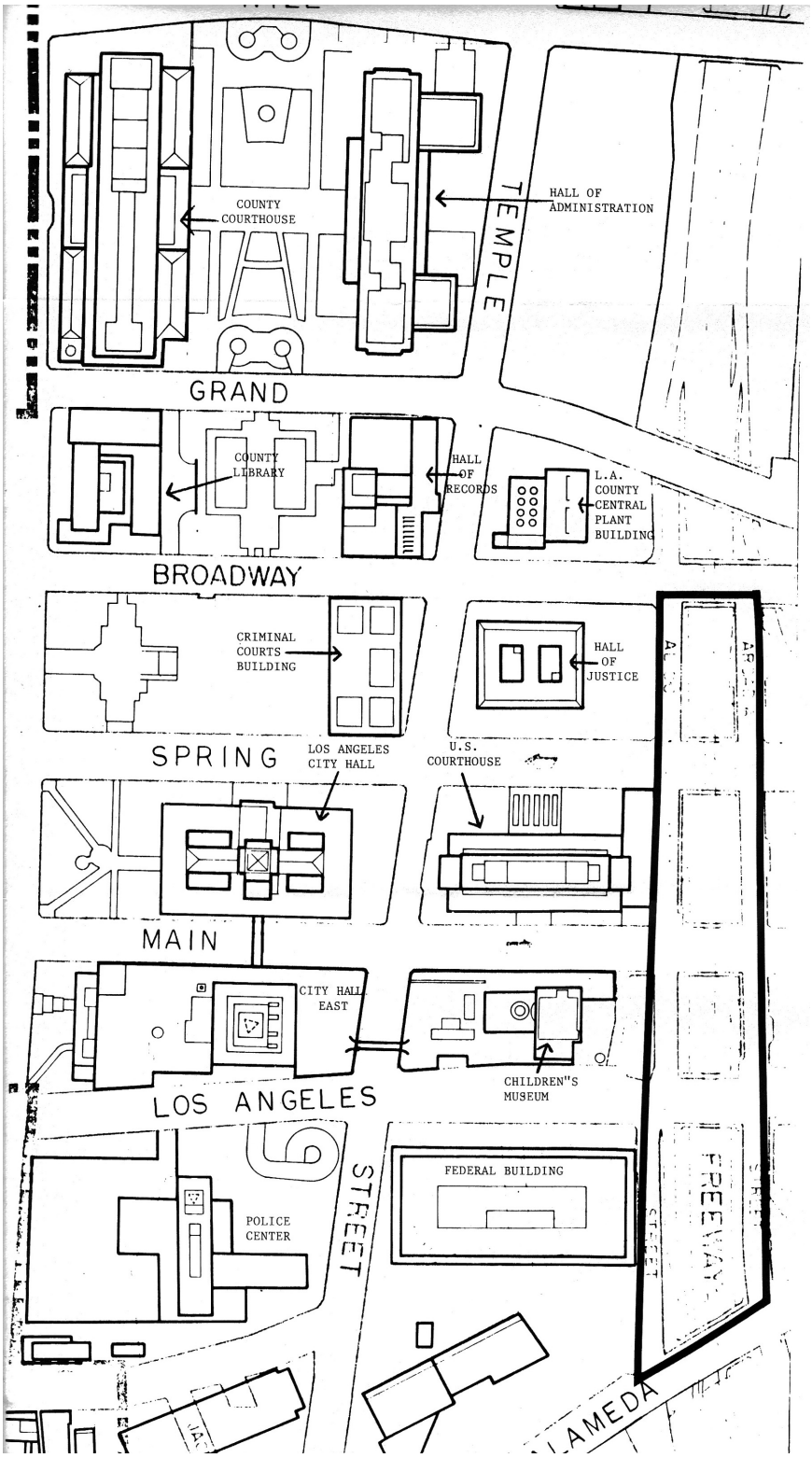


Figure 3.5
Site map with immediate context
from West Coast Gateway Competition Program

Figure 3.6
Aks Runo: Metapolis
from "Four Projects of Aks Runo," (1990 June). *Architecture and urbanism, 6* (237).

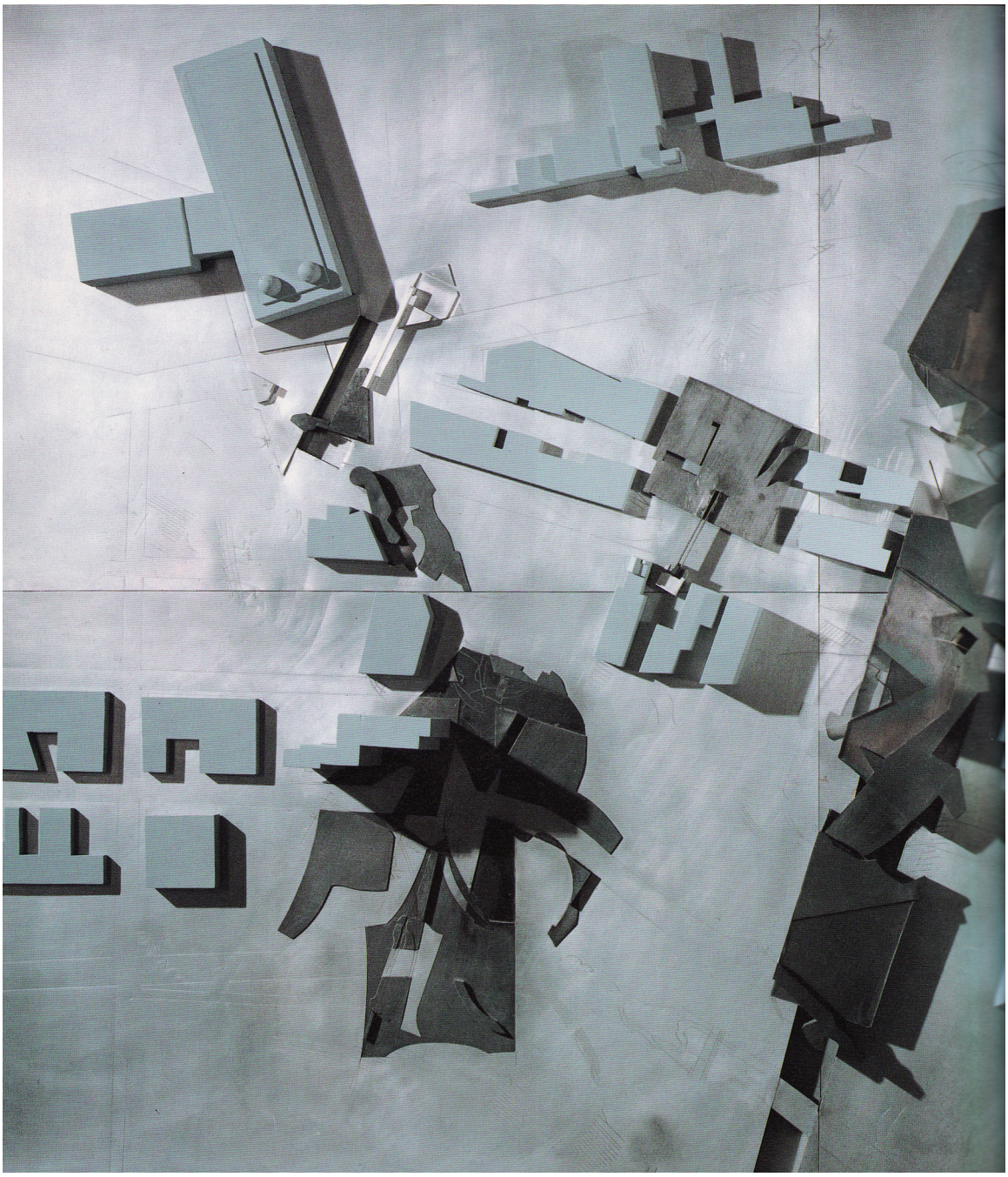


Figure 3.7
Aks Runo: Metapolis, site model. Aks Runo intervention shown on the 101 trench site (right side of image, diagonal) from Cook, P., & Llewellyn-Jones, R. (1991). *New Spirit in Architecture*. New York: Rizzoli.

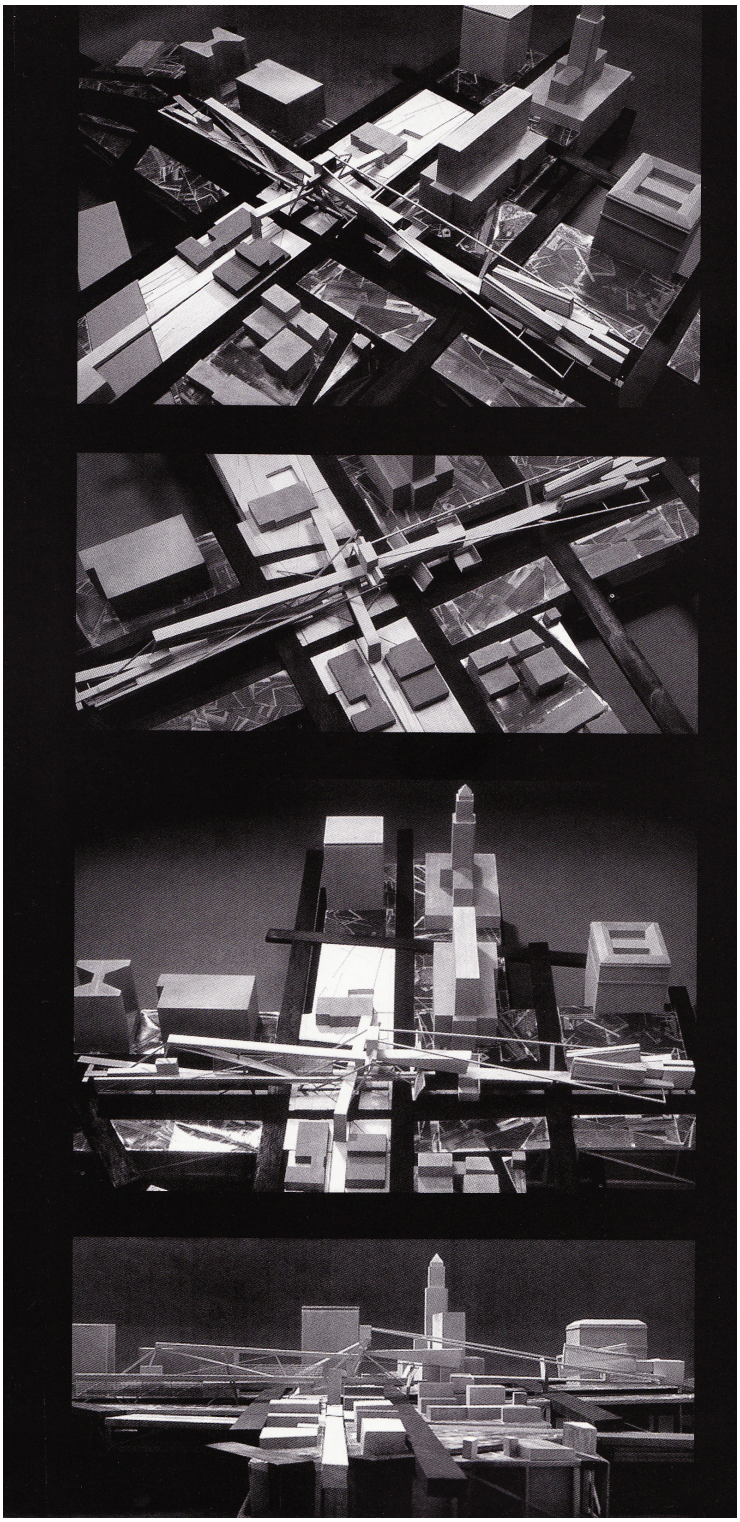


Figure 3.8
Steel Cloud, Asymptote (concept model)
from Rashid, H., & Couture, L. A. (1995). *Asymptote: Architecture at the Interval*. New York: Rizzoli.

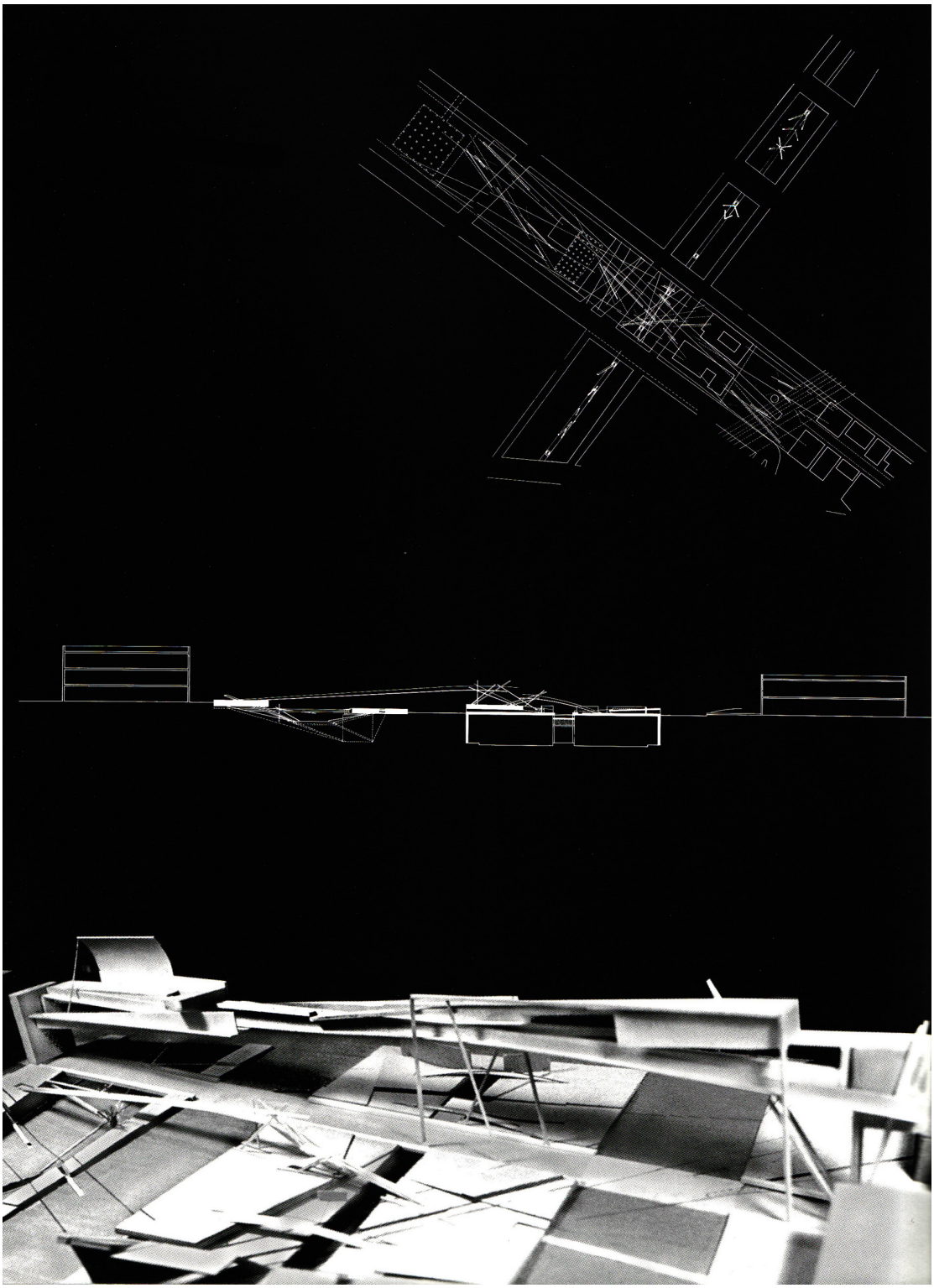


Figure 3.9
Steel Cloud, Asymptote (concept model, plan, & section)
from Rashid, H., & Couture, L. A. (1995). *Asymptote: Architecture at the Interval*. New York: Rizzoli.

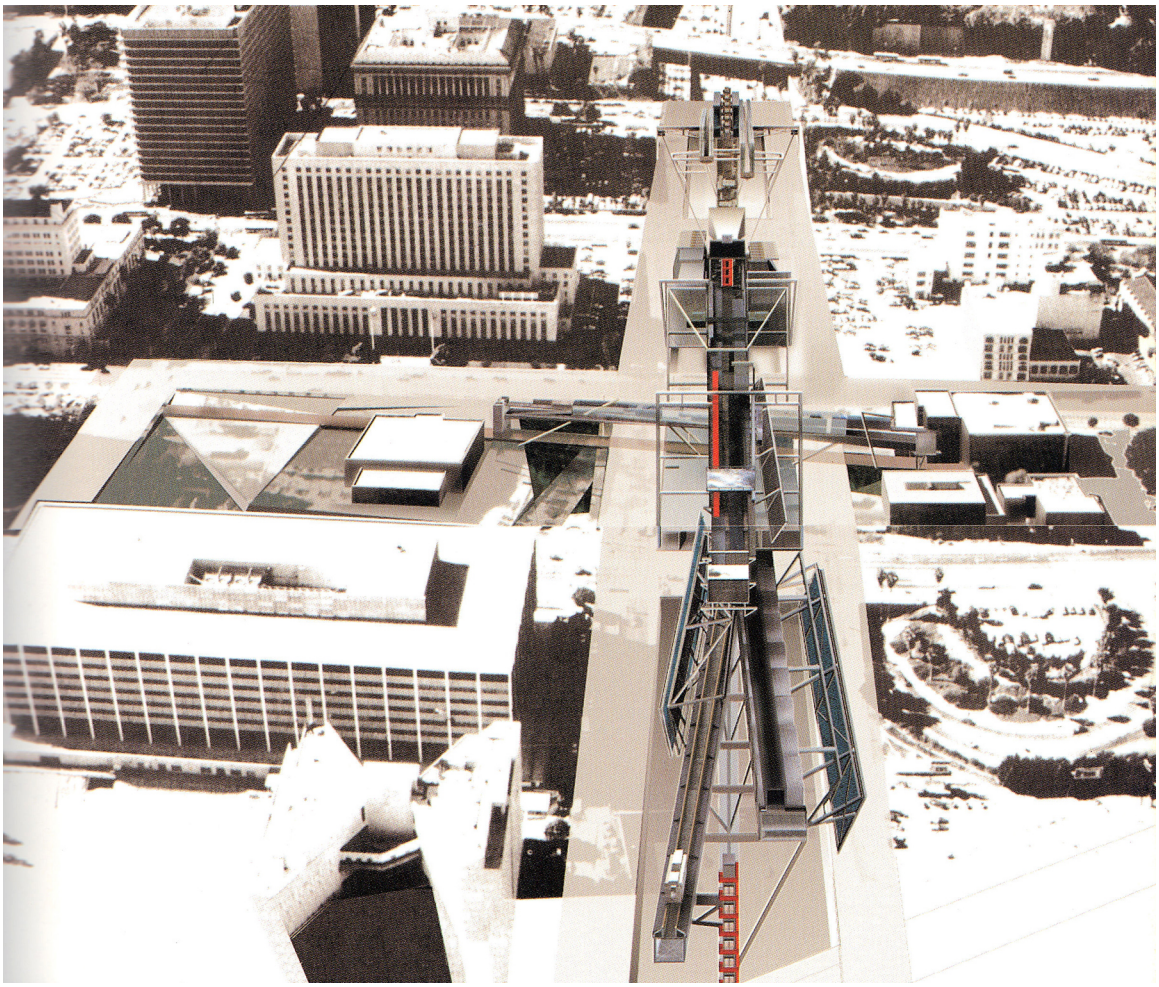


Figure 3.10
Steel Cloud, Asymptote (photo collage)
from Rashid, H., & Couture, L. A. (1995). *Asymptote: Architecture at the Interval*. New York: Rizzoli.

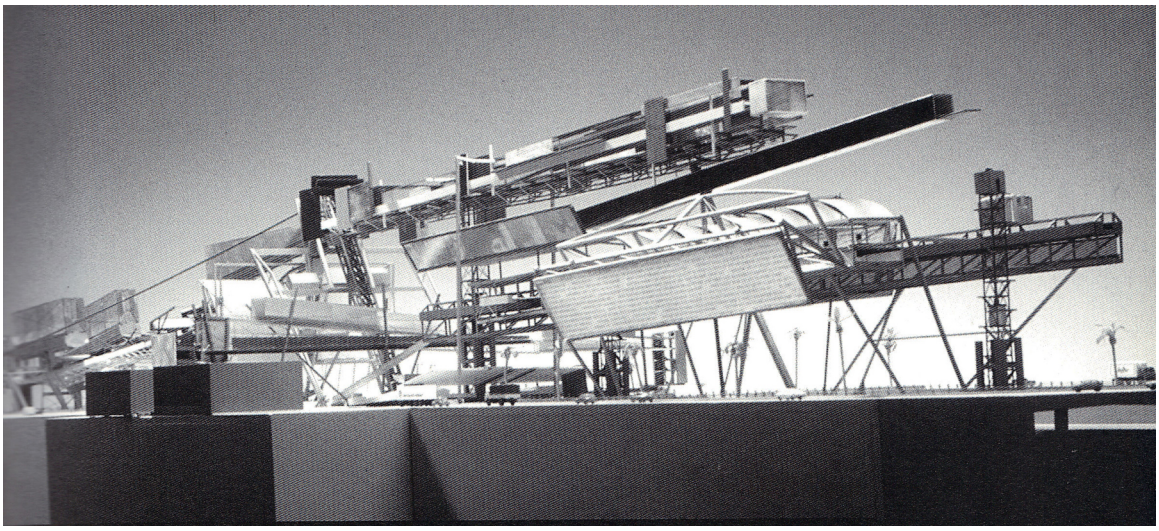
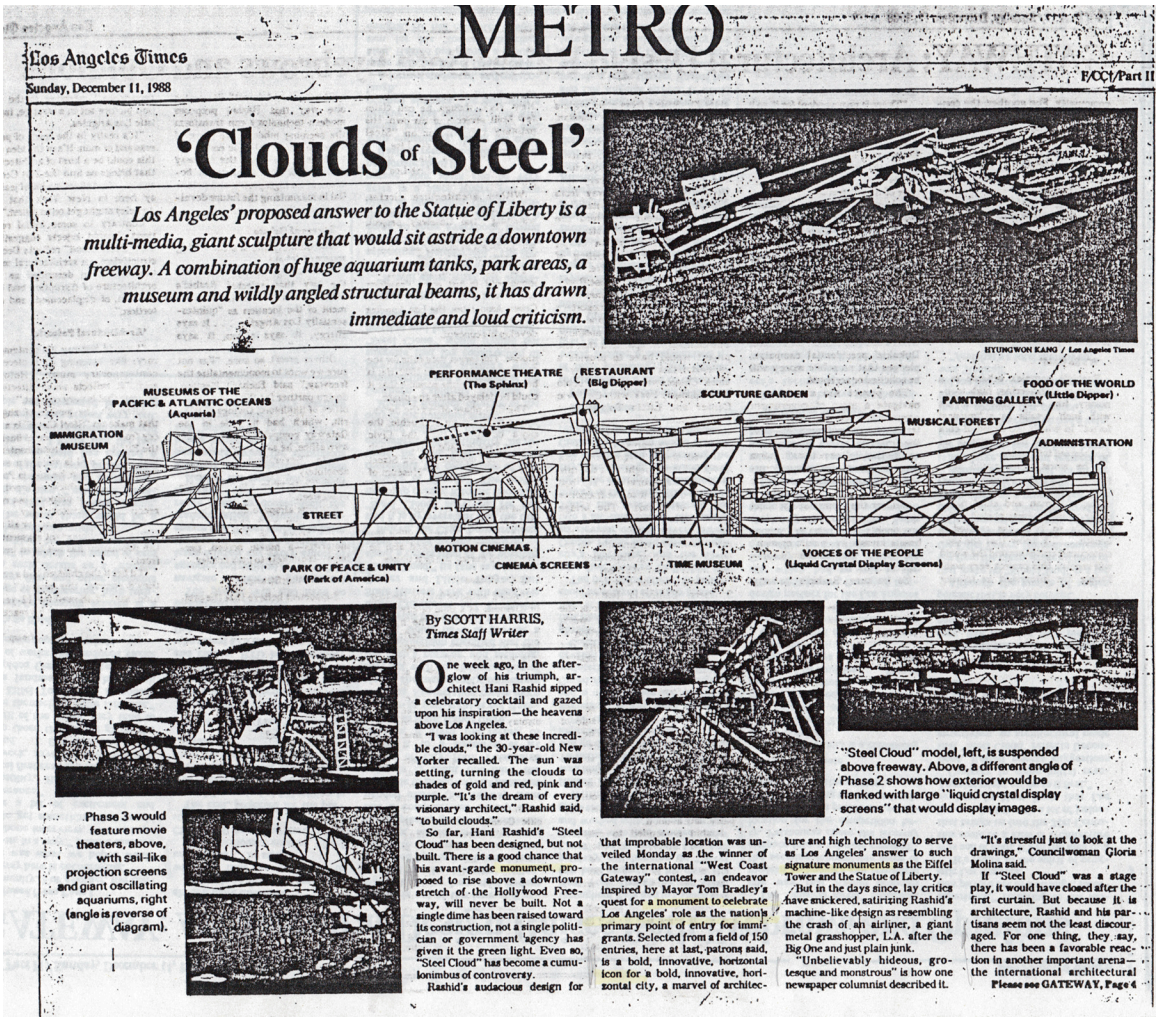


Figure 3.11
Steel Cloud, Asymptote (model)
from Rashid, H., & Couture, L. A. (1995). *Asymptote: Architecture at the Interval*. New York: Rizzoli.



Los Angeles Times

METRO

Sunday, December 11, 1988

F/CC/Part II

'Clouds of Steel'

Los Angeles' proposed answer to the Statue of Liberty is a multi-media, giant sculpture that would sit astride a downtown freeway. A combination of huge aquarium tanks, park areas, a museum and wildly angled structural beams, it has drawn immediate and loud criticism.

HYUNGWON KANG / Los Angeles Times

MUSEUMS OF THE PACIFIC & ATLANTIC OCEANS (Aquaria)
IMMIGRATION MUSEUM
PERFORMANCE THEATRE (The Sphinx)
RESTAURANT (Big Dipper)
SCULPTURE GARDEN
FOOD OF THE WORLD
PAINTING GALLERY (Little Dipper)
MUSICAL FOREST
ADMINISTRATION
STREET
PARK OF PEACE & UNITY (Park of America)
MOTION CINEMAS
CINEMA SCREENS
TIME MUSEUM
VOICES OF THE PEOPLE (Liquid Crystal Display Screens)

Phase 3 would feature movie theaters, above, with sail-like projection screens and giant oscillating aquariums, right (angle is reverse of diagram).

By SCOTT HARRIS, *Times Staff Writer*

One week ago, in the afterglow of his triumph, architect Hani Rashid sipped a celebratory cocktail and gazed upon his inspiration—the heavens above Los Angeles.

"I was looking at these incredible clouds," the 30-year-old New Yorker recalled. The sun was setting, turning the clouds to shades of gold and red, pink and purple. "It's the dream of every visionary architect," Rashid said, "to build clouds."

So far, Hani Rashid's "Steel Cloud" has been designed, but not built. There is a good chance that his avant-garde monument, proposed to rise above a downtown stretch of the Hollywood Freeway, will never be built. Not a single dime has been raised toward its construction, not a single politician or government agency has given it the green light. Even so, "Steel Cloud" has become a cumulonimbus of controversy.

Rashid's audacious design for that improbable location was unveiled Monday as the winner of the international "West Coast Gateway" contest, an endeavor inspired by Mayor Tom Bradley's quest for a monument to celebrate Los Angeles' role as the nation's primary point of entry for immigrants. Selected from a field of 150 entries, here at last, patrons said, is a bold, innovative, horizontal icon for a bold, innovative, horizontal city, a marvel of architecture and high technology to serve as Los Angeles' answer to such signature monuments as the Eiffel Tower and the Statue of Liberty.

But in the days since, lay critics have snickered, satirizing Rashid's machine-like design as resembling the crash of an airliner, a giant metal grasshopper, L.A. after the Big One and just plain junk.

"Unbelievably hideous, grotesque and monstrous" is how one newspaper columnist described it.

"It's stressful just to look at the drawings," Councilwoman Gloria Molina said.

If "Steel Cloud" was a stage play, it would have closed after the first curtain. But because it is architecture, Rashid and his partisans seem not the least discouraged. For one thing, they say, there has been a favorable reaction in another important arena—the international architectural

Please see GATEWAY, Page 4

"Steel Cloud" model, left, is suspended above freeway. Above, a different angle of Phase 2 shows how exterior would be flanked with large "liquid crystal display screens" that would display images.

Figure 3.12
Steel Cloud, Asymptote, model images and section
as published in the *Los Angeles Times*, December 11, 1988, Scott Harris

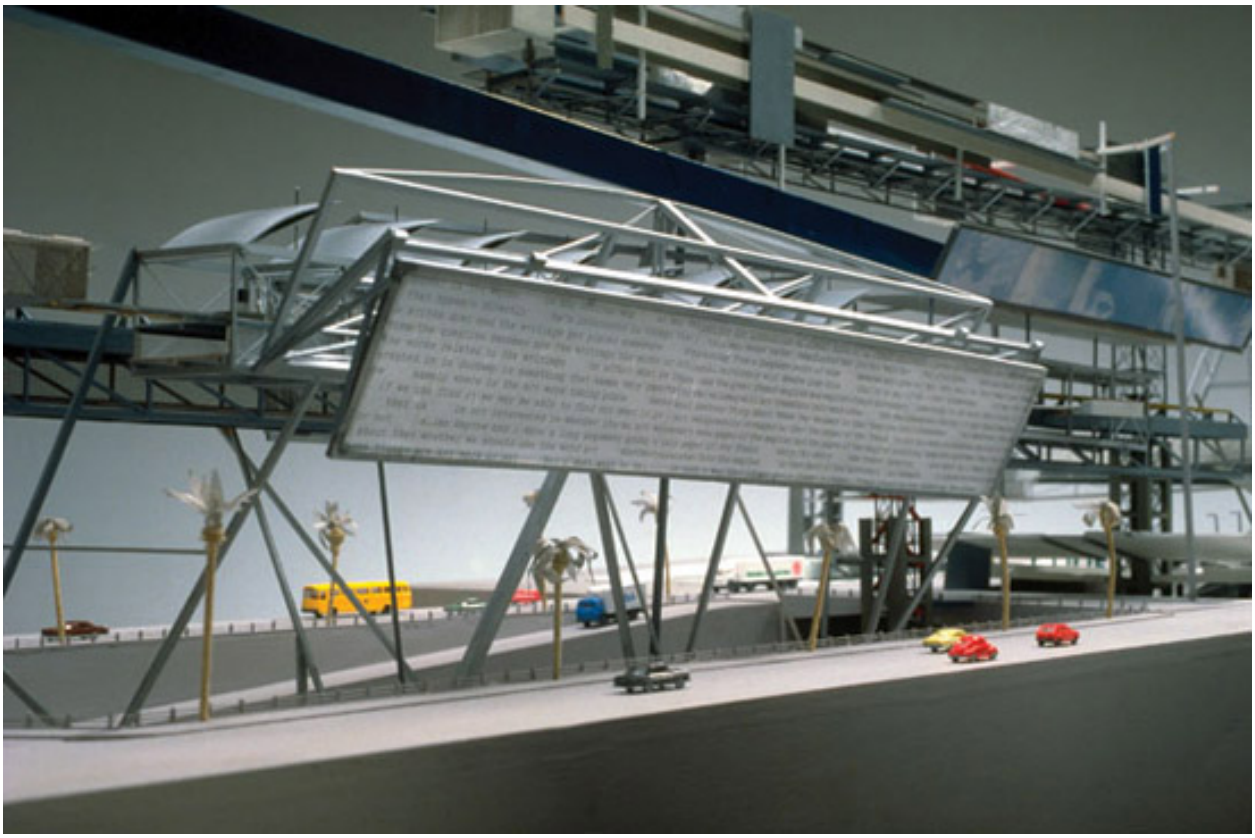


Figure 3.13
Steel Cloud, Asymptote, model detail
from Rashid, H., & Couture, L. A. (1995). *Asymptote: Architecture at the Interval*. New York: Rizzoli.

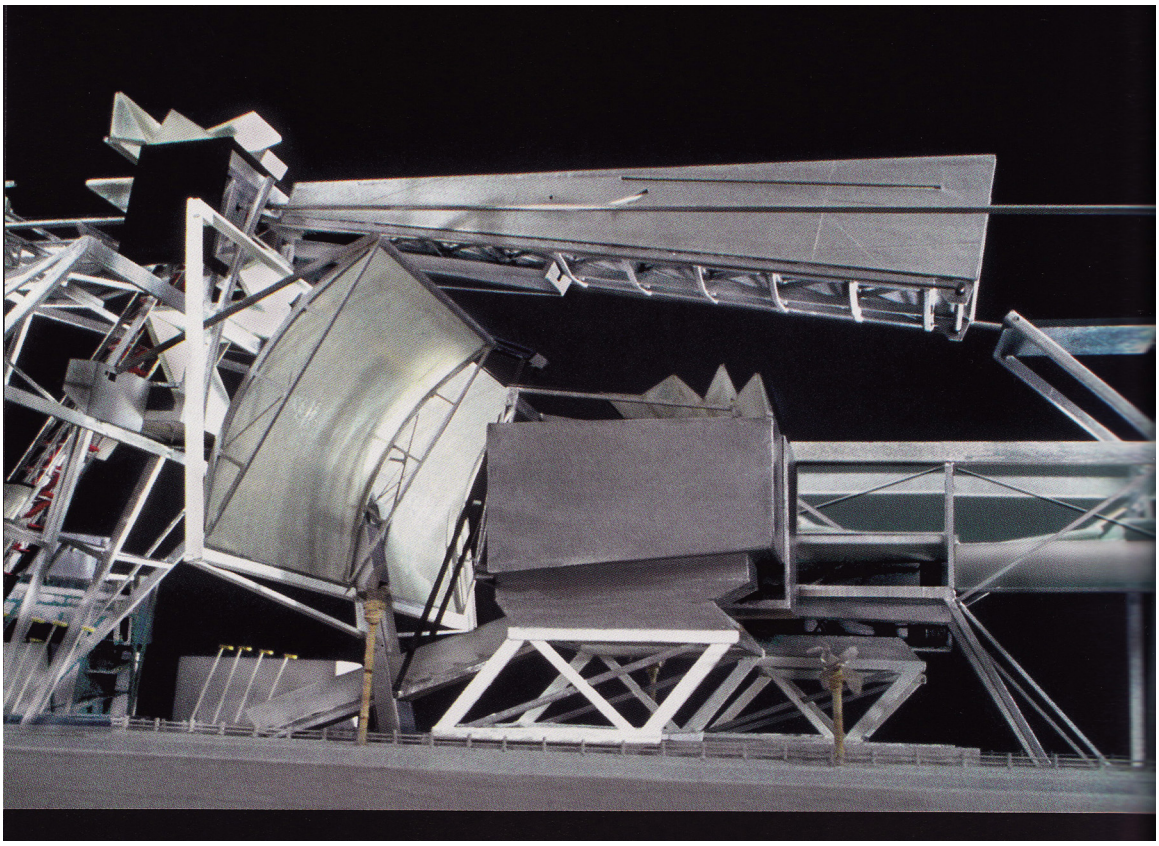


Figure 3.14
Steel Cloud, Asymptote, model detail
from Rashid, H., & Couture, L. A. (1995). *Asymptote: Architecture at the Interval*. New York: Rizzoli.

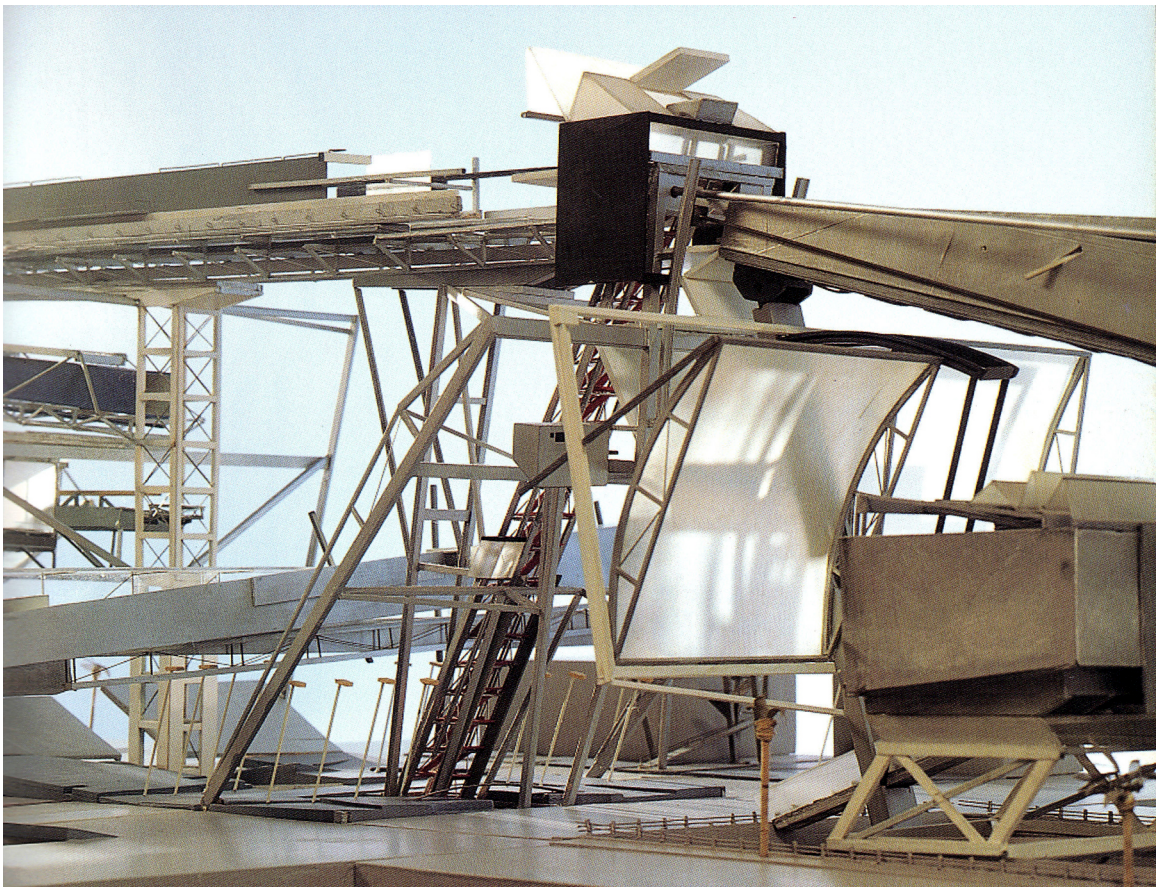


Figure 3.15
Steel Cloud, Asymptote, model detail
from Rashid, H., & Couture, L. A. (1995). *Asymptote: Architecture at the Interval*. New York: Rizzoli.

Chapter 4. INFRASTRUCTURE NOT ARCHITECTURE: MORPHOSIS'S 101 PEDESTRIAN BRIDGE

Introduction: the Project Goes Public

From its launch in July of 1997, the 101 Pedestrian Bridge project was very different from its predecessor, the West Coast Gateway competition. Sponsored by the Los Angeles County Metropolitan Transportation Authority (MTA) with support from the City of Los Angeles and the California Department of Transportation (Caltrans), the primary objective was simple -- to physically connect Union Station to the north via Olvera Street/El Pueblo with the Children's Museum/Civic Center to the south. Because of its agency origins, this version was politically and financially considered a public works project and was intended to be funded through transportation and government-supported special project funding. The competition brief called for a deck or a bridge over the 101 Freeway (between Hill Street to the west, Los Angeles to the east, Aliso to the south and Arcadia to the north) that would facilitate pedestrian movement, create and then activate this barely perceptible axis between the city's historical center and the cultural institutions across the freeway. Though the site was virtually identical to the West Coast Gateway site (the large scope of the 101 Pedestrian Bridge includes the additional block between Broadway and Hill Streets), the loftier objectives of grand cultural unifier so central to the first competition were purged from the program.

The Request for Interest and Qualifications (RFIQ) went out on July 25, 1997. Although the brief is also named "Design Competition for the construction of a Pedestrian Bridge in the Central Business District of Los Angeles" the ancillary requirements of an RFIQ assured a degree of

certification far more formalized than for those entering the West Coast Gateway competition nearly a decade earlier and implied from the very start a project that was seemingly more 'real'. Though not as overtly ambitious, idealistic, or metaphorical as the previous version, the intimation of creative solution seeking was still evident. The teams were required to be multi-disciplinary, partnering an artist with each architect-led design team. The artist was intended to support the objectives of a "visually stunning icon for Los Angeles" on a project that reconnected the "heart" of the city. Requirements of secondary public amenities like retail or office space additionally kept the project from falling into the category of pure, pragmatic infrastructure (Metro, 1997).

Unlike the West Coast Gateway, which vehemently claimed it would seek private funding only, the trajectory of the 101 Pedestrian Bridge was tied directly to its public funding sources. In early 1997, before the competition call was even released, the MTA secured its first round of Transportation Improvement Program (TIP) Call for Projects funding. Due to changes in institutional policy just prior to the beginning of this project, the MTA was disallowed from funding its own projects through TIP so the City of Los Angeles spearheaded the Call for Projects application for the 101 Pedestrian Bridge. According to many of the stakeholders, this logistical modification that put the City of Los Angeles in the lead position on the project meant a shift in bureaucratic power that would ultimately contribute to the project's demise. Nick Patsaouras, then a board member at MTA, had gone from project champion of the West Coast Gateway and its winner, Steel Cloud, to institutional, behind the scenes supporter of the 101 Pedestrian Bridge. The transfer of the project from direct MTA supervision to the City of LA and later to the Bureau of Engineering (BOE) meant the project was separated from direct leadership by its champion and underwent a series of bureaucratic handoffs that increased delays and decision points and decreased commitment to project priorities. Under City control, the vision for the project was progressively

diluted, if not outright disregarded, and the funding -- nearly all of the $4.5 million secured for the first phase of the project -- was "squandered" by the BOE on feasibility studies for unrelated cap park options and staff pay (Blair, 2010; Patsaouras, 2010).

Known in the TIP applications as project 4294: "Pedestrian Bridge over the Route 101 Freeway," the description of the project was framed not as an urban design component of the city but as an extension of the city's transportation network. This argument would surface repeatedly in the funding attempts, claiming that increased pedestrian activity would be both more efficient and more cost effective than automobiles or additional buses necessary to transfer the 120,000 daily passengers from Union Station to the urban core. In addition, this improved pedestrian route was considered a "reconstruction of the historic walking system" and was expected to mitigate the poor air quality and noise conditions, the "aesthetically and visually hostile" environment, and the "unsafe" conditions that discouraged pedestrian activity in this area. Lastly, the second TIP application argued that the new construction would remedy the lack of an ADA accessible connection from Union Station to the Civic Center -- an unlikely feat at a steep, nearly half mile, distance.[52]

Whether these transportation-oriented goals were the primary objectives or not, they served to reframe the argument for the 101 Pedestrian Bridge away from the kind of metaphorical and social unifying desires of the West Coast Gateway competition and elevate the call for solving the much more pragmatic problem of successfully navigating from one side of the 101 to the other. Even though they were included in the brief, the transportation goals meant downplaying the lingering desire for an LA icon and a project that was equal parts art and architecture. These descriptions,

[52] Several TIP Call for Projects applications are in the archive provided by Patsaouras. The two referred to here were submitted to Metro in 1999 and 2000.

combined with the shifting vision of the project through the transfer of agencies, questioned the design-based vision and seemed to elevate the engineering-based bridge widening as the primary priority.

It wasn't until March of 1999, a year and six months after the competition's initiation, that a shortlist of four firms was announced. The selection committee was unable to rank the finalists based on their revised submissions alone so they conducted additional interviews before they named the Morphosis team the final winners. Only two articles covered the announcement, one by Nicolai Ouroussoff, then the *LA Times* architecture critic, on June 20, 1999 and one that was only a paragraph long by Frances Anderton, former editor of *LA Architect*. Published in the *New York Times* on August 5, 1999, her text was prescient:

> How can one make a bridge between the civic core of downtown Los Angeles and the historic Mexican district centered on Olvera Street, neighborhoods split by the 101 Freeway? A recent contest gave top prize to the Santa Monica-based firm of Morphosis (in partnership with the artist Jenny Holzer and AIJK architects and urban designers), which proposed a symbolic answer: a 250-foot armature...in the middle of the freeway, bearing L.E.D. readouts, mirrors and video screens beaming messages to each side. The winning design also incorporates a restaurant looking out onto the traffic whizzing past. The budget is $5 million -- if the bridge is built. There's no starting date yet (Anderton, 1999).

The project was given a PA design award citation in 2000, where Michael Rotondi, juror from the West Coast Gateway competition and former Morphosis partner, served on the jury.

For MTA Project Manager Robin Blair and long-term multi-modal transportation advocate, Nick Patsaouras -- those with multiple decades of experience in the institutional life of the city --

the Steel Cloud and the 101 Pedestrian Bridge are not so much discreet projects, but "defining efforts" of a much larger attempt to increase pedestrianism, link the commercial center of the city to the transit hub of Union Station, and generally revitalize the north side of downtown (Blair, 2010). Blair insists that this is an ongoing, active project, mired in the typical bureaucratic web of parochialism and indolence of all LA public works, but getting closer to completion with each additional seed that is planted.[53] The MTA tower, Patsaouras Transit Plaza, and the subway lines initiated in the 1980s are all part of that same family of defining efforts. According to Mazmanian and Sabbatier's argument for an extended timeline of evaluation, Blair is arguing that even as these individual projects fail to be implemented, the overall objective of bridging the 101 trench might still be on the path to success.

From the West Coast Gateway to the 101 Pedestrian Bridge: Why Now?

The question can be asked two ways: Why would anyone bother to propose a project for the 101 Freeway site after the first version was so heavily criticized and ultimately failed to be implemented? Or, oppositely: Why did it take eleven years between project initiations to try again if the need for some form of connection or intervention was so pressing? To call the decade between the launching of the West Coast Gateway competition in 1988 and the MTA Pedestrian Bridge competition in 1999 anything less than momentous for Los Angeles would be an understatement. In the 80s the city was enjoying unprecedented investment in downtown from, among others, Pacific Rim corporations with money to spare. Shuwa Corporation, responsible for the $100,000 donation to the West Coast Gateway fund as well as $1 million to the Ronald Reagan Presidential Library

[53] Blair considers Steel Cloud, the 101 Pedestrian Bridge, and the new Park 101 as "seeds" leading to whatever the ultimately implemented project will be at the 101 trench.

(what Mike Davis called a version of traditional Japanese gifts to a new neighbor) purchased nearly a billion dollars worth of downtown's skyscrapers in a brief two-and-a-half month period. Japanese investors would ultimately own a third of downtown LA, primarily corporate headquarters like the ARCO towers, investing $3.05 billion in the city in 1988 alone (M. Davis, 1990).

By the early 1990s, before Steel Cloud could ever gain footing, the bottom fell out. The optimism and economic prosperity of the 80s that had supported such grandiose and egalitarian plans as a $33 million multi-story monument celebrating immigrants was buried in the growing social antagonism and economic collapse that came with the recession of the early 90s. Los Angeles County's manufacturing employment declined by nearly a third between 1989 and 1994, the median household income by up to 20% (Soja, 2000). The disinvestment in downtown by Japanese developers in particular undergoing their own economic crisis at home, meant that numerous businesses and hotels, in addition to their office towers, were deserted. As vacancy rates rose, property values plummeted. Department stores -- stalwarts of historical urban cores -- left downtown along with major banks and corporations. An investment advisor from TCW Realty was quoted in the Wall Street Journal in August of 1991 as saying "We've written off downtown for a decade... No one will make any money here" (Starr, 2004, p. 242). Then came the 1992 riots. With over $400 million of property damage and social unrest spreading from south Los Angeles to Hollywood, the viability of a downtown renaissance, even the logic of investing in the neglected and miniscule heart of a vast and needy city, seemed not only more dubious, but perhaps obsolete.

Planning a Comeback

Downtown Strategic Plan (DSP) 1993

Yet in 1993 and then again in 1998 the city produced new, optimistic plans for the

downtown area of Los Angeles, both of which called directly for a connection across the 101 freeway between Olvera Street and the Civic Center. The first, the Downtown Strategic Plan (DSP) (See Figure 4.1) led by Elizabeth Moule and Stefanos Polyzoides with Duany/Plater-Zyberk as architects and urban designers, identified seven problems facing downtown: inconsistent economic vibrancy, a deteriorating historic core, overwhelming numbers of homeless and disenfranchised, cultural and civic institutions that seemed remote to the populace, unsafe and unclean conditions that deterred tourism, traffic congestion that deterred downtown trips, and disconnection and isolation between the downtown districts. Their emphasis on historical locations, streets, and connectivity led to one "catalytic project" with direct relevance to these cases: "Reestablish the historic connection between the Center City and El Pueblo by decking the Hollywood Freeway" ("Downtown Strategic Plan," 1993, p. 55) (See Figure 4.2).

Of the sixteen actual catalytic projects proposed, nine were in The City district (west of Hill Street -- Bunker Hill, Financial District, South Park, and Convention Center); four in The Center City; two in the much larger Center City East and South Markets, and only one extended through the northern zone of the Civic Center. The latter, Broadway Circulator and Streetscape Improvements, would turn Broadway into a pedestrian friendly boulevard and Hill Street into an "Avenida", extending the length of the city and across the 101, as part of a "system of attractive and usable streets designed to emphasize the visual and functional needs of the pedestrian as the heart of the public realm."[54]

The Plan was intended to produce what the committee called "The Fifth Los Angeles" -- a

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[54] The Broadway Circulator and Streetscape Improvement portion of the plan was criticized as an effort to transform Broadway from the energetic and affordable Latino street it had become to a gentrified simulacrum of its New York namesake. Said James Steele "...planners have tried to paint a picture of a sanitized commercial street 'enlivened' by the restoration of the old theaters along it; but the concealed agenda has been the eradication of the very diversity they claim to want to create. Broadway, as it exists today, is conclusive proof, if further proof were needed, that Los Angeles really is 'the capital of the Third World'" (Steele 1993, 219). This points to the plans potential exclusion of stakeholders, though they claim to have used a coalition approach to planning.

bustling diverse city, attractive to tourists, full of cultural and entertainment options, with distinct yet interconnected districts, and a clear, readable sense of place. The Downtown Los Angles 2020 map, the concluding page of the document showing both existing and proposed new construction, shows the majority of new building in the west (Bunker Hill, Financial District) and southwest (Convention Center, South Park) districts. Regardless of the mention of housing and connectivity to the north, no new built forms are indicated in the Civic Center area, El Pueblo, Union Station or anywhere near the 101 Freeway on the 2020 map (See Figure 4.3).

Downtown in the 1990s was decidedly *not* shifting northward. The Los Angeles Convention Center was completed in 1994 as the city reached towards economic recovery. Staples Center filled the corner of that quadrant in 1999. Pershing Square, renovated in 1993, was (naively) expected to appeal to the nearby Latino population with the selection of a Mexican architect and his tropical theme, but the pastel palette and even more hidden spaces proved to be a design disaster. The Central Library expansion, accomplished through an air rights trade that resulted in the construction of the tallest building in California, now the U.S. Bank tower, was also completed in 1993. During this entire decade -- and beyond -- Gehry's Disney Concert Hall was an on-again off-again project.

Ten-Minute Diamond Plan 1998

Completed in June 1998 another, much smaller plan for the Civic Center area was developed by Suisman Urban Design in collaboration with City Architect Bill Holland and four other design firms. Popularly known as the "Ten-Minute Diamond," this plan places City Hall in the center of a diamond marking the extents of a ten minute walk in each of four directions (See Figure 4.4). The four accessible quadrants were known as Hillside (Bunker Hill), New Town

(financial district), Riverbed, and Old Pueblo. This $145 million project shows, in the main rendering of the diamond, Hill, Spring, and Los Angeles Streets as tree-lined extensions across the 101 freeway; arcaded facades create a continuously lined axis down Main Street from one edge of the diamond to the other -- from First Street to El Pueblo. The bridge across the 101 is rendered as an Angelean Ponte Vecchio, creating an uninterrupted thoroughfare lined with pedestrian-scale facades and hiding the view of the freeway below (See Figure 4.5). According to Dan Rosenfeld, former Deputy Director of Real Estate for California and City asset manager under Mayor Riordan, the Diamond Plan was the impetus for government consolidation in the Civic Center area through a major adaptive re-use and renovation initiative. This consolidation represented an unprecedented commitment towards downtown's resurgence through agency cooperation and cost-sharing (Rosenfeld, 2007).

Years later, commentary on both plans recognized the link across the 101 as the gaping puzzle piece. What's still missing in the Ten-Minute Diamond Plan, Rosenfeld says in his 2007 article, is the renovation of the Los Angeles Mall and the "reconnection of the Civic Center with El Pueblo and Union Station, resurrecting the surprisingly feasible prospect of literally bridging over the 101 Freeway". Robert Harris who had co-chaired the DSP committee, claimed in an LA Forum article four years earlier, that, whether the City, developers, residents, or investors knew it or not, they were fulfilling the urban destiny of the DSP, albeit slowly. Now that Staples Center, no matter how dreadful, and the Cathedral of Our Lady of the Angels (2002), no matter how removed from the traditional center of the city, and Disney Concert Hall (2003), that living room of culture, were in place, he opined, it must certainly be soon that the pedestrian links from Pershing Square to the Central Library to MOCA to Disney Hall to the Cathedral extend to El Pueblo and Union Station, and then beyond to the Cornfields and the River (R. Harris, circa 2003).

MTA and Public Transit

Though no one I interviewed mentioned the 1998 Ten-Minute Diamond Plan or the 1993 Downtown Strategic Plan as motivators for the renewed interest in a project at the trench, they certainly saw the trench site as a missing link in their own focus to revitalize the northern edge of downtown and to incorporate Union Station and public transit into the active city. The MTA Headquarters Tower, completed in 1995, was intentionally placed north of the 101 and adjacent to Union Station to help instigate revitalization of a dead area. It was just one part of the millions of square feet of office, retail, entertainment, and housing development rights secured by Catellus developers with the purchase and renovation of Union Station in 1992.

Along with the new renovation and development at Union Station was an expanded system of public rail transit. Supported by voters with Proposition A in 1980 and Proposition C in 1990, by 1991 the city was taking in $800 million a year for transportation projects, at least 35 percent of which was devoted to rail construction and operation (Starr, 2004). Two additional propositions in 1990 added $3 billion more for fixed rail in addition to millions coming in from the federal government for subway construction. With fits and starts and huge amounts of controversy, the Blue Line light rail began operation in July of 1990. The first segment of the Metro Red Line opened in 1993, another in 1996, and a third in 1999. The Metro Green Line began operation in 1995 -- all originating in Union Station.[55]

The significance of these plans, spear-headed by Mayor Bradley but largely shaped by Nick Patsaouras, then a member of the Southern California Rapid Transit District (RTD), had a tremendous impact on the evolution of all of Los Angeles. Historian Kevin Starr goes so far as to call Patsaouras the Robert Moses of LA, implying both the big vision and the big power of the New

[55] http://www.metro.net/about/library/archives/visions-studies/mass-rapid-transit-concept-maps/ and Starr

York transit mogul:

> Here, truly, was an empire to shape, and Patsaouras was an empire builder. Here, also, were the tools with which to bring into being -- through transportation -- the next stage of Los Angeles's development, and Patsaouras was a bold dreamer, desirous of bringing Los Angeles to world prominence as an achieved urban environment.
>
> ....
>
> Transportation systems and public works, Patsaouras believed, had more than a functional importance to metropolitan Los Angeles. Like the Eiffel Tower or the skyline of Manhattan, transportation expressed, perhaps better than any other form of public activity, the particular genius of the region. As fact and symbol, metropolitan Los Angeles was about the mobility of people in society across space and, as Patsaouras knew from personal experience, as movement across classes and social conditions. Transportation was the one thing everyone had in common, and it offered a compelling symbol of civic aspiration and unity" (Starr, 2004, p. 550).

Scheduling and construction disasters, including a giant and very visible sinkhole caused by digging under Hollywood Boulevard, exposed massive economic and political problems at MTA. By the time Mayor Riordan audited the agency in 1997, it was revealed that the MTA was over $7 billion in debt.[56] USC planners wrote an article published in the *LA Times* on December 28, 1997

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[56] "The MTA, it was claimed, was a runway, even rogue agency: a colossus for tax consumption, a program of public works long since devoid of social meaning, a bureaucracy bedeviled by more than one thousand lobbyists (more on duty than in Sacramento) out to get their share of the pork. The MTA played to and reinforced this developing anti-identity with a growing crescendo of accidents, indictments of officials for bribery and kickbacks, and other fiscal faux pas." (Starr 554) The seventy foot deep sinkhole that resulted from the tunneling under Hollywood Boulevard was called by Mike Davis "the taunting symbol of the biggest transportation fiasco in modern American history." (Starr, 554 then Davis in Starr)"

that not only further lambasted the MTA, but projected that in this growing technological age, an active, pedestrian-oriented downtown, in a city founded on vast disbursement, was an outdated and ludicrous waste of resources (J. Moore, Richardson, & Gordon, 1997 as quoted in Starr, 2004, p. 558).

The dream of transit advocates and champions persisted. That same year, 1997, was the year the MTA applied for the first TIP Call for Projects funding that would support the 101 Pedestrian Bridge and released the RFIQ for the competition. The emphasis in both the DSP and the Ten-Minute Diamond plan had made it clear that an enhanced connection over the 101 was a strategic link in the larger city vision. The infilling of the Civic Center had brought a more stable and dense population to the edge of downtown. Gateway Center, with its millions of square feet in development opportunities, was in place, and the first phases of the Metro -- controversial or not -- were real. This meant a greater population entering the city at Union Station, and it was only expected to grow once Metro construction resumed. Disney Concert Hall, now that its parking garage was completed, was on the verge of moving forward and must have seemed an icon of urban endurance, a monumental commitment to culture, and a symbol of persevering patronage in downtown LA. Just around the corner was the new Cathedral and after that, whether they knew it or not, would come Caltrans (2001 - 2004) -- perhaps the most optimistic of the projects as it was one of few government building initiatives (and transit-related to boot) that from the very beginning was willing to take large risks for high design.

Like much of the work of LA government, the traumas at MTA (severe enough to result in a vote by the people to cease subway construction entirely) were like a rock in a river -- just one more thing to slowly circumnavigate, one more set of ripples that, no matter how turbulent, would peter out before they hit the shore. In this slow world of barely perceivable progress, where each effort is a

tiny yet incremental step towards a project's ultimate success, the MTA did not see the 101 Pedestrian Bridge competition so much as a new initiative, but simply perseverance towards the vision of a city left over from 1988, or before. With new public sector leadership, a precisely refined tone, and a much more limited scope, a shuffled deck of stakeholders tried again to reinvent the 101 trench site.

Divided Objectives: Separating Architecture from Infrastructure

Dated July 25, 1997 the "Design Competition for the Construction of a Pedestrian Bridge in the Central Business District of Los Angeles"(also called RFIQ NO. PS-4320-0178) initiated the second search for an intervention on the 101 between Hill and Los Angeles Streets. Three to five architect-led teams with artist collaborators were to be selected as finalists and awarded $10,000 to complete a conceptual design phase. The highest ranked team would be awarded the contract for schematic design, then final design and construction documents. Unlike the West Coast Gateway competition, the ambitions and program for the 101 Pedestrian Bridge were limited in scale and slanted towards the pragmatic, with three broad objectives -- deck or bridge the 101 Freeway between Olvera Street/El Pueblo and the Children's Museum/Los Angeles Mall; enhance the pedestrian environment between Union Station and the city to provide walkable options primarily as a cost-effective transportation alternative; and incorporate the objectives of the new Angel's Walk plan by reconnecting the 'heart' of the city to the transportation hub and City Hall. The competitors were also asked to enhance the pedestrian environment in two ways: by mitigating the unpleasant environmental effects of the freeway and by providing office or retail program that might increase the perception of site safety. The deck was to be a minimum of 30 feet wide with no maximum. The idea of an urban icon is mentioned in the brief twice, once while defining the role of

the collaborative artist and once on the list of evaluation criteria for final project selection.[57]

A latent and later critical contradiction of objectives occurred almost immediately in the 101 Pedestrian Bridge competition. On the one hand are the faint remnants of the first competition's ambitions -- to be a public icon, a symbolic as well as a physical link, and, most significantly, a work of architecture with decidedly "artistic" components rather than a pure engineering solution. On the other hand, is the relentless emphasis on the transportation aspect of the project as an affordable mobility alternative intended to reduce congestion in downtown by providing carless opportunities to cross the 101 from Union Station.[58] This divide is most problematic and prescient in the project overview, which describes the relationship between the $5 million budget for the first phase of the project (the single block between Main Street and Los Angeles Street) and the designation of those funds. According to the brief, those funds should cover the hard and soft costs, including structural support, of the phase one amenities, but not the amenities themselves. This funding designation damages the project in two ways: first, it inherently separates the project into segregated parts -- dividing infrastructure from architecture; then prioritizes the construction of the support structure or base of the project over the (now separate and removable) design components. This functional and philosophical segregation would, much further down the line, allow the architecture to basically be deleted from the project, leaving only a deck at first and finally, only twenty extra feet of sidewalk.

The divided objectives between a design-inspired and a pragmatic solution are implied as well in a study of the jury selection process. Julia Silliman from Metro Art in a 7 January 1997

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[57] Being a "Los Angeles Community Icon" seems a distant fourth item on this list after achieving transportation and pedestrian objectives, integrating with context, and meeting all other objectives in the scope of work. The icon requirement is not mentioned in the scope of work.

[58] In bold letters, the Objective portion of the scope of work insists that the "primary justification for the construction of the Project and a primary criteria for evaluating the success of the project design" is the cost-effectiveness of an enhanced pedestrian environment as a link in transit trips. This seems an explicit response to the over-scaled and over-ambitious nature of both the West Coast Gateway goals and of Steel Cloud.

memo to Robin Blair recommended stellar juror options with strong disciplinary impact. The list included (with their professional affiliations at the time): Aaron Betsky (Curator, Architecture and Design Department, San Francisco Museum of Modern Art); Margaret Crawford (Chair, History and Theory of Architecture, SCI-Arc); Walter Hood (Associate Professor of Landscape Architecture, UC Berkeley); Richard Koshalek (Director, Museum of Contemporary Art and trained as an architect); Sylvia Lavin (Chair, Architecture Department, UCLA); Donlyn Lyndon (Professor of Architecture, UC Berkeley, editor of *Places*); Stephanos Polyzoides (Professor of Architecture, USC, lead consultant on Downtown Strategic Plan, co-founder of Congress for New Urbanism); Nicholai Ourousoff (new Architecture Critic, *Los Angeles Times*; and Richard Weinstein (ex-Dean of the School of Architecture and Urban Planning, UCLA, Mayor's Design Advisory Council, Planning Deputy to Mayor Lindsay). Had a key selection from this list been the final jury for this competition, it no doubt would have generated a more robust group of competitors, garnered greater presence in the architectural discourse of the day for the competition deliberation, and potentially had more reverberations through academic, political, and institutional environments. At the very least, a selection made primarily from that more disciplinarily-renowned list would have established a committed intent to design excellence.

Instead, the actual jury make-up took a decidedly pragmatic turn. With the exception of Neil Denari, who stood in as the SCI-arc director (and, by chance, former finalist for the West Coast Gateway competition); Robert Timme, Dean of USC's School of Architecture; and Elizabeth Smith, curator from MOCA, the jury represented primarily institutional interests. In addition to those three and non-voting members from MTA, Metro Art, the El Pueblo Historical Society and GSA, the final jury included: Mel Green, Structural Engineering Association; William Holland, City of Los Angeles Architect; and Robert Sassaman, Caltrans Chief Deputy.

Competition Finalists: Seeking an Icon

The jury selected four finalist teams: Siegel Diamond Architects, Angelil Graham Architecture, Levin and Associates, and Morphosis Architects.[59] As mentioned previously, the presentations by the finalists in November of 1998 did not produce a definitive lead team, so the jury assembled additional questions for each team and conducted a second round of interviews in March of 1999. The selection committee asked questions in four categories -- pedestrian movement, design, cost, and maintenance. Every team was asked program-inspired, budget conscious questions: "How does your proposal meet the objective stated in the RFP, to improve pedestrian movement between the Union Station and the Civic Center, over what currently exists?" and "What proportion of the cost of your project proposal physically and directly works toward the objective stated in the RFP?". In addition each team was asked to respond to the risk of graffiti and the possible effects of little or no maintenance support for the project -- all indicators of official priorities and potential lack of agency investment.

The first three schemes, though configured quite differently, were primarily horizontal, each with a certain kind of structural lightness that made them seem small in the face of the monolithic 101 and its never-ending, thick stream of traffic. Levin & Associates' design was primarily a deck topped with scattered and somewhat dissociated parts hung by a central mast; the Angelil Graham design was a network of five billboard-faced commercial strips edging each of the existing blocks crossing the freeway. Siegel Diamond's original proposal was made up of three diagonal, asymmetrically intersecting bridges which offered shaded areas, generated solar power, and supported a sound art piece integrated with the steel tubing of the structure. None of those, the jury

[59] A memo from Susan Dove dated 3 December 1987 lists 11 firms as submitting proposals before the 14 May 1997 deadline, yet the deadline changed at least three times with the last one being Oct 28 1997. Therefore it's hard to say how many total submissions the MTA received.

decided, were strong enough designs to significantly impact the image of this site or the city.

Whereas the other proposals could be rather easily categorized as parks or bridges, the Morphosis proposal was far more structurally and programmatically sophisticated. The main component was a long bar running parallel to the 101 freeway, what Eui-Sing Yi, project manager from Morphosis, says initially resembled a "Dutch minimalist scheme" in contrast to the "de-con of Steel Cloud" (Yi, 2010). In the initial phase of the competition, Morphosis advocated for intensification of program by proposing a varied cycle of activities (education, culture, recreation) intended to "catalyze the decrepit urban condition of 90s Los Angeles downtown" (Yi 2010). For the second phase, the revised proposal "embraced an emerging sense ... that urbanism in Los Angeles needs to be intensified." Therefore, rather than a large new structure with complicated program, or an unprogrammed platform or plaza that would merely contribute to the already desolate sense of the area, they proposed a programmatic infusion spreading out from the newly intensified pedestrian bridge into the open spaces, infrastructure, and buildings surrounding the site (See Figure 4.7). In addition to two phases of redevelopment on the site south of the trench, the proposal had four basic components -- a "landscape stitch" (or bridge component) connecting Aliso and Arcadia adjacent to Main Street; a cafe accessible from that Main Street bridge component; a 'sign' or 'billboard' component that emerged from the center of the median and connected to both Main and Los Angeles Streets; and electronic, LED signage on both the billboard and cafe pieces (See Figure 4.6). Costly horizontal infill over the freeway was avoided, intending to focus the limited available finances towards the new intervention. The contextually responsive steel frame "sign" whose base connected directly to Los Angeles and Main Streets, served to transform the experience of the existing sidewalks through separation, shade, and planting, as required in the competition objectives.

With the pragmatic objectives achieved as simply as possible in the base elements, the

conceptual richness of the project was explored in the vertical sign element that seemed to grow from the 101 median. The emphasis on section bridged the vertical layers of the site from freeway to city grid to skyscraper. Said Yi, "we were also interested in a structure that would connect with the road surface and emerge, like a plant above the city level and grow to this symbolic icon" (Yi, 2010) (See Figure 4.6, sections). Codifying multiple references to Los Angeles, the two-sided plane -- one facing downtown and one Olvera Street -- most obviously referenced a freeway sign/billboard with each side reflecting the 'imprint' of the disparate yet interconnected identities. The south elevation, facing downtown, used the Anglophied name of the city, Los Angeles, and held multiple digital surfaces that would show the text artwork of Jenny Holzer and later accommodate changing, digital information of all sorts. The north side, facing Olvera Street, reflected the historical identity of the city by utilizing the original Spanish name -- El Pueblo de la Reina de los Ángeles -- and the 1781 date of the city's founding (See Figure 4.9). The entirety of the sign was the same size and shape as the plan of the trench hole, as if a slab had been built in the gap, then rotated along the axis of the median into a vertical position; if horizontal, the circular steel plate of the sign would share a center point with the origin of the city (See Figure 4.8, model).

The layers and material transparency of the "billboard" were intended to unite the two sides, collaging their differences together in one form. But the distinctions between the two sides also called attention to, rather than erased, the divide between north and south. Morphosis, however, saw the porous structural frame as a combination of public and private -- "a Situationist 'living room' in the middle of the city" with the restaurant one story below serving as "the equivalent of a traditional *Piano Noble* -- the public living room -- of a European Palazzo" ("Morphopedia, 101 Pedestrian Bridge,"). This public living room, the cafe, provided the completely unique draw of traffic voyeurism, capitalizing on the strip of freeway where traffic reaches a nation-wide record-

breaking peak.

Neil Denari and Robert Timme utilized their influence and expertise to persuade the perhaps more pragmatic members of the jury that the Morphosis design provided the only workable and visionary alternative for the site:

> The two landscape projects didn't provide enough literally vertical surface or memorable, kind of iconic nature to the project. The Angelil Graham one was truly infrastructural and clever in that sense, but it was that spectacle, the icon, in the nature of all bridges that are beautiful in cities that was needed, so that's what we went for... I think the Morphosis project was chosen because of its spectacle nature. I think ultimately that would be a way to define the agenda of either of the projects [Steel Cloud or the 101 Pedestrian Bridge] which was that if you're going to spend the money you need to make an icon rather than just a purely banal piece of infrastructure. Why else have the competition? You can go work with engineers to satisfy some sort of literal problem...this [project] was about bridges becoming spectacles and icons and urban branding and the other projects were about spaces and landscapes and true exchange of people (Denari, 2010).

The question Denari posed -- why have a competition if you're not seeking a solution beyond the status quo? -- returns us back to the initial divergence of objectives. The jury, though composed of a range of stakeholders, was led by those who believed in both the role of the competition to seek innovative solutions and the seed idea that what LA needed was not another blank space or an uninspired bridge, but an inspirational work of design. By eliminating the slab component and instead rotating the horizontal surface separating the freeway and city into a vertical surface linking

them, the Morphosis design simultaneously eliminated the costly freeway cap and proposed a much more active, symbolic, and provocative solution than those of the other finalists. They skillfully solved the problems proposed in the brief of an enhanced pedestrian environment, increased public space, a link between the historic center and the Civic Center, and a potential Los Angeles icon. Yet, covert or not, that simply wasn't what some of the stakeholders were seeking.

The Slow Disappearance of the 101 Pedestrian Bridge

This continued divide between infrastructure and architecture and the inherent implications to the competitions' objectives were central to the failure of this project. Once Morphosis won the competition, a formalized scope of work was needed to clarify specific, logistical expectations and responsibilities. Three versions of the Memorandum of Understanding (MOU) exist in the archive before an actual agreement was reached, their variations pointing to these growing cracks in the process.[60] As the MOUs evolved, the winning design -- even the existence of a competition -- was further and further marginalized until the Morphosis design was extracted from the agreement entirely and the project reconfigured (and literally renamed) as a bridge widening by the DOT.

These alterations came to fruition in the third and final version of the Scope of Work. The email that accompanied this new Scope, dated December 05, 2000 -- over a year after the previous signed version -- rejected the MOU outright and submitted a drastically different replacement. The new Scope was entirely revised, beginning with a new title that contained an obvious alternative emphasis: "Interstate 101/Los Angeles Street Overcrossing Bridge Widening". The Project Purpose was described as follows:

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[60] "Infrastructure versus architecture" is the unfortunate option here instead of "infrastructure as architecture" or "architecture as infrastructure". The repeated reference by the engineers to architecture as "artwork" instead further minimizes both its significance and its spatial ramifications, implying, further, that it is potentially a decorative (and removable) addition rather than the project itself.

> The project will design the widening of the existing Los Angeles Street overcrossing (Caltrans Bridge No. 53-0609) and also the overcrossing at the Northbound I-101 (about 30 ft. to the east). This project will be implemented in order to develop an efficient and enhanced pedestrian environment from Union Station to the Civic Center. This will be designed to join, and conform to, a proposed realignment of Los Angeles Street & Alameda street intersection. [ ]
>
> The design cost of the "Sign" over the I-101 Freeway is also budgeted in the 97 Call design scope; however, due to its controversy, carrying out the design scope of the "sign" is subject to further discussion.[61]

Blair forwarded a copy of this correspondence and revised scope to Patsaouras with a note that confirmed Morphosis's ongoing contract with the city to "design the bridge" up to a 30% drawing set, at which point the city would "finish the design." Further, he restated the city's apparently long-standing interest in having the project transferred to another agency, perhaps a non-profit as Patsaouras had at some point suggested. In addition, he said, "City staff remains very concerned that the controversial nature of the ultimate design will be very difficult for them to work with. So, they are limiting their work to the non-controversial components" (Blair email, Patsaouras archive).

When pushed to define either the controversy or the process that made the elimination of the design work possible, it reads like a bureaucratic chess game of slow elimination. Unlike Steel Cloud, there was no media that exposed the exact "controversy" both Blair and Rios refer to in this

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[61] From the Scope of Work 3, December 14 2000.

correspondence. Blair says there are hundreds of controversies, one being the "disjointed collective" of El Pueblo merchants, interest groups, and politicians -- debates that have been going on for 25 years or more -- where project planners simply don't want to risk embroilment. The options then were to pass off the project to those willing or appropriately connected, or to downscope the project until the controversial components -- the design -- disappeared (Blair, 2010).[62] This project went in the latter direction.

When asked about any potential controversy, Morphosis's Yi felt that the original expectation for the design might have been "some palm trees and a California garden, all filtered through some romantic watercolor painting." Of course, that's not what they provided and not what won the competition. Says Yi, "We didn't believe in making more 'space' in downtown LA, and definitely not in some romanticized, populist, Spanish colonial decorated stucco washed assemblage. Our design was to engage actively and to provide a reference -- visual, geographic, symbolic, provocative -- to downtown LA." Yi suspected that "the vertical surface was seen as a 'wall' that perhaps reinforced the division when in reality we advocated for widening and programming the bridge that extend[ed] from Main Street." In other words, it is possible critics were blinded by the symbol, unable to appreciate the nuances of the program inserted alongside the existing bridge; whereas Morphosis saw their proposal as an economically responsible solution exploiting the current condition by attaching to and improving rather than replacing the existing bridge, while at the same time activating the immediate context and contributing to the historical and social narrative (Yi, 2010). It is also possible that any solution more complicated than a plain

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[62] Blair: What they're saying is "I'm not touching this. It's controversial. So I'll get rid of the controversy."
LS -- So you get rid of the project
Blair -- Well you modify the project. You keep down scoping and down scoping and down scoping. That's what you do.
LS -- And then you have nothing left, which is where we are right now.
Blair -- You say that as though you're surprised.

paved deck was too much effort and expense for the contingent of design naysayers.

What is evident is that from the perspective of the city's limited imagination, regardless of the vision that a design competition should imply, there was always resistance to seeing architecture as a solution for the problem of the 101 trench, particularly architecture with any substance. Yi recalls a comparison made between their design and the highly ridiculed Triforium sculpture -- an artwork intended to be both an attraction for the LA Mall and a technological marvel that failed on every front and, in the meantime, cost the city nearly a million dollars. Koo still refers to Morphosis's winning solution as "the artwork" hence grouping it with what was perceived as a series of unpopular, expensive, and failed public art initiatives, superfluous to the success (or actually, the failure) of downtown's suffering developments. The bridge widening became the solution, the Morphosis design became "controversial" decoration.

AB942: El Pueblo Park -- Deck One

In 2001, Assemblyman Gilbert Cidello got involved in the "101 freeway overcrossing pedestrian improvement" project and initiated Assembly Bill 942, "An act relating to pedestrian crossings". AB942 was an attempt to shift the financial responsibility for the project into the California state budget rather than its previous reliance on small, incremental, and difficult to secure granting opportunities from transit sources. AB942 sought a one time funding appropriation from the General Fund in the 2001 Budget Act, but a memo in July regarding AB942 seemed skeptical. General Funding, the Legislative analysts claimed, was unlikely to support the project due to "the impact of the current 'energy crisis'" (Mejia Memo, July 12 2001). In addition to seeking additional MTA Call funds, they suggested pursuing state transportation funding with a caveat heard repeatedly throughout the documents and interviews: pedestrian enhancement projects, because

they do not directly relieve traffic congestion or increase mobility, seem to fall into a funding abyss (Blair, 2010; Koo, 2011). Seen as neither public space enhancements nor pure transportation projects, they fall somewhere between Parks and Recreation and Caltrans; the latter loathe to fund pedestrian initiatives -- particularly such high cost ones -- as they don't blatantly achieve the authority's mission of traffic abatement (Blair, 2010). The intergovernmental relations committee that suggested approval of AB942 re-emphasized "that the project should be configured as a major transportation improvement project aimed at improving traffic circulation, transit operation and the pedestrian environment" (City Clerk, Aug 22 2001) -- another shift in the divided objectives away from an architecturally inspired solution and towards a pragmatic one.

A revised AB942, amended in April and adopted by the LA City Council and Mayor Hahn in August of 2001, was more vague and less committal than the original, asking the state to *consider the benefits* of a pedestrian crossing, determine potential funding sources, and provide a report to the MTA including a budget by the BOE. As requested, John Koo, Project Manager for the Bureau of Engineering, completed a budget for the project along with a list of current funding, potential funding sources and project scope. Redefined again by Councilman Nick Pacheco as "El Pueblo Park " (or what Patsaouras calls "Deck One"), the project estimate included decking, traffic management, and park improvements only, separately estimating the decking of each of the six blocks over the 101 freeway. Much larger than any of the previously proposed projects, the estimate was grouped into two sections -- the first two blocks of decking from Alameda to Main street with park conversion and numerous traffic accommodations, then the next four blocks that expanded the deck from Main to Grand.[63] Koo listed six potential sources of additional funding: State General

[63] The estimate for section one was $61,937,480; for section two was $170,188,040; and the grand total was $232,125,520. The list of current funding -- 1997 Call ($1 million), 1999 Call ($1.2 million), and State TEA funds ($1.2 million) -- totaled a measly $3.8 million, barely 6% of the cost needed for section one alone.

Fund, Governor, Proposition C, Park Bonds, HBRR (Highway Bridge Rehabilitation & Replacement), and MTA CFP (Call for Projects); he also described the current scope of the project in one very brief, and telling, fragment: "Widen LA Street OC by 15' to 20' each side".[64]

In the official City of Los Angeles announcement approving AB942, the intergovernmental relations committee support confirms that the BOE intended to allocate all current funds -- those previously allocated to the 101 Pedestrian Bridge project -- to the bridge widening project alone. In addition, the HBRR (Highway Bridge Rehabilitation & Replacement) funds they had already applied for were intended to go towards replacing the Los Angeles Street bridge which, under the National Bridge Inspection Standards, was already considered functionally obsolete (Intergovernment Report, August 2001). No funding was allocated to the original competition winning proposal. By the time Cidello became involved and AB942 was under consideration at the state level, the project for a pedestrian bridge over the 101 freeway had been redefined as a series of mundane widenings and decks essentially separate from the Morphosis project. A Project Study Report (PSR) was undertaken, but by the City of Los Angeles. It makes no mention of Morphosis, Thom Mayne, or the 101 Pedestrian Bridge competition.

Project Study Report (PSR): Caltrans' Duplicity

Project Manager for the City of Los Angeles, Wenn Chyn, completed a 245-page Project Study Report (PSR) in March of 2003 entitled "On Route 101 from Los Angeles Street OC to Main Street OC". According to this PSR, the reestablishment of the pedestrian link between the historical and transit amenities north of the 101 and the Civic Center and Los Angeles Mall south was supported in a Caltrans feasibility study completed in 2001, though not adopted in any of their

[64] OC = over crossing (or bridge)

transportation plans. This PSR stated that "This project is an integral part of the City of Los Angeles' Angels Walk Pedestrian Improvement Program, which includes redesigning the Los Angeles Mall area to assist the movement of pedestrians across the U.S. 101 freeway between the EI Pueblo area/Union Station and the Los Angeles Mall/Civic Center. As a result, the City of Los Angeles is committed to the completion of this project." (PSR)

As outlined in AB942, this PSR studied the reconstruction of the Los Angeles Street and Main Street overcrossings with the added provision of a park deck between the two. According to the PSR, this park would provide public space, additional landscaping, encourage pedestrian activity, and create display space for public art in downtown Los Angeles (note the idea here that art was to be 'displayed' rather than integral and occupiable). Priced around $10 million in Koo's estimate two years earlier, the PSR takes into account Caltrans' 1999 Transportation Concept Report (TCR) that foresaw the 101 as a 10 lane configuration with two HOV lanes rather than its current 8 lane, mixed flow configuration. The implication of this TCR was huge, handcuffing any future development around the 101 in terms of both cost and property usage. The cost estimate for a one block deck under these new conditions was between $33 and $39 million, not including the actual park/public space amenities -- nearly four times the estimate only two years earlier. In addition, fully meeting the design standards would have required extensive appropriation of adjacent properties including active businesses, the U.S. Court House, the historic Pico Garnier structure, and undisclosed Native American resources as well as the closure or relocation of several intersections (PSR). Therefore, meeting current design standards was not considered viable.

This estimate -- the $33 - $39 million required to fulfill the projective goals of the TCR by adding two lanes to the 101 -- is the last of the factors that ultimately killed the 101 Pedestrian Bridge Project. Blair called this stalemate condition created by Caltrans' conjectural plan "the grand

bureaucracy eating itself" (Blair, 2010). So, though Caltrans in theory supported the idea of a pedestrian link over the 101, its own projections prevented the implementation of small improvements by contiguous requirements of insurmountable cost and scale. It is a "bureaucratic impasse" says Blair, that "allows you to dream, but never to fulfill it at all."

To Blair, it is both those kinds of institutionalized politics and their backroom counterparts combined with the gnawing away by parochial interests that reduce the possibility of both grand civic gestures and modest public space improvements. In a city where individual needs often trump those of the collective, government is fragmented and the mayor is weak, it would take mandates from a much higher level, he says, like state laws, that would then demand a particular framework predisposed towards project implementation. In this case, an institutionalized direction for the 101 that all subsequent decisions would be required to support (such as recognizing the current 8 lane configuration as the given scenario rather than the delusional, nearly impossible 10 lane version) would remove the site from its current purgatorial limbo. But even that move would only eliminate one variable of unstable power in the equation. LA, says Blair, plays its political game unlike other American cities, requiring a network of high-powered friends and project shepherds to grease the wheels of bureaucracy over decades of subtle ground laying until there is solid enough footing to warrant political risk-taking. Only then can the real process of implementation begin[65] (Blair, 2010).

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[65] "Many people don't understand that LA is a city of subtleties when it comes to its politics. You don't know my agenda, and you don't know my influence and so what we do, we collectively as a city, we kill things slowly without an obvious weapon. In a sense, we poison ourselves versus cutting our heads off like other cities might do...Do I think the project is good? Sure I do! Do I think it has meaning? Sure I do! Do I think it has political support? No, it has some political support, but not a political support that's going to fight another contingency. It's not going to do that because there are too many other things that I want to do with my political capital -- I'm speaking rhetorically here -- than waste it on taking on my friends because these people help me out, they make sure I get re-elected." (Blair interview)

LA Now: the Emergence of a New Model

The will to engage with the city at this level, to pursue a kind of meaningful reading of it, is bound to two fundamental rights: to be a citizen, and to have access to public information. One could even argue that access to public information is necessary to true citizenship...Noted information architect Richard Saul Wurman has observed that public shares the same root as publication. This formulation promotes a kind of "freedom of information" disposition toward data, replacing the ownership of information with a public compact for full and legible disclosure. It is in the same spirit that our research efforts were carried out. We are concerned with the lack of ingenuity in grappling with the city as an idea, and in developing tools to wrestle with its scope and complexity. LA Now is provocation for further analysis and the advancement of interpretive techniques. --Thom Mayne, Introduction to *LA Now* (2001, p. 11)

Morphosis's 101 Pedestrian Bridge solution was generally well received by the profession but failed to generate substantial enthusiasm -- pro or con -- either in the city or in the design discipline. Mentioned in only a few articles outside of the firm's own publications, its most notable direct accolade was the PA citation it received in 2000. Even then, it got mixed reviews -- supported by Michael Rotondi for being dynamic and moving "ingeniously in between the literal and figurative uses and meaning of a bridge", it was panned by Marion Weiss and Brigette Shim who saw it as superficial and over-stylized (Barreneche, 2000).[66]

Disciplinarily, though, it played a role as one component in a much larger set of design

[66] Two factors that seem notable in the set of winners is, first, the emergence of the 'non-building' -- Holl's all glass 'lenses' for the Nelson-Atkins Museum of Art expansion are light boxes in and under the landscape; Diller + Scofidio's Blur building was a barely coalescing and magnificent cloud -- in stark contrast with the beefy, exaggerated (and mostly non-bearing) structure of Morphosis's pedestrian bridge. Second, Maltzan received kudos for his Inner City Arts addition and renovation as much for the social agenda as the architectural resolution. Culver City's SPA by Eric Owen Moss is a third LA project and LA-base Studio Works also received a citation for their InSide OutSide House for the fifth ward in Houston. This was Morphosis's 20th PA award.

ambitions, the first for the Morphosis firm, the second for their vision of Los Angeles. Interviewed for a special *GA* edition on their firm's competitions, Mayne described the role competitions play in the larger development of ideas as a form of design research.

> These investigations are our research...[they] become the precedent for subsequent projects.... Competitions are an indication of what's taking place in the culture of our studio at any given moment in time, the questions we're grappling with... How does architecture -- the architect -- interact with, contribute to a particular problem?.. Architecture can't solve all problems, and certainly not in this time frame, so we are forced to be discriminating in choosing which problems to address." ("101 pedestrian bridge, Los Angeles, California, U.S.A. [Morphosis]," 2005)

What are the questions then that the 101 Pedestrian Bridge is intended to answer? Or, if not answer, then ask? And is the 101 Pedestrian Bridge project part of a larger trajectory intent on inserting a transformative urban agenda into a downtown that repeatedly acquiesces to the path of least resistance? There would seem to be a geographical and temporal lineage -- from the Junipero Serra Shrine slightly to the northeast (and two years prior, unbuilt), to the Children's Museum of Los Angeles slightly to the southeast (also unbuilt and of the same era), to the Caltrans headquarters two blocks south (and built), whose design and then construction overlapped with the stretched out process of the 101 Pedestrian Bridge -- and whose street edge "sign" bears a remarkable resemblance to the one designed for the competition.

As Yi mentioned, the objective of the 101 Pedestrian Bridge was not to provide additional blank space in need of occupation in a zone already under-activated (i.e., a park), but to imbue the site with a kind of architectural and programmatic adrenaline intent on combating the spatial

lethargy rampant in the northern zone of downtown Los Angeles. The Morphosis proposal from the very beginning included the entire block south of the freeway as well, extending the El Pueblo grid through to Temple Street, with a new platform over the Los Angeles Street exit ramp and a new vision for the LA Mall site. For Morphosis, the 101 Pedestrian Bridge is one node in a string of moments intended to create a grander narrative for the city. The acceptance of the grander narrative shows potential in cracking the resistance to success at the 101.

The L.A. Now project was the second phase of this effort to define the city's grander narrative and contribute to the urbanism discourse. This new north downtown, encompassing a range of initiatives from the Art Park through the Civic Center and the Cathedral to El Pueblo, needed a greater degree of momentum (and more savvy advocates) to capture the imagination of the city's stakeholders and constituents to generate action. One way, of course, was the proposition of these many architectural interventions, with an obvious goal of construction. Another way, though, was the development of synergistic focus emerging from leading design thinkers (particularly big names aligned with academic institutions) in an attempt to understand and then effect the flummoxing particularities of the Los Angeles urban condition. L.A. Now, a research, teaching, design, and publishing collaboration, was intent on exposing a wealth of comprehensive content on LA's urban dilemmas key for first finding and then attacking its neediest predicaments. According to Yi, the lethargy in the political infrastructure of downtown was one reason behind the development of L.A. Now, as much about generating a potential advisory committee of public and private policymakers and developers as it was about data and design (Yi, 2010).[67]

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[67] From Yi interview: "... in terms of larger civic, infrastructural, urban initiatives, the city suffers heavily. That is why we made LA Now, so we would have an advisory committee of public and private policymakers and developers. What it revealed to us is how dysfunctional the city is. The chief Architect or the Urban Planner does very [little] envisioning or future planning. We never had anyone the likes of either Robert Moses or Jane Jacobs to advocate for a type of urbanism". A list of advisory board members is included in the credits of LA Now, volume 3 and 4, which includes Robin Blair (MTA), Con Howe (Director LA Dept of City

Initiated originally by Art Center's Richard Koshalek in 1999,[68] LA Now was a cross-institutional initiative with Mayne running a year-long research studio out of UCLA and SCI-Arc, while photography, film, and environmental-design students at Art Center and graphic designers at Cal Arts produced accompanying images and graphics for what would ultimately become a four volume book series and exhibition at the A+D Museum. In terms of the overriding agenda, the goal was not to make the city ordered and understandable in the classical, comprehensive master-plan sense, but to construct a compelling identity from its fragmented, polyvalent, poly-centric reality that could then catalyze transformation and encourage its own brand of design civitas.

In the introduction to the publication, *L.A. Now, Volume One*, Mayne proposes a series of arguments in an attempt to expose the roots of a pervasive urban apathy. First, that the illusive nature of Los Angeles -- and the attempts to master that illusiveness through irreconcilable tactics -- denies the natural condition of a place that is actually the scale and complexity of a nation rather than a city -- one also in a constant state of flux (Mayne, 2001).[69] This complexity and flux often spawns a sense of unknowability, resulting in the assumption that LA has nothing to grasp hold of that is concrete and definable. L.A. Now took on that challenge, claiming that its complexity and ephemerality were valuable descriptors of the city in and of themselves and that embracing the particularities and distinctions of the city was far richer territory than smoothing them out. From the analysis and sorting of the actuality, an alternative form of coherency could then be cultivated: "resisting polemics and ideological alignments, we pursued a neutral field of information from which citizens, planners, and architects alike may draw interpretations and assessments" (11). As in

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Planning), John Kaliski (Principal, Urban Studio), Jan Perry (Councilwoman, City of LA), Ian Robertson (Robertson Company), Richard Weinstein (UCLA AUD Professor), and Deborah Weintraub (City Architect, City of LA).

[68] Richard Koshalek also served on the PA Awards jury in 2000, the year the 101 Pedestrian Bridge project won a citation.

[69] In the text the city is considered the LA Conglomeration reaching 13.1 million people, larger than Cuba or Sweden in population and four times the size of Ireland (Mayne, 2001).

Powers of Ten, Charles and Ray Eames's famous movie that zooms from unrecognizable microscopic views to the total vision of the cosmos, the cosmic is made comprehensible through changes in scale that constantly reveal the familiar in the seemingly obscure. As in the movie Momento, "'truth' is contingent and iterative, subject to new and malleable arrangements" (11).

In *L.A. Now, Volume Two* (*L.A. Now*, 2002), the proposals are speculative, hybridized urban gestures emerging from studied material conditions with aims of productivity -- infrastructural urbanism inchoate. In the proposals, urban recreation space is increased, the Los Angeles River becomes host to a new urban park; the MTA mandate for public art is radically expanded by inserting museums and galleries into new rail and link projects; a monorail connects LAX and downtown; "Red Line School District" subverts the idea of cross-town bussing by making the 'bus' itself more integral to school infrastructure; housing is densified; and downtown gets a new UC campus. As Mayne says, "these studios favored the metamorphosis of existing realities, accepting fluidity, complexity, and discontinuity as possible points of departure" (Mayne, 2002, p. 10).

The leap then is not huge to see Morphosis's 101 Pedestrian Bridge project as an instigator for the questions posed in L.A. Now of urban comprehensibility and the responsive grappling with flux and ingenuity. What more prime location to exploit these issues than the site actually between the past and the future, emerging from the very density of flux that most defines LA? The design proposal is both data and empty screen -- literally and figuratively. The vastness of the urban constituency -- not the least of which are the 216,000 passengers and drivers each day that pass through the trench -- is challenged to see the permanent and ephemeral juxtaposed. The blank screen is the symbol of citizenry (the town square, the soap box, the speaker's corner, the people's park), both open and waiting for any projection of identity and providing an endless stream of other's interpretations to peruse. There is no fixed interpretation of the Morphosis 101 Pedestrian

Bridge -- quite intentionally. Art is advertisement; advertisement is art. The restaurant is just an excuse for the city to be the feature entertainment, for turning the typically shunned and villainized -- the mass of pulsing traffic, the very symbol of the unknowable, unlikable, uncontrollable, and incomprehensible -- into the very most unique moment for public space, the moment where access and projection meet. Their design exposes the data -- the divide of constituencies, the disconnect of past and future -- and bridges that divide with the full occupation of the frame between, the hyper-active view from the road to the city, from the city to the road.

In the introductions of both volumes one and two, Koshalek and two other LA Now organizers, Dana Hutt and Nelson Rising, stress the idea that these proposals are not meant to be theoretical but pose real solutions for a projected 2020 LA. Their list of twelve concrete suggestions includes four clear successes -- a new Police Headquarters, further development around the Staples Center, the nearly completed Civic Center Mall (as part of the slow and on going Grand Avenue plan), and an increase in downtown housing units. Again, what remains unfinished are improvements to the LA river, greater public transit enhancements between Chinatown and Exposition Park, and the connection over the 101 Freeway to link El Pueblo with downtown.

What their list substantiates is the widespread belief that infrastructure augmentation -- parks, transit, bridges, rivers, lighting, public space -- are focus areas of impact, even in this 'identityless' city of flux and fragmentation. Ironically, mobility remains a struggling objective in the city of flows. On this list, the trench site factors in prominently. Physically linking El Pueblo with downtown by somehow altering the architectural condition of the 101 remains a significant -- and unachieved -- element in the success story of downtown Los Angeles. This proves that there is support, at least in theory, for this project from the voice of the design disciplines as well as that of city planners and LA officials.

The catalytic projects proposed in *LA Now* were intended to provide key stakeholders in the city with access to the most forward-thinking propositions, backed up by several years worth of research and design responses as proof. The secondary significance of LA Now (the comprehensive initiative) was the conglomeration itself -- a stockpile of not only data and design solutions, but of pooled intellectual and creative resources in an attempt to have more substantial influence in a city highly resistant to nudging. The totality of the endeavor represented an alternative method of operation, partially in the mode of Rem Koolhaas's "Project on the City" series, that argues both for data and studio-based speculation as plausible operations to effect urban change, while at the same time becoming a highly graphic, glossy brochure, albeit a heavy one, that turns a mirror back on city officials and demands they see the truth of the conditions -- and the opportunities hidden within them. LA Now is not just a compilation of information, but a public relations work of constructed expertise intended to generate design-based metamorphosis in a place resistant to knowability.

Morphosis Revisited

In 2005, Morphosis was contacted again regarding this project and submitted new site analysis and two revised design ideas. The two new proposals are one block long deck projects between Main and Los Angeles streets. One includes a park, cafe, and visitor center supplemented with tensile structure-supported lighting over what appears to be an event or sports field with bleacher seating (See Figure 4.10). The other includes a museum and a park and has some aesthetic similarities to the original 101 Pedestrian Bridge (See Figure 4.11). What was previously 'the billboard' is thickened to become a more conventional glass building, still flanked on two sides by opposing signage that transforms into the building facades. Both translucent (one appears to be glass and one mesh), one side still bears the original name of the city and the date of its founding while

the other side says simply "LA Pavilion". The programmatic content is indicated as the new Latino Museum, likely a precursor to the Latino cultural center, LA Plaza, that opened in April of 2011 on a site just one block north of the 101 trench.

These new schemes were part of the "Latino Museum phase of the Bridge" initiated by Patsaouras and perhaps Koo (Yi, 2011). The timeline fits as the Latino cultural center gained non-profit status in 2002 and became an official project of Los Angeles County in 2004.[70] By then, the deck direction had replaced the bridge direction, and the designers were steered away from the iconic intervention that Steel Cloud and the original Morphosis 101 Pedestrian Bridge solution represented and towards an infill scheme, primarily park or open space atop a flat deck. With a heavy architectural presence, however, Morphosis was clearly trying to hold on to the larger implications of the project as an urban instigator rather than a neutral space that needs filling. These two schemes were largely forgotten.

The Final Chapter: $4 million later

The money trail of the 101 Pedestrian Bridge project tells an abbreviated version of the larger story. From the very beginning, the RFIQ foreshadowed the split between the pragmatics and the poetics of the problem. The implication in the competition was that it was a $5 million project; at the same time, the implication was that the total $5 million might go to the decking alone. This fact was exactly why Morphosis chose to avoid expensive decking all together and to focus limited resources on large design gestures, solving the pedestrian linking problem by attaching to the existing bridges and making the visually powerful sign and the existing view the primary focus.

The roughly $4 million that was ultimately secured for the project was spent in phases over

[70] http://www.latimes.com/entertainment/news/la-et-la-plaza-20110411,0,1121068.story (Johnson, LA Times, April 11, 2011)

the last decade.[71] The first part, just under $1 million, was spent preparing the Project Study Report referred to previously. The second part, just over $1 million, was a rather miraculous accomplishment gained by threats and negotiations to widen the sidewalks on the east side of Main Street and the west side of Los Angeles, in effect achieving the additional 10-12 feet of pedestrian space desired on each bridge without the expense and complications of widening the bridge itself.

The third part of the original funding, the remaining two million, represents the last remnant of the original project's money trail. Once Caltrans' Transportation Corridor Report (TCR) for the 101 tipped the risk scales in the eyes of the assessor, John Koo and Wenn Chyn were directed to implement whatever project they could with the $5 million already available and nothing more (Koo, 2011). That project was Bridging Flows, an entirely new project initiated by the Department of Cultural Affairs (Snodgrass-Lambert, 2011). An appointed selection committee (including a Caltrans representative, two arts professionals, and two people from the Bridge Improvement Program) chose two separate artists -- Ned Kahn and the technology-oriented design firm, infranatural -- from a prequalified list. Encouraging them to collaborate on a single work, they were asked to take on the responsibility, as indicted in the new RFQ, to improve the pedestrian experience over the Los Angeles and Main streets bridges. Those guidelines resulted in an art piece that would attempt to mitigate the sensory and experiential problems left unsolved in the sidewalk expansion. Now fifteen years after the original money was secured, Bridging Flows remains unbuilt as well, with $2 million still designated for its construction.[72] Bridging Flows is what John Koo calls a

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[71] $1.0 million from the 1997 Call for Projects $1.7 million from the 1999 Call for Projects, $1.2 million from the State TEA. = $3.8 million.

[72] More information on this project can be found at: http://www.infranatural.com/projects/bridgingflows.php. An interview with Rahim Vaveh, project manager of Bridging Flows for Caltrans, exposed his complete lack of awareness of the 101 Pedestrian Bridge competition or the winning solution by Morphosis. He had no knowledge that the funds for Bridging Flows were holdover dollars from the failed MTA competition. When asked if he knew anything of the previous project intended for this site, both Vaveh and Elaheh Yadegar, Caltrans Director of Projects and Special Studies in District 7 who was directly involved with the original project when it first arrived at the BOE, made references instead to 'deck one'. Recollections of any previous project for this site by Vaveh

throw away cost, a project that is small enough that it will ultimately be removed and replaced with something more substantial in the future (Koo, Wenn, Ing interview).

Conclusions: What Went Wrong With the 101 Pedestrian Bridge?

The pat response for project failure from nearly every participant is the failure of the project to receive ample funding. There is no simple equation here, obviously, between the disappearance of this project and a shortfall of finances. As proposed in the competition-winning entry by Morphosis, the project would not require freeway decking at all, yet the scope of work and the actions of politicians transformed the project from an architecturally provocative symbol to a nearly invisible and entirely empty engineering solution. The parameters then placed on the alternative decking solution of impractical objectives by restrictive and aggressive bureaucracies required such massive financial and political risk that even the most banal deck was rendered impossible.

Morphosis's version of the 101 Pedestrian Bridge was irrevocably eliminated with Councilman Pacheco's appropriation and transformation of the project into El Pueblo Park. "I don't give a fuck about your vision" was Pacheco's response to Thom Mayne and Nick Patsaouras when they presented their version of the project to him in an effort to win his support (Patsaouras, 2010). Once the City of LA and the Bureau of Engineering took control of the money and therefore the project, Patsaouras's power as project champion was effectively blocked and the BOE took direct orders from the politician. In a telephone interview with competition finalist Sarah Graham of Angelil Graham she added that "the Bureau of Engineering is the biggest deep hole on earth. They used to be incompetent -- and I'll say this to the Mayor -- but now they're badly corrupt." Based on

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and Yadegar include only a $30 or $40 million deck project that, even though it was technically approved, simply couldn't garner the necessary funding for implementation.

the analysis of the competition brief and process, however, a fundamental divide was written into the RFIQ and continued to reemerge in funding proposals, scope of work contracts, and political negotiations among stakeholders. By dedicating the initial funding to the pragmatic engineering components of the project, the architecture was in effect relegated to secondary status and ultimately made redundant. By prioritizing the transportation benefits of the project above the public space amenities, the 101 Pedestrian Bridge was further and further downscaled until any aspects of architectural interest (the so called "controversial pieces") were transformed -- literally -- into a widened sidewalk. Unlike Steel Cloud, the architecture here was generally ignored and ultimately eliminated.

Though spearheaded by a formal city agency in the beginning, the implementation process was rapidly diluted by the need to pass the project from the MTA to the City of LA and finally to the Bureau of Engineering. Not only did these diversions and decision points delay progress towards implementation, they also created a loss of momentum, disinvestment in objectives, and dilution of political will. Each hand off, plus negotiation time, further and further removed the project from design objectives established by project originators and agreed upon by the jury. The BOE shared no commitment to the greater design agenda and became powerless followers with blind leaders. "We are project managers. It is our responsibility to implement projects. We are not dreamers" says Wenn, "Our job is not to plan, it is to implement. So whatever planning has done we receive that concept and then if we can get the money, we will implement." In the end, their primary responsibility was the routine PSR which cost a quarter of the money won by the MTA and went to evaluating a project other than the competition-winning one supposedly on the table. The rest of that funding has been slowly whittled away for various politically-motivated studies and payment of city staff. The remaining million dollars is slated for a temporary public art project, as yet

unimplemented, and so diminutive as to be barely visible from a block away.

Caltrans's blinders towards traffic abatement purely through the production of more and more lane space had little compatibility with the project's other objectives. The outlandish estimates resulting in that PSR emerged from the slice of power Caltrans could still claim as their own -- the TCR projections that catapulted the project into limbo. Their unrestricted hold on land use surrounding the immediate site virtually eliminated all uses that don't support the prohibitive expense of two added HOV lanes. This kind of unchecked power play lands the site in an ongoing stalemate.[73]

In addition, these agencies are simply ill-equipped to accommodate much less solve the complex, systemic problems of the twenty-first century version of urban public space. Says Richard Weinstein, reflecting on the planning difficulties of the region,

> "[T]he most serious problems facing the viability of the [Southern California] region are interconnected, yet the agencies devised to address them are autonomous, fragmented, and organized around a single mission. Issues of transportation, land use, air quality, waste management, and housing are related yet are never addressed as a system. As a result, agencies cross-plan, cross-regulate, and neutralize each other's initiatives. The friction rising from these inefficiencies also diverts large amounts of public funds that might otherwise be put to good use" (Weinstein, 1997, p. 83).

The inability for LA agencies to work collaboratively with shared purpose and flexible implementation processes decreases the liklihood for project implementation on such a multi-agency

[73] According to project stakeholders, this blatant resistance to collaboration by Caltrans is common as they have the reputation for being both the most demanding and narrow-minded of the participating agencies. According to Koo, the engineering mentality that drives the organization means their representatives are aggressively pragmatic, relentlessly interrogative, and highly resistant to change.

site as the 101 freeway.

In addition to the unsupportive political context, Morphosis's plan of a multi-phase expansion highlighted the belief that the physical context still required greater catalyzation to support further development at the trench. The extensive multi-year and multi-institution efforts behind the LA Now studio, research, and publication project emphasized the need for reconceptualizing the urban discourse of downtown Los Angeles and disseminating that work to generate interest and investment. LA Now decidedly rejects the preordained city of structure and fixity for the unfolding realities of a fluid, complex, and discontinuous condition. The divide seems, still, between the vision of what could be and the institutionalized preordained.[74] As in the Steel Cloud project, no local residents or businesses were consulted in the process of developing the competition or selecting the winner. The socio-political ramifications of the design, then -- the bilingual billboard which might be seen as a wall dividing the city into Anglo and non-Anglo districts -- went largely uncontested.

Stalemate: Failure at the Trench

As is apparent, literally connecting the two sides of the freeway has never defined the extent of the actual problem. Though unpleasant, sidewalks do exist on every block crossing over the trench. But populating that site and transforming the experience from void at best and detrimental at worst to something meaningful, impactful and enjoyable has proved impossible so far. To this day,

[74] Says Robin Blair, in one of the most depressing interviews of this research: "This is the institutionalized form of the city. I look out the window and see it everyday. Is there anything [you see] here you would say is a great city? I don't. This isn't a great city out the window. There's not great vision here. There's no great ambition here. There's no great DNA here. It is one of the most institutionalized organizations in the world and the institutionalized form, this city, like this, will continue to grow on its own...This is what the code created, and this is what the code builds, and it's exactly this."

the widening of the two sidewalks from 10 to 20 feet is considered a small public works miracle.[75]

The persistence for a creative solution -- the persistence for any solution -- continues. If literally connecting the two sides of the freeway is not the actual problem, then perhaps the definition of the problem itself is at the root of the project failures. To persist in the belief that this is a project about ambulatory access alone lacks the understanding of the city as a constructed and complicated set of interrelated public and private negotiations. The chasm still in existence between the historical north and the gentrifying south seems to claim that LA Now and other disciplinary-specific efforts did not have their intended effect of catalyzing political and intellectual energy around the revitalization of downtown near the 101. In short, this site, regardless of its persistent appearance on plans and lists, has yet to be a high enough priority to people with power.

Yet the addition of Caltrans headquarters, the Coop Himmelb(l)au performing arts school and the Broad art museum currently under construction by Diller, Scofidio, and Renfro to Gehry's Disney Concert Hall and Moneo's Cathedral show that at least on clearly demarcated property with single jurisdiction designation (be it public or private), an autonomous building, even a radical one, can come to fruition in downtown LA if enough time and money are allocated and, significantly, a powerful enough project champion invests significant political capital. A closer look at each of these contributions to the fabric, though, shows an introversion bordering on narcissism. Disney Concert Hall attempts a rather meek contribution to the public realm with its massive staircase facing the corner of First and Grand and its wide front sidewalk, both of which are often empty and highly patrolled. The Cathedral's traditional public space, the classical urban piazza that foregrounds the entry, is literally walled off from the space of the city, turning its back and locking its doors from the

[75] apparently not entirely unrelated to Doug Failings eventual departure from visionary at Caltrans to head of a new highways division of MTA (Koo Wenn Jones interview).

public life of the street. Its largest public component is the etched glass wall facing the 101 freeway, a billboard for angelic salvation to the captive audience of passengers and drivers. The High School is effectually moated by the freeway, the steep section of the site, and the aggressively inhospitable slivers of dirty, dangerous leftover space that surround it. Its tower is a hollow, inaccessible sign that, though aesthetically dramatic, does little more than call attention to its own self-interest. The newer Police Headquarters attempts more of a public contribution, filling the figure ground of its block with a small, very accessible, park, seating, and public art. Next to it is Caltrans plaza, described as brutal and, though several blocks from the freeway, works much more effectively at the scale of the 101 than its actual city block neighbors. Those mimicking speed, like skateboarders, are its most appropriate audience. Lastly, a new Grand Avenue plan, a variation on that scheme first initiated over twenty years ago in the boom of the late 80s, has been retooled and rereleased yet again. Though the park component is set to finally open in the summer of 2012, its failed surrounding development raises doubts over the success of another large scale empty open space in the northern section of downtown Los Angeles.

Where Councilman Pacheco and Vaughn Davies of AECOM (leader of the Park 101 initiative) believe that filling the literal hole by covering the trench and erasing the freeway is somehow the solution, Asymptote and Morphosis (and those who picked those projects) believed that energizing the metaphorical hole through synergistic icon-building was the more important one. They proposed this by celebrating the trench, and hence the LA identity wrapped up in its infrastructure, through dramatic works of architecture that capitalized on the unique site condition and city-specific symbolism. Their attempt was to knit together all the urban users -- heterogeneous cultures, drivers and walkers, the immigrants of Olvera and Broadway with the whiter, richer occupants of Bunker Hill and the Financial District. So far neither the infrastructure hiding nor

celebrating versions have gained success. Where Steel Cloud seemed to collapse under the weight of its own grandiosity, the 101 Pedestrian Bridge seems the opposite -- politically (and perhaps physically) small enough and institutionally mired enough to become trapped in a sticky, uncommitted, fragmented bureaucracy.

The competing agendas of the agencies and stakeholders reflect dichotomous understandings of the responsibilities of urban public space. For Caltrans and LADOT, the 101 intervention is guised, though not necessarily supported, as a transit efficiency effort. Because it is a pedestrian initiative, those transportation agencies consider it outside their agency's purview and a distraction for their traffic mitigation efforts. For city officials, it is a beautification project, but also a political nightmare as competing players demand financial accountability -- and credit. For business owners, it is a redevelopment effort but with minor if any real advantages most of which are for players of insignificant financial status. For planners, it is an equity issue, imagining the city as a dense, diversified, and unified place with strong civic space and iconic moments of hierarchy. For architects -- the politically powerless stakeholders -- it is a once in a lifetime opportunity to tackle a site which is arguably the most exceptional -- and prototypical -- symbol of the twenty-first century city.

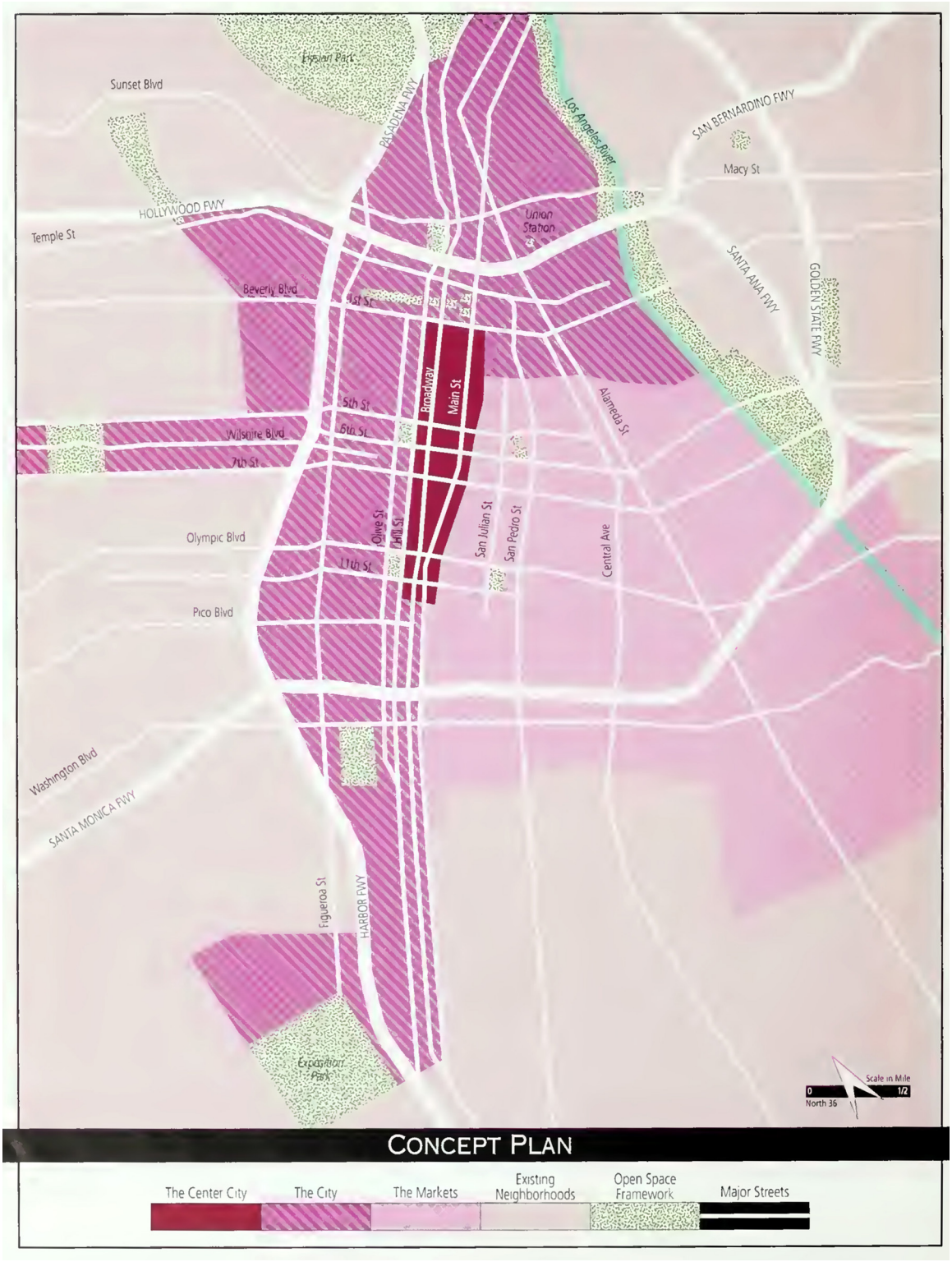


Figure 4.1
Downtown Strategic Plan, Concept Plan (1993)

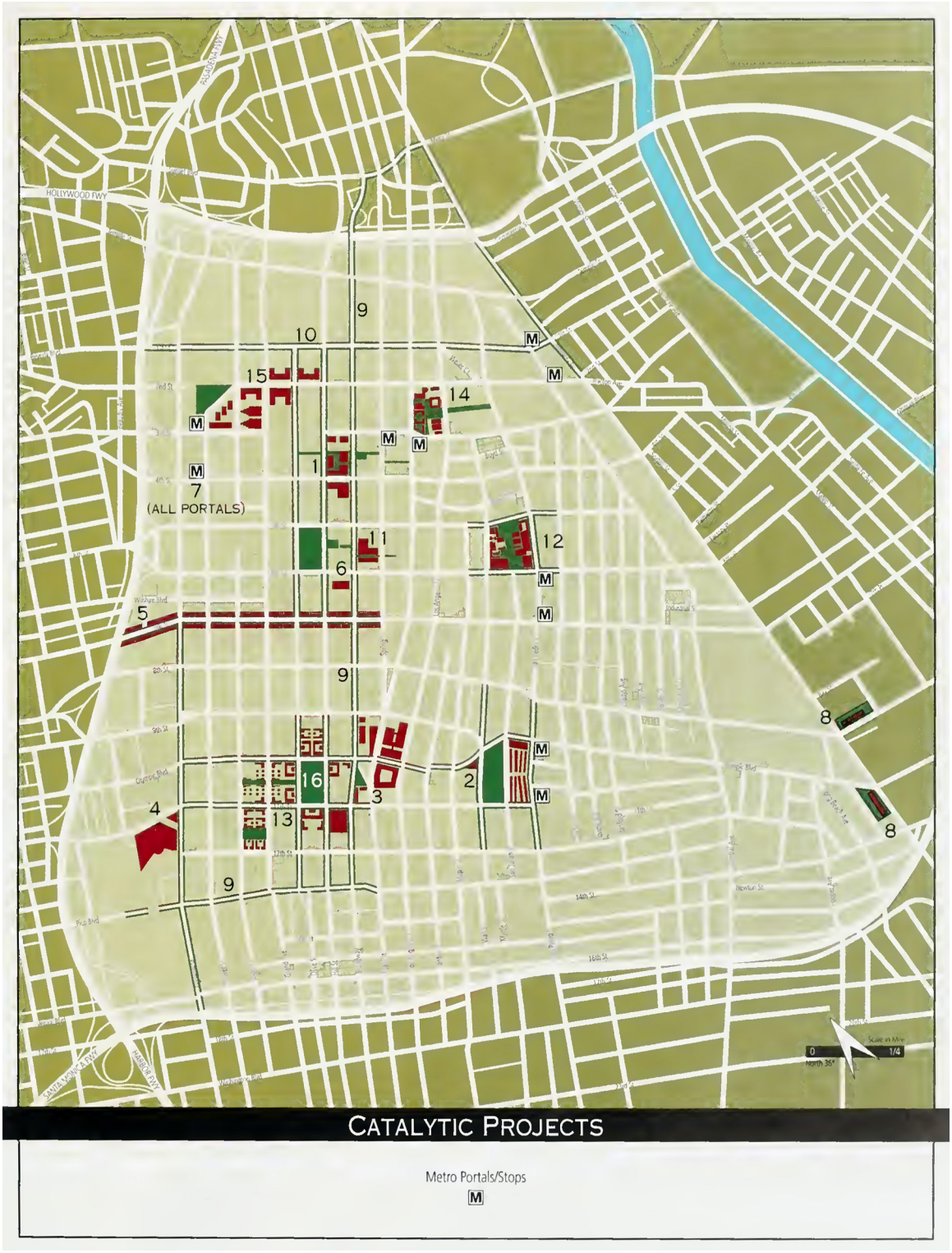
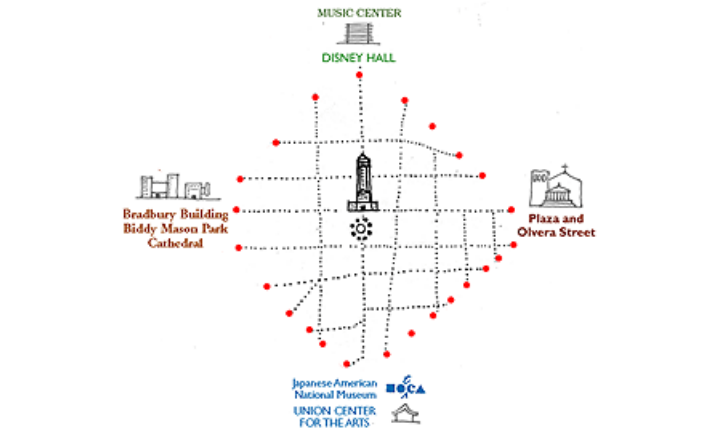


Figure 4.2
Downtown Strategic Plan, Catalytic Projects (1993)

Figure 4.3
Downtown Strategic Plan, Downtown Los Angeles 2020 (1993)



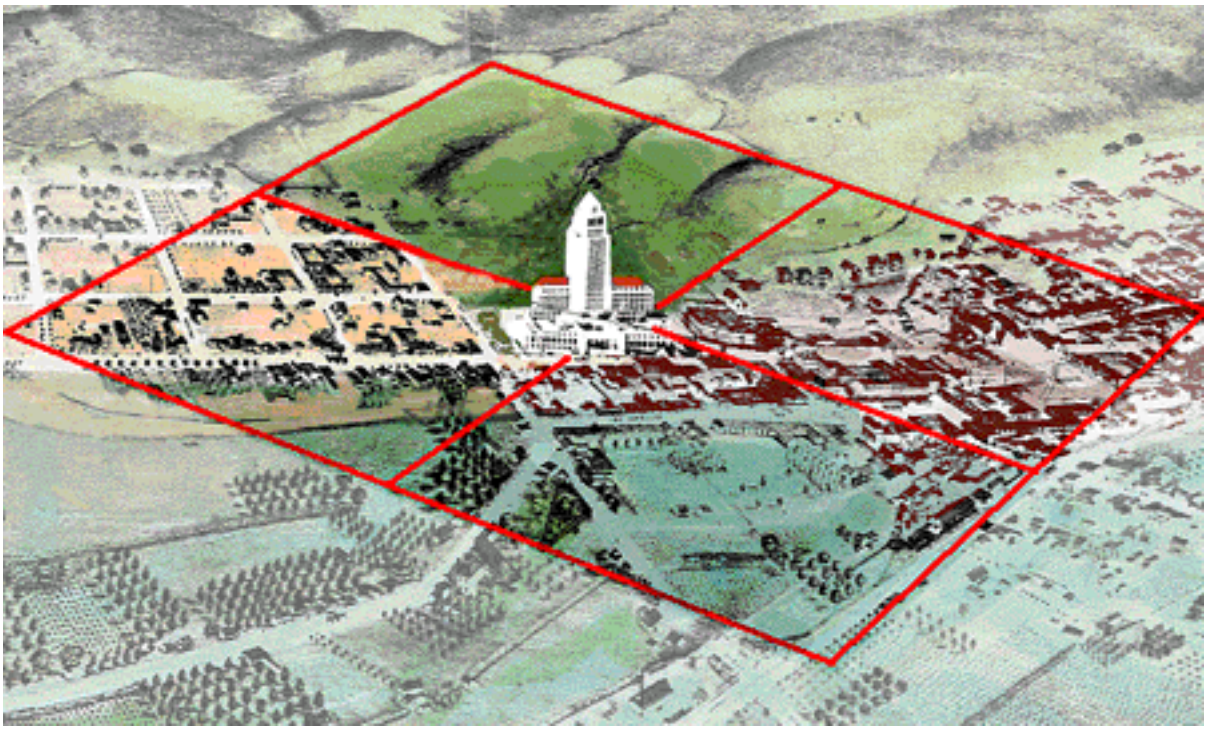


Figure 4.4
Ten-Minute Diamond Plan, Suisman Urban Design
(images accessed on line at http://www.suisman.com/Images/pdf/Civic_Center.pdf)

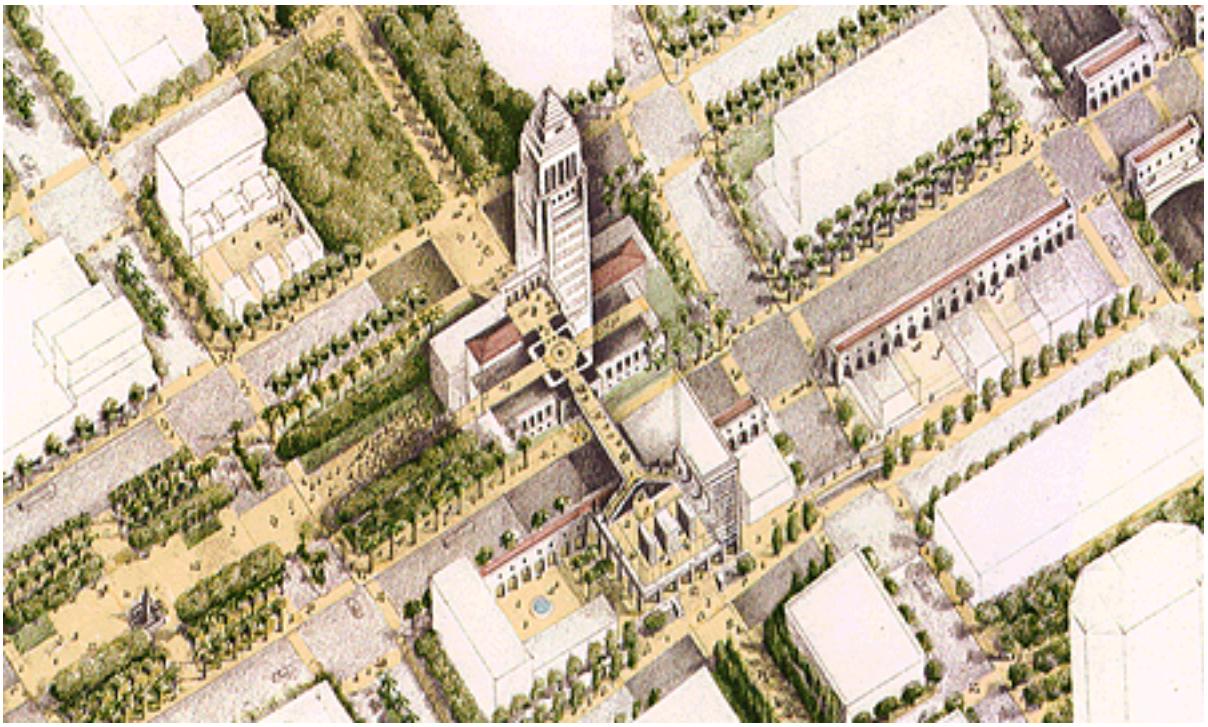


Figure 4.5
Ten-Minute Diamond Plan, Suisman Urban Design
(images accessed on line at http://www.suisman.com/Images/pdf/Civic_Center.pdf)

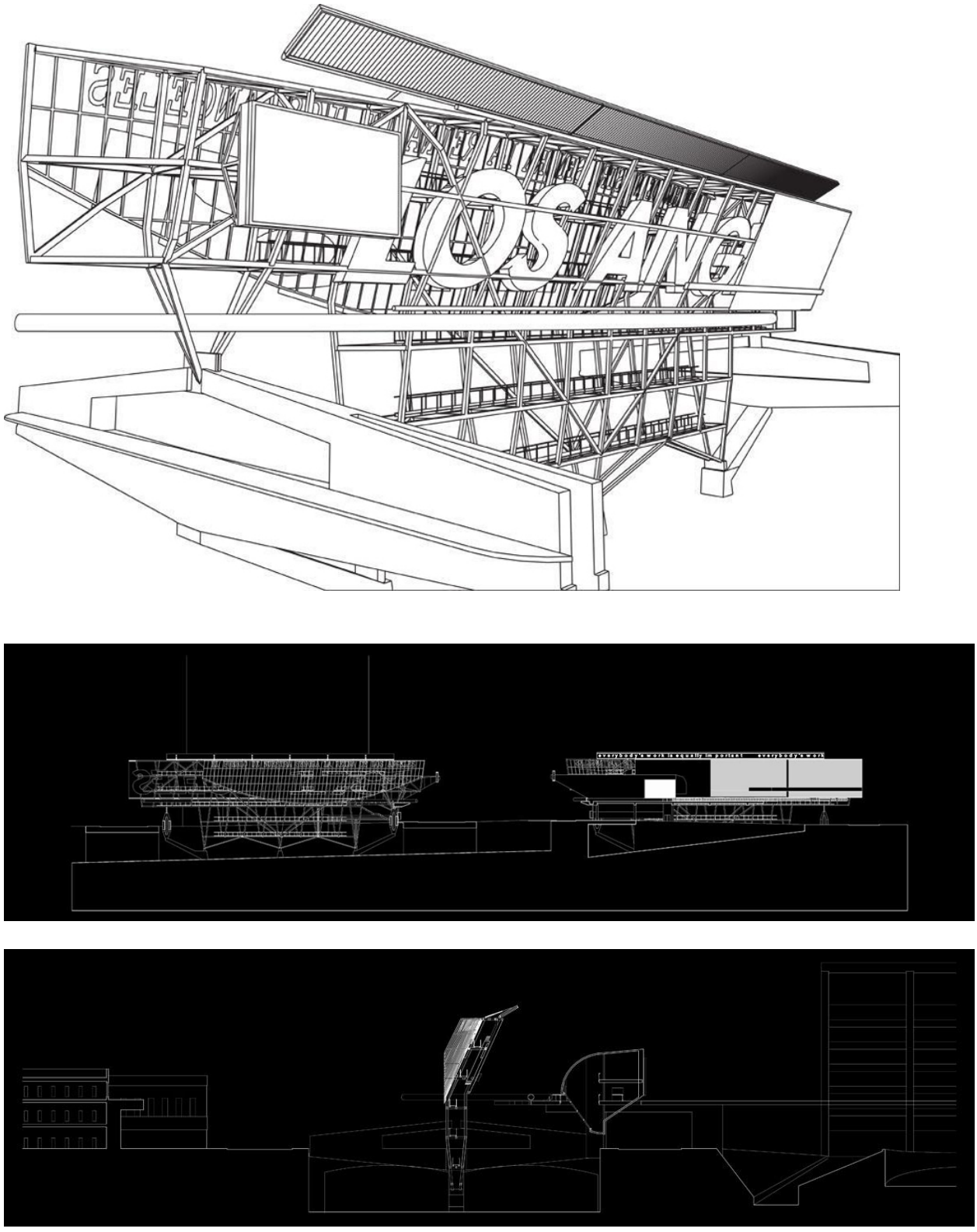


Figure 4.6
101 Pedestrian Bridge, Morphosis (perspective, longitudinal sections, cross-section)
images accessed November 2010 on line at Morphopedia, http://morphopedia.com/projects/101-pedestrian-bridge

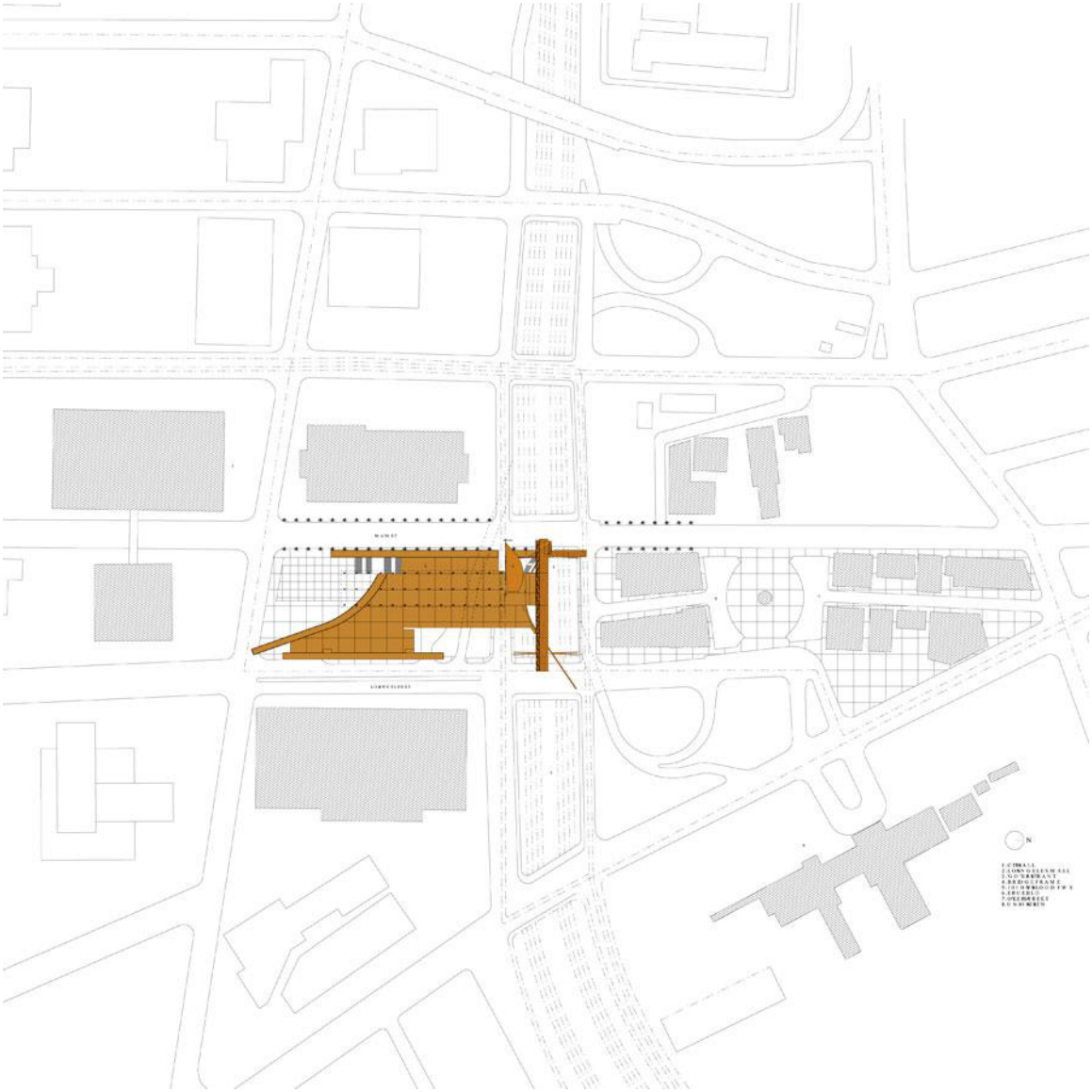


Figure 4.7
101 Pedestrian Bridge, Morphosis (site plan)
images accessed November 2010 on line at Morphopedia, http://morphopedia.com/projects/101-pedestrian-bridge

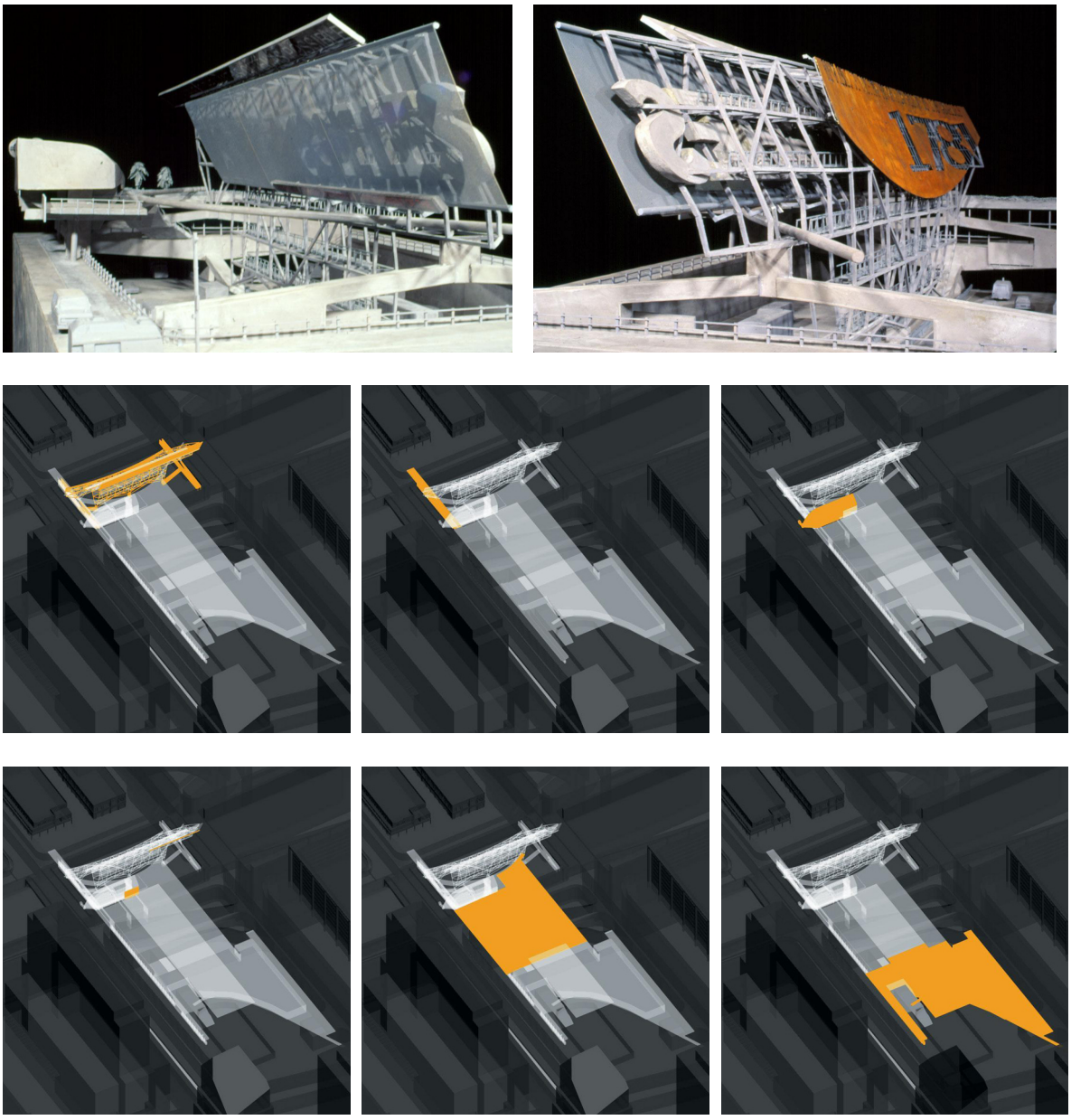


Figure 4.8
101 Pedestrian Bridge, Morphosis (city side view of model, El Pueblo side view of model; development phase diagrams) images accessed November 2010 on line at Morphopedia, http://morphopedia.com/projects/101-pedestrian-bridge

Figure 4.9
101 Pedestrian Bridge, Morphosis (perspective from Arcadia Street)
image accessed November 2010 on line at Morphopedia, http://morphopedia.com/projects/101-pedestrian-bridge

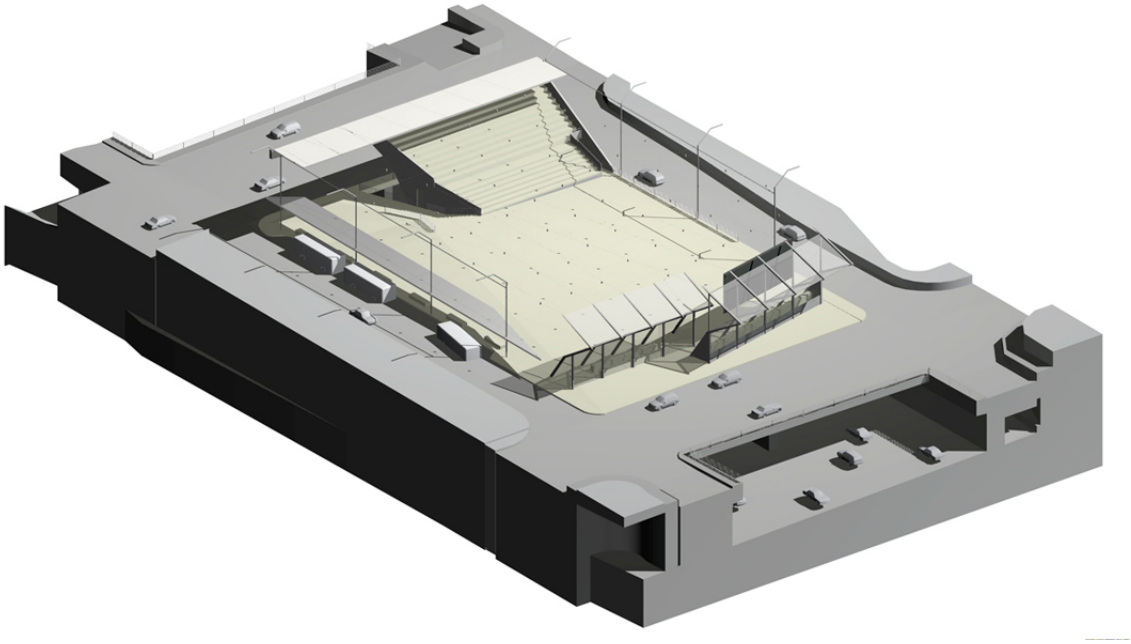


Figure 4.10
101 Pedestrian Bridge, Morphosis, revised proposal (2005)
images accessed November 2010 on line at Morphopedia, http://morphopedia.com/projects/101-pedestrian-bridge

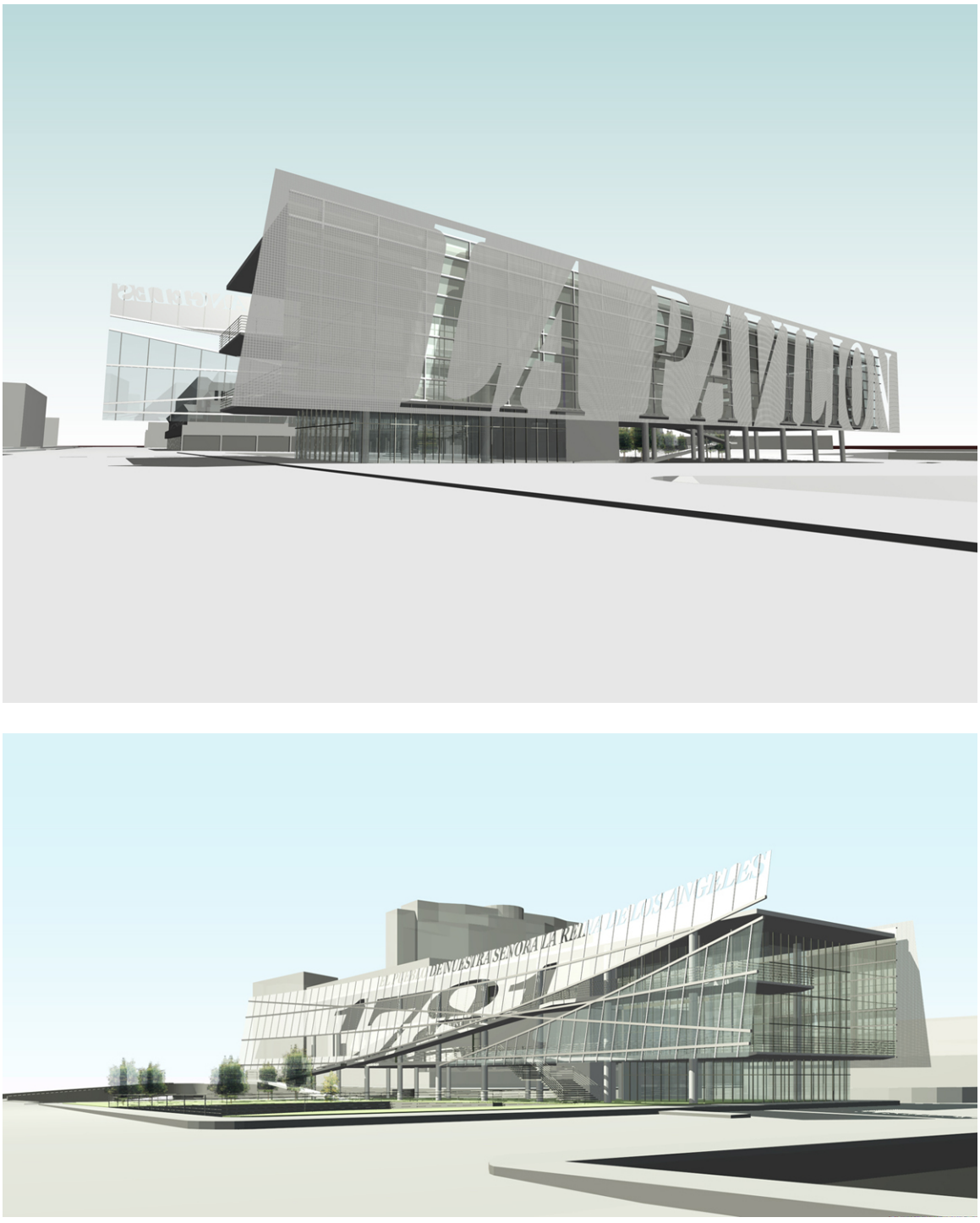


Figure 4.11
101 Pedestrian Bridge, Morphosis, revised proposal, reinterpretation of billboard (2005)
images accessed November 2010 on line at Morphopedia, http://morphopedia.com/projects/101-pedestrian-bridge

Chapter 5. URBANISM AS INFRASTRUCTURE: OLYMPIC SCULPTURE PARK, SEATTLE

Introduction: Cross-examining Failure with Success

The Weiss/Manfredi-designed Olympic Sculpture Park opened to the public in January of 2007, just over seven years after the waterfront property was purchased from Union Oil of California (Unocal) in December of 1999. One of the last undeveloped lots on Elliot Bay and slated for private residential development, the Seattle Art Museum (SAM) ultimately assembled a total 8.5 acre site between the bay and Western Avenue, split into three sections by the four-lane Elliott Avenue and an active BNSF railroad line near the water's edge (See Figure 5.1). SAM released an RFQ seeking a lead designer in October of 2000 (the same year Morphosis's 101 Pedestrian Bridge design won a PA commendation). Five design firms were shortlisted in May of 2001 before Weiss/Manfredi was selected by a "Design Panel" consisting primarily of museum-affiliated arts patrons plus a representative from Parks and Recreation and two design scholars. Though the project faced three possible barriers during its development and implementation -- the uncertain relocation of the Alaskan Way viaduct following the earthquake in 2001, public resistance to the removal of the streetcar maintenance shed on one of the parcels, and a concrete workers' strike near the project conclusion -- it was widely supported by public agencies, private donors, conservation groups, local residents, developers, and both disciplinary and popular media.

Though it shares the primary criteria for selection defined for all the cases, the Seattle project, even prior to the release of the brief, differs from the Los Angeles projects in several ways.[76] Unlike the first two, Olympic Sculpture Park was a project generated from private interests and

[76] To recap, qualified projects aim to reinvent active infrastructural sites, specifically lines of mobility, through architectural means of recognized design merit selected via design competition.

supported upfront by local, wealthy arts patrons. Donors Virginia and Bagley Wright, Jon and Mary Shirley, and Martha Wyckoff were engaged from conception to completion. Though the Shirleys contributed a substantial $30 million in support of the initial land purchase and long term operating costs, ultimately funding came from a vast range of private supporters contributing in large and small amounts (some first time museum members) plus support from numerous agencies at the city, county, state, and federal levels.

Mimi Gardner Gates, SAM director, engaged a range of stakeholders in the project early on. Unocal Oil, on the verge of seeking private project proposals, instead lowered their price and extended their time line to accommodate the museum's needs. Mayor Paul Schell and representatives from city and county agencies were project supporters even before the competition brief was released. Early conversations with Seattle's Transportation Department (SEATRAN), Parks and Recreation, and local residents and business owners cultivated a degree of shared investment and positive momentum towards successful implementation. Perhaps most importantly, though, a project shepherd devoted to steering the project at every phase of development was hired by the museum. Chris Rogers, who had been employed by the Trust for Public Land and located the original Unocal property for purchase, came with a background in art history and environmental policy and planning with professional experience related to landscape architecture, community park development, and eight years of work that included public/private and multi-agency partnerships like the ones to come at OSP. Unlike Patsaouras and other top-down project champions, Rogers worked not as a politician but a bottom-up connector, guide, and facilitator.

In addition to the initial process, the OSP site also differed from its Los Angeles counterpart. Adjacent to one of the fastest growing and rapidly gentrifying neighborhoods in Seattle (Belltown), the largest section of the lot had been spared from development primarily because of its

industrial toxicity. The total site was actually made up of three parts, two privately and one publicly owned. The "Upper" and "Lower" yards equaled just over 6 acres and were purchased by the museum in phases. The Alaskan Way right-of-way, an additional 1.8 acres, was leased from the city for two 25 year periods, completing the span of the property from Western Avenue to the water and assuring a public/private partnership. Of the 8.5 acre site, about 1/3 was comprised of existing transportation infrastructure. The assembled site provided opportunities to enhance the urban environment in numerous ways beyond the arts amenity including public access from the city to the waterfront, extension of Myrtle Edwards park to the north, restoration of environmental damage both on land and in the sound, and preservation of views to the Olympic mountains across Puget Sound and south to the Seattle skyline.

The cultural and economic contexts, in contrast to Los Angeles, are also worthy of recognition. Microsoft's success along with their ripple effects in related corporations provided a plethora of arts-inclined patrons in the midst of a pro-growth corporate economy. In addition, a series of new cultural facilities by well-known architects were further establishing the city's high design culture. These included acclaimed buildings like Rem Koolhaas's Seattle Public Library (funded by a progressive $196 million public bond measure passed in 1998, building completed in 2004), Frank Gehry's Experience Music Project (founded by Microsoft co-founder, Paul Allen, and completed in 2000), and Steven Holl's St. Ignatius Chapel (completed in 1997) -- all within three miles of the sculpture park site. The museum itself had a history of architectural investments including its original building by Venturi Scott Brown Associates in 1991.

The similarities, though, make the project a viable secondary case. Infrastructurally, Elliott Avenue does not seem to match in scale the critical case of the 101 freeway, but a seemingly insurmountable divide remained; the road and the railroad along with a wide swath of industrial-era

contaminated, uncrossable, and undesirable land, segregated the city from the waterfront. The horizontal divide was further exaggerated by a forty foot topographical drop created when the waterfront property was leveled for industrial use. Both road and railroad came laden as well with complicated logistical requirements and restrictive codes backed by agencies that could -- like in LA -- be inflexible and unimaginative. Resistance to traffic back ups, commercial disruptions, and transportation planning were certainly possible, particularly as tunneling under the OSP site became one alternative for rerouting the Alaskan Way Viaduct -- a major bypass freeway for the city -- after the 2001 earthquake. In essence, though not all road, this trench, like the 101, spanned the width of the site and hosted competing agendas, a range of agency purview, and numerous mobility demands.

Also like the 101 Pedestrian Bridge project (at least in theory), the Olympic Sculpture Park program intentionally blurred the boundary between art, architecture, and infrastructure. Though programmatically defined as a sculpture park, that framework was pushed to advance a larger urban agenda including its role as a new form of architectural bridge between disparate conditions. Like the LA cases, the intention was to further activate the immediate context, encourage greater pedestrian activity by being a node in a larger walkable network, and mitigate existing negative externalities of alternative uses. The Olympic Sculpture Park was also an open design competition that attracted numerous skillful entries (Rem Koolhaas, Zaha Hadid, James Corner -- none of whom were finalists) for a highly visible, potentially iconic project in a major urban center.

The intention of the cross-examination, then, is not to simply ask why the Olympic Sculpture Park got built when Asymptote's Steel Cloud and Morphosis's 101 Pedestrian Bridge did not. By looking at the preliminary conclusions of the LA cases and the same criteria and conditions utilized in that analysis, the analysis of the success case can identify gaps, corroborate, or dispute those conclusions, and challenge the assumptions and preconceptions that may have emerged.

All on the Same Page: Starting from a Place of Success

Like the two previous cases, the Olympic Sculpture Park was an open design competition. The competition brief was actually written by Chris Rogers and reflected input from people in the neighborhood, city officials, park advocates and, primarily, trustees at the museum (Rogers, 3 November 2011). The program section of the brief consists of a site description, design principles, artistic program, landscape program, and building program; the RFQ for the Lead Designer provides project background and guidance on the design process, selection process, and submission requirements. The brief differs markedly from the other cases in two particular and significant ways: clarity and specificity. The West Coast Gateway competition brief was packed full of lofty ambitions, both programmatic and symbolic, that not only seemed physically over-scaled for a reasonable project scope but also vaguely defined. Competition respondents, as mentioned previously, were encouraged to "interpret WCG's goals, objectives and desired functions in whatever way they see fit". Perhaps an intentional effort to allow for wide interpretation, this open-ended series of options meant that the leeway evident in the responses could drastically veer from the original intentions of the project instigators, the needs of the public (who, in the LA cases, were not even consulted), and the expectations of stakeholders. Ultimately, that allowed the jury to have a large amount of control in interpreting the objectives by choosing a solution that best suited their own visions.

The 101 Pedestrian Bridge brief on the other hand was fraught with contradictory sentiments and broad but not particularly visionary direction. From the beginning there was the confusing language regarding the relationship between the deck and the amenities, implying that the "infrastructure" and the "architecture" were explicitly distinct as was the funding for the two. In addition, the amenity to be added, other than the requirement of a pedestrian link, remained

completely undefined; no quantitative or qualitative particulars were included. The project was intended to be unified with the work of the selected artist, but again that vision was left to the discretion of the team. The single clear objective -- the "development of an efficient and enhanced pedestrian environment between the regional transportation improvements at Union Station and the concentration of county, city, state, and federal jobs and services along the Civic Center Mall" was defined, to the extent that it was defined, as a cost effective transportation option rather than an enhanced experience in public space, much less an architectural icon.

In some ways, these two competition briefs also included design ambitions outside the realm of possibility. Both imagined their successful solutions would instigate a pedestrian renaissance in downtown Los Angeles and (by greater implication) spur a revitalization of this languishing, no man's land territory, a block deep along the edge of the 101 trench. The Angel's Walk or pedestrian link idea literally fell outside the boundaries of the defined site, connecting nodes from Chinatown to Broadway. Socially, the West Coast Gateway hoped to foster a celebration of diversity and become a kind of unifier for a wide and not necessarily congenial range of ethnic groups - an idealistic if not controversial social justice agenda. It also saw itself alternatively as a monument, a gateway, or an icon -- potentially very different kinds of urban markers.

In contrast, the program for the Olympic Sculpture Park was precise and explicit without being overly restrictive. Site boundaries, site relationships, and expected scale of construction were clear. The functional requirements of interior spaces were explicit in terms of use, square footage, adjacency, and climatic necessities. The artistic and landscape programs were more open and suggestive, reflective perhaps of the changing nature of their content over time (the temporary artworks, educational, and public programming) and the opportunity for the designers to find the greater meaning and creative solution within these areas. Landscape architecture elements emerged

as the priority in the program as they defined the "park" experience, particularly the exterior sequence connecting the city to the water, the extension of the public space along the waterfront, the opportunities for views over Puget Sound and back to the city, and the support environment for viewing and interacting with the sculpture collection. The Design Principles in the program reinforced the balance of priorities between art, public space, and environmental improvements.[77]

Yet the boundaries between landscape, architecture, and infrastructure remained intentionally flexible. Part of the artistic program called "Art as Infrastructure" sought the inclusion of art into the design of the park's new infrastructural components: "Potential pedestrian bridges designed by artists could be sculptural as well as functional structures. Other commissioned features of the park may include retaining walls, stairs, entrance gates, pathways and park furniture." In the "Landscape Program", the railroad, streetcar, and shipping lanes were considered "urban elements that add to the site's character." And though the streets and railroad that divide the site were certainly recognized as challenges for a unified design, the brief called upon the designers to "integrate these transportation systems into a park visitor's experience." Pedestrian bridges, partial road depressions, and at-grade crossings were all mentioned as options for access.

Many of the promises made in the brief indicate an already in place and wholly cooperative relationship with city, county, and state agencies. In administering responsibilities for this public/private partnership, SAM and the city agreed upon an official Memorandum of Agreement (MoA) placing the museum in charge of selecting the lead designer for the project and managing and administering the full extent of the design process (RFQ). The Alaskan Way right-of-way between Broad Street and the entrance to Myrtle Edwards Park (the sliver of land owned by the city and

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[77] The six Design Principles in the program are: showcase outdoor sculpture as a vital visual art form; expose people to the arts in a comfortable, inviting civic space; celebrate the park's spectacular natural setting; create a pedestrian-friendly, contiguous waterfront open space; provide a unique venue for educational programs and special events; and contribute to recovery and conservation of the natural environment.

later leased to complete the park acreage) was noted as a key transition point in the project; SAM was given leeway in the MoA with the city to include this space as part of the site under consideration. The streetcar maintenance barn that the museum hoped to relocate because of its obstruction of views was already "under consideration by both the City and King County governments" when the brief was distributed. Streetscape improvements including new sidewalks, trees, and lighting on all three sides of the park, plus a possible extension of a pedestrian and bike trail from its end in Seattle Center to the waterfront were included as part of the site upgrade. The RFQ also mentioned ongoing engagement with community organizations, residents, and businesses in the vicinity of the park, elected officials, and agency staff from the City of Seattle and King County.

In addition, the City of Seattle Transportation Department (SEATRAN) conducted a study known as the North Waterfront Access Project coincidently with the early stages of the OSP. The study considered issues of access from the waterfront to the neighborhoods around the park including bike, pedestrian, and vehicular options, as well as engineering alternatives for the various car and train traffic relationships potentially resulting from altered transportation patterns. Remarkably (in comparison to Caltrans in Los Angeles), SEATRAN considered these issues in light of their larger urban design implications and hired Weinstein Copeland Architects, an urban design and engineering firm, to lead a consultant team under that objective.

These agreements and early conversations indicate a collective effort unseen in the Los Angeles projects. Though issues related to the city-owned property were unresolved at the time of the brief, the city still, in good faith, granted permission for the brief to include the full scope of the 8.5 acre site. They also granted a clear leadership role in the project to SAM, indicating either shared project objectives among the museum, the city, and the stakeholder agencies, or confidence

in the clarity of the process and the investment of the players -- or both. OSP was also seen as an integral component in the larger public objectives of the city. Recreational amenities, traffic solutions, and public space were systemically not competitively considered.

Finally, the program described key components of the context that made a clear argument for the project at this site and at this time. Unlike the 101 freeway, surrounded by generally stagnant sites in need of investment and densification, Belltown's growth meant that new residential units and commercial activity were on the rise. High-tech firms were moving into the area, likely bringing growing investment, and the central waterfront area was continuing on a mixed-use development path. Open public space and particularly the unique aspect of waterfront access could be supported by the density in the neighborhood. In addition, the city's interests were aligned with SAM's, as were the residents' already in place. The museum itself served as a solid symbol of reliable, high quality investment in the city's cultural fabric. The natural opportunities to populate this brownfield site for public use, to connect with Myrtle Edwards Park and to preserve, if not enhance, this area of the bay seemed, according to those interviewed, nearly inevitable.

Context In Transition

When SAM bought the first piece of property for the Olympic Sculpture Park from Unocal, the surrounding area was already a neighborhood in transition. Competition for this prime waterfront site was proceeding and a "new Seattle" was under construction all around the city. The museum had played an early role in downtown revitalization by building their primary facility in a still-seedy neighborhood in the early 1990s (Sheets, 2007); at the same time as OSP, SAM partnered with Washington Mutual to expand their main building downtown, furthering that initial investment. The park was seen as an additional effort to revitalize the district, to distribute art

outside of museum walls, to create green space in the city, and to connect the urban fabric to the waterfront. Corporate capital growth fueled the possibilities.

The OSP site had been part of an industrial port since the nineteenth century, then, after Unocal departed, sat vacant for decades. The Alaskan Way Viaduct, running parallel to the railroad, was a classic elevated urban freeway typology of the late 50s and early 60s, segregating the waterfront from the inner portions of the city. The OSP block was a lynchpin site seemingly waiting for development -- a partially remediated brownfield with a dramatic sectional drop, spectacular views, potential for ecological contribution, bordering on an already active park and an up-and-coming neighborhood.

Rather than a detriment, the infrastructure components were seen as an opportunity. Seattle already had precedents for such projects; Lawrence Halprin's Freeway Park (1976) and the renovated Gas Works Park (1975) both capitalized on infrastructural or industrial moments as physical attributes to inspire creative response and human occupation. Colonnade Park, connecting the Capitol Hill and Eastlake neighborhoods, was constructed in 2005 in the air rights space of I-5, filling the area beneath the freeway with skill-building trails for mountain bikers. Those projects had already successfully reframed single purpose or obsolete sites for new urban opportunities. OSP provided a chance to perform "a marriage of Seattle's wilderness beauty and its industrial grit" said *Seattle Times* columnist Danny Westneat (Verhovek, 2007).

The city council was also actively pursuing downtown's development in this direction. A "livability" plan for downtown led by council member Peter Steinbrueck promoted just such culturally rich, environmentally friendly, and density encouraging projects as Olympic Sculpture Park (Sheets, 2007). SAM collaborated with such groups as the Cascade Land Conservancy, "fostering Northwestern cities that are compact, densely populated, and, Ms. Gates said, 'are places

where people want to live.'" (Sheets, 2007). And, as already mentioned, more than $2.5 billion worth of public buildings, libraries, parks, schools, and cultural institutions were sprouting in nearly every neighborhood of Seattle. An active and wealthy arts community -- beneficiaries of investments in booming local corporations -- invested heavily in local arts culture and environmental causes.

People Over Products: The Value of Experience

The finalists for Lead Designer were announced in May 2001 and Weiss/Manfredi chosen in June.[78] Once the 52 submissions were narrowed to five, the intensive selection process included exhaustive visits to the hometown offices of each firm and several of their relevant built projects. According to Chris Rogers "We were looking at firm's or individual's ability to understand design in the public realm that also had a high design practice but were also going to be, frankly, good people to work with who could manage a public process well." (Rogers, 3 November 2011) This sentiment (completely absent from the West Coast Gateway brief and the 101 Pedestrian Bridge RFQ), that the solution to the problem at hand was not the primary criteria, but rather the design strategies, successful participation in public processes, and substantiated record of success seen in actual implemented projects, shifted the emphasis from the boutique, one-off solution to the evaluation of design, process, and execution skills. Attributes like personality, cooperativeness, and experience even came into play (RFQ 6, Rogers interview). Not having a design proposal for the site during the first round of eliminations and interviews shifted the emphasis from a specific solution to an assessment of the firm. Marion Weiss and Michael Manfredi were chosen just as much as their

[78] The five finalists were: Caruso St John Architects, London; Tom Leader Studio, Berkeley; Michael Maltzan Architecture LA; Michael Van Valkenburgh Associates, NY; and Weiss/Manfredi Architects, NY. A January 26, 2001 list in the *Seattle Times* also included Adriaan Geuze's West 8 Landscape Architects and Urban Planners and Julie Bargmann's D.I.R.T. Studio then in Charlottesville, VA who seem to have been preliminary finalists though were not interviewed.

design was.[79]

Finally, SAM went out of their way to make the presentations by finalists as public as possible. They each presented their work in a public lecture format followed by a typical question and answer period with the audience. According to the RFQ, all of this was to be webcast live and aired on local public access television. On the second day, the members of the selection panel interviewed each finalist before selecting a Lead Designer.

The Design Panel (called the Selection Panel in the brief) consisted of five museum-affiliated arts patrons, including Mimi Gardner Gates, Director of the Museum and the primary initiator of Olympic Sculpture Park. Jon Shirley, Virginia Wright, Ann Wyckoff, and Susan Brotman were all SAM Trustees and avid art collectors. Chris Rogers was also a voting member of the panel. The three non-museum affiliates included: John Beardsley, a Senior Lecturer in Landscape Architecture at Harvard University's Graduate School of Design who published extensively on earthworks and landscape; Ken Bounds who was the Superintendent of the Seattle Department of Parks and Recreation and served formerly as the city's budget director and in the City of Seattle's Office of Policy Planning; and Peter Reed, Curator in the Department of Architecture and Design at the Museum of Modern Art in New York where he was involved in shows concerning the work of such site-sensitive architects as Alvar Aalto and Frank Lloyd Wright.[80]

What differs between this panel of reviewers and the juries on the Los Angeles projects? First, the considerable overlap of project initiators with project jurors. This obviously means that the objectives for the project agreed upon in the brief were thoroughly understood and likely to be

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[79] The entrants in the Olympic Sculpture Park process were not asked to provide a solution up front. After being selected, the finalists were given five weeks to prepare a solution for the park (or not, as was the case for a few of the finalists who chose to only show their previous work in the interview) and present it to the design panel.

[80] Peter Reed would later curate the Landscape Urbanism show, Groundswell: Constructing the Contemporary Landscape that included the Olympic Sculpture Park as one of its projects. It would be interesting if being a juror on this competition? sparked the idea for the exhibition or not.

upheld when selecting finalists and a winner. Secondly, a vast majority of the panel were members of the local community, meaning their familiarity with the site, the institutions, and city agencies was high. Thirdly, the one most likely pragmatic, agency member on the panel had locally-based experience in planning, finance, and public space maintenance, perhaps aligning him as much with the visionary interests as the pragmatic (as opposed to the agency officials from the previous competitions who were notorious naysayers). Finally, the two outsiders selected (not living in Seattle or involved with the museum), John Beardsley and Peter Reed, were scholars and curators with particular sensitivity towards landscape-centric design. According to Rogers, when the selection was made from the five finalists, Weiss/Manfredi was a clear, non-controversial favorite.

Compared to the blockbuster starchitects enlisted for the rising buildings around Seattle, the finalists for the OSP were intentionally low key (Leader, 5 January 2012); Offices like OMA (who did enter) failed to get shortlisted. Though a public RFQ, both Manfredi and Tom Leader, another of the finalists, remember being recruited to submit for phase one. Leader's distinct impression was that SAM and the design jury were seeking someone "beyond the usual suspects". Michael Van Valkenberg, during the presentation period in Seattle, expressed doubt over his own possible success because he felt he was too well-known. Leader recalls an informal conversation with a museum employee during jury deliberations who told him of the finalists selected, they felt they had one person who represented architecture (Michael Maltzan), one urban design (Weiss/Manfredi), and one landscape (Leader) (Leader, 5 January 2012). In the end, they selected not only the firm with notable relevant experience, that also presented a highly formulated site-specific project, but one whose ambitions were beyond the exclusive reign of architecture or landscape, but a combination of gestures that would create a substantial urban impact.

Architecture, Infrastructure, Landscape

Two references emerged paramount in the earliest sketches by Weiss/Manfredi -- mobility infrastructure and contextual specificity. In a sketch labeled "Infrastructural X-ray", red and black arrows of various sizes illustrate the energy those existing spines and scales of mobility provide on the site (See Figure 5.4). On top of those is drawn the zigzagging new path of their spine, stopping to pause, view, then change directions at the center points of Elliott Drive and the BNSF railroad. The new route doesn't meander, but directs in pure geometry -- to the road and the mountain view, the railroad and the city view (See Figures 5.6 and 5.8). Infrastructure is clearly a force to be leveraged rather than hidden.

Weiss/Manfredi celebrate not just the relationship with existing infrastructure but also the reinterpretation of infrastructure as part of the experience (See Figure 5.2). Lists of 'infrastructure topologies' appear as well at the top of that Infrastructural X-ray sketch: cars, trains, streetcar, ferry, people, parking; water, power, tele-data, gas monitors; rain water, environmental systems; ecosystems [sic]/remediation, information, daylight; infrastructure is widely interpreted, existing and new, permanent and ephemeral. For Weiss/Manfredi the z-shaped spine was intended to absorb the energy from all of these -- "the urban energy of the edges and the streets, but also the energy of the trains and the highway [and] the more ephemeral energy of the waterfront, the energy of waves, tidal energy, and of the biking community." As Manfredi said, this is an urban park, and they capitalized on the dirty, busy, noisy aspects as well (Manfredi, 2012). The design process grew out of the geological and infrastructural topology of the park, the new design serving as almost an exploratory top layer to the existing historical palimpsest of industry, mobility and occupation.

Extensive thought was obviously given to the numerous existing systems present on the site and the possibilities to celebrate and supplement them. Three questions appear at the bottom of the

same sketch:

> *-- Can the plinth of/for sculpture be reconsidered as a topographically modulated & infrastrucuturally expanded landscape.*
>
> *-- How can an intelligent infrastructure support contemporary art/urban life*
>
> *-- How can a program of remediation be reformulated to support a program for art.*

These questions seem to encapsulate and reinforce the objectives of the brief, particularly the implication that this is not to be a mundane or typical sculpture park to begin with, but a hybrid: landscape becomes plinth, infrastructure becomes museum and public space, remediation becomes arts infrastructure. Their framework merges infrastructure and arts space, seeks an ecological as well as an arts-based agenda, and takes progressive views of sculpture/land/audience relationships.

Their design is also deeply contextually specific. In Lisa Corrin's essay from the museum's book published on the project, she says:

> ".. . the museum explored existing sculpture park models as the basis for discussions with the design team. Weiss/Manfredi also began a process of free play, pinning to their studio walls photographs of sculpture parks, urban parks, reproductions of artworks, and Northwest 'textures' -- vegetation, water, topographies, changing skies -- to find the *genius loci* of the city and the park site. Their shared goal was to collaborate in the realization of a model that responds to the histories and ecologies of Seattle and, at the same time, provides a unique home for both historic works of art and contributions by contemporary artists." (Corrin, 2007, p. 26)

Weiss/Manfredi's presentation boards reflect this extensive contextual research. The boards are

made up of six long horizontal, color-coded bands of information. The very bottom band is the collection of textures Corrin mentions: water, tree limbs, rocks, lichen, clouds, bark -- a sensual understanding of the qualities of both the project territory and the region. The middle three bands are timelines: geology of the Puget Sound and surrounding area; significant Seattle historical events relevant to its urban form; and precedents of what they termed 'Art in the Landscape' -- a title that itself implies a different, more integrated take on a 'sculpture park' than might have been expected.

The solution as built closely approximates these first design sketches (See Figure 5.3). The parti remains the same, though the artworks themselves, as they were curated, began to push and pull slightly on their new landscape plinth (See Figure 5.5). The consistency from idea to implementation is further testimony to the degree to which the Weiss/Manfredi proposal is so comprehensibly and faithfully a reified interpretation of the project objectives as expressed in the brief. It might also be said that the architects, the client, and the project were a good match, sharing a continuum of design, urban, and ecological priorities that the Olympic Sculpture Park was the perfect platform for exploring. The further relationship between project objectives and architect's strategy allows the design to seemingly emerge, inevitable, from the historical, geographical, and infrastructural conditions.

This is different from the two previous cases. Neither the Morphosis nor the Asymptote solution for the 101 were grounded in such an intense understanding of contextual conditions. As mentioned earlier, Morphosis felt it was a necessity to extend beyond the parameters and boundaries of the project, adding program over time to densify the context. In their analysis, the context was found lacking rather than inspiring, so much so that they felt it impossible to propose a successful solution on that site with the program as given. Where they did capitalize on existing context it was controversial. The site specific 'billboard' intended to reflect the nature of the two sides of the

freeway was interpreted oppositely by some, as a greater division rather than a unifier. The last versions showed little inspiration from the context, filling in the gaps between the road and simplifying the billboard into more of an animated facade. Steel Cloud, as so many quotations in the press stated, seemed a formal alien in its banal context. The only relationship to context the public seemed to make was to a car crash on the 101. It, too, was drawing its inspiration from non-site specific, disciplinary theories, relating more to the emerging frame of deconstructivism. A possibly appropriate theoretical response to the complicated spatial and social problematics of Los Angeles and that site in particular, still, it hardly spun an optimistic vision that would inspire civic investment.

Olympic Sculpture Park's integrated relationship between architecture, infrastructure, and landscape was also unique among the three projects. Steel Cloud in particular was endemic of a particular vein of radical rebellion against the fluid and discernable conditions of modernism. Both Morphosis and Asymptote were devoted to a materially complex and, most importantly, autonomous expression of form. Weiss/Manfredi, on the other hand, embraced a hybridized approach, reading the site as an architecturalized landscape of infrastructure -- an early expression of the Landscape and Infrastructural Urbanism movements just emerging at the time.

Finance and Politics: Leadership, Collaboration, and Barriers

Perhaps the phrases that best describe the social and political spirit surrounding the Olympic Sculpture Park are those that reappear in texts written by several of its stakeholders describing the project: visionary, legacy to future generations, catalytic force, gesture of goodwill. More than complimentary terms, the proof of broad political support seems to be substantiated by the range of financial sources and cooperative efforts that propelled the project forward. Both Gates

and Rogers credit Unocal as a key partner in the project's success due to their generous price reduction and time line extension that ultimately allowed the museum to purchase the property (Rogers, 3 November 2011) (Gates, 2007). The Trust for Public Land which located the site and negotiated the deal was also an early key partner. As mentioned in the analysis of the RFQ, city, county, and state agencies were already in consultation with the museum when the call was issued. As early as December of 1999, Seattle City Council passed a resolution that approved some version of city-level participation in the project (Updike, 1999). The later negotiation of the Alaskan Way right-of-way -- a parking lot that stood between the railroad and the water -- became another potential barrier for the project that ultimately contributed to its success.[81]

OSP benefited from consistent, though interrupted, support from city politicians. Two mayors ultimately championed the project -- Paul Schell (Mayor from 1998 - 2002) and then Greg Nickels (mayor from 2002 - 2010) -- as part of a greater waterfront revitalization, though the change in leadership required proactive public relations work (Gates, 2007). Schell, former dean of the University of Washington's School of Architecture, was particularly vocal regarding the possibilities of a revitalized waterfront. An article written by former-mayor of Seattle (Mayor from 1978 to 1990 and later director of the Harvard Institute of Politics), Charles Royer, credits Schell for his understanding of the strong symbolic and political messages that architectural vision was providing for Seattle at the time. With the construction of over $2.5 billion worth of public buildings, including libraries, a city hall, an opera house, and numerous parks and open spaces -- some by the world's most famous architects -- Royer recognized a shift in values:

The new City Hall will reflect different values, including now the value of good design

[81] City Ordinance 115429, October 24, 2005 and 121721 adopted February 2, 2005 with additional revised ordinance 115592 of June 19, 2006 accessed December 27, 2011 at: http://clerk.ci.seattle.wa.us/~scripts/nphbrs.exe?s1=&s3=&s4=122141&s2=&s5=&Sect4=AND&l=20&Sect2=HESON&Sect3=PLURON&Sect5=CBORY&Sect6=HITOFF&d=ORDF&p=1&u=%2F~public%2Fcbory.htm&r=1&f=G

> befitting an important public building... These new public buildings are doing what public buildings are supposed to do. Even before they are finished, they are political and controversial, sending out messages and symbolism, eliciting comment pro and con... Like it or not, this massive rebuilding of the city's civic infrastructure shows that we have moved from making do in our public buildings to doing it well" (Royer, 2003).

Political and controversial, perhaps, but finally debates the city and its citizens recognized as worth having. According to Royer, every neighborhood in the city was somehow improved by this new commitment to civic design. This political momentum behind civic architecture raised expectations and, perhaps, disseminated the idea that good architecture equated to higher standards of livability.

Still, the project steward was critical. It is telling that everyone interviewed -- architect, museum employees, parks personnel, etc. -- directed me back to Chris Rogers. As already mentioned, he located the original property for the park while an employee at the Trust for Public Land then was hired by SAM as, technically, the Director of Capital Projects. As he says in his essay for the OSP book, "A Gift to the Community", "the realization of the sculpture park was a complicated seven-year odyssey, ultimately requiring partnerships with many entities outside the museum" (Rogers, 2007, p. 23). As Project Manager for the Olympic Sculpture Park, he led that odyssey smoothly and effectively. In addition, an extensive team supported the project including an advisory panel at SAM, a second project management consulting team, and Lisa Corrin, who was the museums' Deputy Director of Art until her departure.

Unlike the Los Angeles cases which were inserted into the workload of agency representatives already engaged in numerous other initiatives (and likely unable or unprepared to work in a flexible or innovative manner) or led by project champions working tangential to the

system, OSP had a team whose full attention was devoted to the project's implementation success. Because it was a privately managed process, it also avoided the government bureaucracy as much as possible, instead developing strategic, powerful relationships with influential stakeholders and necessary decision makers. These relationships were expertly cultivated, making full use of all the team players and their public relations capacity.[82]

Bumps

Though the mayors and the council members were behind the project form the beginning, two political speed bumps were large enough to significantly delay the project. SAM planned to demolish a streetcar maintenance barn on the Alaskan Way right-of-way as part of the park expanse, which meant necessary relocation of the barn for future operation of the waterfront streetcar. The issue was further politicized in the 2005 council race, as competing candidates proposed various options to try to appease both streetcar and park supporters. Ultimately the option to put a maintenance barn at the port was rejected over the option of one at Pioneer Square. In the end, though, the uncertainty of additional streetcar service suspension due to impending demolition of the Alaskan Way Viaduct made the construction of a short-term maintenance barn seem inefficient. Despite alternatives agreed upon by all stakeholders, the waterfront streetcar in Seattle has not run since its closing in November of 2005.

The uncertainty of the Alaskan Way Viaduct project was a second, large speed bump. Following the earthquake of 2001, its structural resilience and long-term capacity were questioned. In 2004, John Rahaim, planning director for the city's Department of Planning and Development,

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[82] Michael Manfredi recounted being called by Mimi Gates to participate in events, discussion groups, and dinners where he might socialize or give presentations to Senators, Council members and other key players. Rogers, who ran the day to day operations, would also quietly cultivate these relationships on a constant basis, particularly with the new Mayor halfway through the project (Manfredi interview, Rogers interview).

spearheaded a charrette where architects, landscape architects, planners, and members of the public developed alternative solutions to the elevated roadway (Gilmore, 2004). Most teams chose to demolish the elevated road and instead construct a tunnel to carry the traffic from Route 99. An option pushed by city officials, the ultimate $2.5 to 4 billion price tag and troublesome reputation of Boston's Big Dig (under construction and far over schedule and budget around this same time), elongated the debate over options. In the meantime, the route threatened to go under the Olympic Sculpture Park, delaying construction for nearly a year.

In the end, the tunnel route was revised (and has yet to be built, though a current proposal estimates completion in 2018), but not without elaborate public debate. This debate actually seemed useful for the ultimate success of the Olympic Sculpture Park, as the idea of a dramatic and potentially expensive waterfront revitalization took root in the minds of planners and the public alike. Questions of reintegrating the city and the waterfront, of infrastructure's contribution, of scale, mobility, and pedestrian access were all raised by the conversations surrounding the viaduct. In some ways, this project asked the hard questions about urban values and the degree to which the citizenry and their government were willing to make financial commitments and take risks.[83]

This debate -- exactly the kind that was missing from the political and public conversation in Los Angeles -- framed the project in terms of civic investment, not in terms of efficiency or transportation. It also sought, for the price, more usable and impressive levels of design innovation worthy of the emerging architecturally-rich city. OMA's public library in particular was part of constructing a technologically advanced urban architecture worthy of its tech corporate citizens.

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[83] Doug Kelbaugh, famously conservative urban planner (and former chair of the Department of Architecture at the University of Washington) was actually arguing for the preservation of the viaduct as a series of greened ruins (Agnew, 2002; Kelbaugh, 2002). Bruce Agnew, writing as a guest columnist, pushed the city to be even more radical in their infrastructural reinvention suggesting not only that the viaduct be torn down and then tunneled, but that pedestrian access be increased throughout the waterfront area, the railroad be submerged, more of the shoreline be restored, surrounding interstates be expanded and "lidded" (or covered with park, commercial space and transit stations), and bus rapid transit be expanded. His argument was -- if we're going to pay $30 billion to underground the Alaskan Way Viaduct, it might as well be visionary (Agnew, 2002).

Royer's contrast of the 2000s Seattle with that of three decades earlier was drastic. The previous city hall "was a powerful statement on behalf of civic frugality" but the new one was "inspirational as an expression of civic and aesthetic values." The library was risky, meant to "challenge and inspire", and to be a new city icon. "[W]e want quality in our built environment as much as we want and value quality in our unparalleled natural environment" (Royer, 2003). Political will seemed aligned with the people's will.

SAM and the designers of the OSP leveraged this debate in several ways. Instead of spending the $50-$80 million estimated by transportation engineers to bury the viaduct at the water's edge and simultaneously reinforce the also threatened seawall, OSP stakeholders proposed a public amenity alternative. The much more affordable $5.5 million from King County, the City of Seattle, the State of Washington and the federal government went towards a pocket-beach that included a submerged rock buttress for reinforcement, a shallow near-shore salmon habitat, and the first re-creation of a natural shoreline for Seattle's central waterfront. Together, these efforts also achieved the goal of creating the continuous waterfront park from Myrtle Edwards south. The tunnel plan was relocated.

These kinds of moments, where barriers were turned into opportunities -- both for design and for funding -- reflect a level of innovative thinking that required flexible institutions with the ability to solve problems across agencies and with the design team. Olympic Sculpture Park emerged more and more as a small fraction of the much larger and more expensive work to be done on the city's west side. Though the viaduct and the streetcar barn controversies both resulted in project delays, they ultimately reinforced the vision of the park as a simple, affordable, effective solution for connecting the city and the waterfront, improving ecological conditions at the shore, and encouraging greater pedestrian activity. The previous pollution on the site (now combined with

these new eco initiatives) opened up funding opportunities from the Washington State Department of Ecology and the Department of Housing and Urban Development (Rogers, 2007). This funding then allowed for additional partnerships with public agencies at various levels of government.

Funding

Estimated originally as a $37 million project with an expected completion date of 2003, the project estimate then went to $60 million in 2002 (estimated completion in 2004) and finally came in at $85 million and opened in January of 2007 after the last delay (a King County concrete worker's strike). The funding was multifarious, from the NEA grant that funded the competition to the numerous technology millionaires who gave multi-million dollar gifts.

Though the park was roughly one-quarter funded with public resources ($21 million) and three-quarters with private resources ($64 million), the breakdown tells a more refined story. In addition to the $30 million provided by the Shirleys and the $20 million (or more) by the Gates Foundation, 6500 private donors --roughly half first time contributors to the museum -- helped fulfill the $180 million capital campaign (Sheets, 2007).[84] Twelve project "Stewards" gave between $2.5 and $4.9 million, including, separately, Washington State Department of Ecology and Washington State Department of Transportation (to put this in context, the initial budget for the 101 Pedestrian Bridge, not including "amenities", was $5 million) ("The Transformation of SAM: Campaign Contributors," 2007). In addition to NEA funding that went towards the selection of the lead designer (under their new public works program) and funding from local, state, and federal agencies, Seattle citizens also voted for a parks levy in 2000; $2.1 million from a Real Estate Excise Tax (REET) went towards improvements within the Alaskan Way Boulevard ($1.5 million) and

[84] $180 million was the combined campaign for OSP and the museum expansion downtown.

$600,000 for improvements on the seawall (Parks and Recreation, 2006). The museum development authority (MDA) of the city backed $65 million in bonds for the museum and a capital campaign for both the park and the main museum. According to Rogers, when the tech bubble finally did burst, public funds kicked in to fill the gap.[85]

The Olympic Sculpture Park was certainly politically supported and well-funded --- two integrated aspects of the analysis. The initial phase of the project collected the town's most well-connected philanthropists to each other and to the museum. Crossing numerous advisory boards, symbiotic relationships sparked a series of donations and acquisitions (money, land and art) that grew the project's visibility and possibility rather rapidly. These well-connected philanthropists and their interests in public space and culture aligned nicely with the city's interest in redeveloping the waterfront and connecting it back to the city. Mayor Schell's connection with the architecture community might have been integral to the elevation of architecture's profile, along with what seems to be a generally high respect for culture, environmentalism, parks and public space that already existed in Seattle. Political will, in other words, was generously granted rather than risked. The trauma of the earthquake actually exacerbated the planning process by putting large, significant questions in the forefront -- what to do with the viaduct? And, if it goes, how might the city reconsider the newly opened waterfront? What does all of this mean for the ecology of the sound and other issues of livability like transportation and green space? Finally -- if we're spending all this money, says a city with expectations of architecture and culture, how can we innovate and create space and objects that represent the aesthetic and human values we want to promote? Critically -- what are Seattle's values and how do we produce a city that reflects them?

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[85] Fiscal note for Capital Projects attached to Council Bill number 115592, approved June 19, 2006 accessed December 27, 2011 at http://clerk.seattle.gov/~public/fnote/115592.htm

Resistance: leadership or intimidation?

When asked what aspect of the project was most necessary for its success, Chris Rogers said leadership from the museum and from the city. "We controlled the process pretty well," he said, "It was led by the museum so the museum took leadership and frankly didn't take no for an answer when there was resistance" (Rogers, 2011). Though Gates calls the project "a fortuitous confluence of vision and serendipity" by its founders (Gates, 2007, p. 10), there are those who claimed this control was at times aggressive. Representatives from Seattle Events, an organization that plans Hempfest (a 100,000 person free speech celebration in Myrtle Edwards Park that's been happening since 1991), sued the city in 2006 over issues of permitting and access.[86] Though required by the city ordinance to provide ample public route for events held in Myrtle Edwards Park, they claimed the point of connection between the park and OSP was narrower than required. Though Seattle Events repeatedly raised concern during the design finalization phases, it wasn't until a bottleneck resulting in human gridlock occurred at the 2006 festival that the conflict garnered real attention (J. Davis, 2012a). On site alterations by Hempfest organizers to avoid an impending life safety hazard resulted in elevated battles between SAM and Seattle Events mediated by the city. In the end the city was ultimately responsible for enforcement of code requirements and no changes were made.

John Davis, Vice-President and Chair of the Board of Directors for Seattle Events, sees OSP as part of the ongoing imbalance of power between the very wealthy of Seattle and the less powerful. According to him, the successful implementation of the Olympic Sculpture Park was another "wielding of excessive influence and money" (J. Davis, 2012b). In addition to the reduced physical access for people and vehicles to the highly popular festival grounds in Myrtle Edwards Park, Davis

[86] John Davis, Vice-President and Chair of the Board of Directors for Seattle Events, provided extensive links to articles and council meeting recordings that covered this controversy over Hempfest. (personal email exchange, January 3-6, 2012).

also cites more typical gentrification problems such as the displacement of homeless, lack of public toilets and drinking water access. Hempfest still continues on the site, yet one long-running July 4th festival ceased to exist in 2006 after decades of events.

Though there is general amiability between Seattle Events, the public and SAM over this issue, there are several indications in the press, council meetings, and interviews that SAM ultimately hoped to pressure Hempfest out of existence, or at least encourage their relocation.[87] This sense of pressure along with the disappearance of the streetcar and the delay and relocation of the Viaduct tunnel, gives some sense of the influence necessary for successful implementation, even in an extremely supportive environment. According to Davis, Chris Rogers once told him "This project is about the new Seattle. You represent the old Seattle" (J. Davis, 2012b). A local official supported Chris Rogers' assertion when he said, "It's obviously world class, an amazing asset to our city, but I think it was the weight of the constituency, the fact that it was being done by the private sector, it managed to use this derelict piece of Union oil contaminated property that had sat in the middle of our city idle for decades, that it had everything going for it -- basically, get the hell out of the way because we're coming" (DHI, 2012). Though regretful to those more attached to the previous, less formal, less institutional and more rugged version of the waterfront, the new Seattle is OSP and projects like it.

Discourse: Architecture, Infrastructure, Urbanism

The list of accolades received and number of publications and exhibitions that include OSP are extensive. The project won a Progressive Architecture Award in 2003 and was included in

[87] No changes were made to OSP to improve access and no action was taken against SAM or the city regarding access or in terms of a permitting infringement beyond this initial lawsuit. All parties have since worked to continue amicable relations.

MoMA's "Groundswell -- Constructing the Contemporary Landscape" exhibition (curated by OSP jury member, Peter Reed) in 2005. After that, it won awards from the AIA, ASLA, Seattle Design Commission, the Cascade Land Conservancy, engineering associations, preservation associations, travel magazines, and cultural organizations -- nearly 20 different awards by 2008. One of the most prestigious, Harvard University GSD awarded it the Ninth Veronica Rudge Green Prize in Urban Design. Its positive impacts on the Belltown neighborhood, the city of Seattle, and its waterfront redevelopment are well documented; the experiential qualities of the space, the landscape, the beach connection and the sculptural plinth are as well.

One of OSP's substantial contributions to the discourse is its role as a new model of urbanism. Disciplinarily, it breaks new ground as a successful hybrid of architecture, landscape, urban design, public space, and art -- all of which capitalize on the potential of the existing infrastructure (roads and railroad) and the opportunities to create new infrastructure (bridges, sidewalks, paths, bike trails) and new forms of infrastructure (data and light plinth, eco habitat seawall, art bridge). Exemplifying many of the tenets of landscape urbanism, it is, as elaborated on by Charles Waldheim, "layered, non-hierarchical, flexible, and strategic.... a horizontal field of infrastructure that might accommodate all sorts of urban activities, planned and unplanned, imagined and unimagined over time" (Waldheim, 2006, p. 41). It is a project, as well, that integrates public space and the infrastructure of transportation. These characteristics also defined the postmodern urbanism of Tschumi's (winning) and Koolhaas's designs for Parc de la Villette in 1982, though few other projects that attain such relatively equal and noteworthy status for architecture, landscape and urban design were built between the two.

Though the competitions for Downsview and Fresh Kills, two of the largest and more recent projects under the landscape urbanism umbrella, occurred within a year of the competition for

Olympic Sculpture Park, the latter is implemented and operational while the other two, much larger in scale and decidedly more park than architecture, are slowly being phased into construction. The realization of OSP (like New York's High Line) means it operates in built form as proof of possibility. National and international city officials (including New York's Mayor Bloomberg and Director of City Planning, Amanda Burden) have studied Olympic Sculpture Park as a successful model of bold thinking and public/private partnerships for urban reinvention (Manfredi, 8 January 2012).

Olympic Sculpture Park provides the opportunity, then, to dissect what might seem minor differences between Landscape Urbanism and Infrastructural Urbanism. Unlike Waldheim's characterization of the accommodation of infrastructural lines, OSP's relationship with infrastructure follows more closely Stan Allen's conception of field conditions and infrastructural ecologies. In this project, infrastructure is not an object but a vector; the set of contextual, infrastructural forces are not just accommodated by the park, but drive the design response. This is made evident in Manfredi's "Infrastructural X-ray" diagram where the lines of multi-scaled, multi-speed urban movement are integrated with the z-shaped organizational spine of the design.

The horizontal plane of OSP is as much a new organizational system as artificial ground plane. The plinth of green, as seen from the very first diagrammatic collage, supports sub-structures of old and new infrastructure: drainage and marine outfall; environmental remediation; power, teledata, and security; lighting; primary, secondary, and tertiary paths of movement; and landscape and art program precincts: turf, meadow, groundcover, and beach. The thickened eastern edge is a multi-story building roofed by the green plane covering indoor galleries and educational space with parking beneath. The ground plane folds between them to accommodate the outdoor amphitheater and space for Richard Serra sculpture; the thickened ground plane is lifted, held back, or parted by

retaining walls that open the view to the road and the railroad, and use a freeway-based material language adapted and refined for varying experiences of light, shadow, view, and texture, and the fluctuating scales of movement on the site. This 'park' is in no way organic, but structural, geometric, architectural.

Richard Sommer makes the distinct observation that Olympic Sculpture Park is perhaps the first successful urban reuse project that was not developer driven and therefore eschews both "festival" urbanism and corporatization (Sommer, 2008). He, instead, puts the project in the much more disciplinarily-compelling lineage of Kotter and Rowe's *Collage City*, Constant's *New Babylon* and Superstudio's *Continuous Monument*, Lefebvre and the Situationists, and the land art heavyweights of Serra and Smithson:

> The park brings together, perhaps for the first time in North America, several of the critical themes that have animated the creative discourses of architecture and urbanism in recent generations. In roughly chronological order, these themes include: subject-driven remappings of the city as a more continuous plane of occupation, Duchampian artistic tactics that take the found detritus of both the built and natural world and create indexes through which to see them anew, and a post-Olmsted remarriage of landscape and infrastructure design (Sommer, 2008, p. 69).

Olympic Sculpture Park, Sommer argues, is not the more traditional form of urban design intent on recomposing the city through a design-infused planning practice, but an alternative history of urban design, one that is situation driven and focused on reinventing the physically or programmatically obsolete site. Additionally, I would argue, OSP emerges from a rich patina of context and use, the thick description of history reframed and modernized, yet not abstracted.

Infrastructural urbanism, again according to Allen, is a material practice, distinct from the

image and abstraction that have ultimately been the defining features for a project like Steel Cloud. It is purposefully grounded in concrete proposals, instrumental in their formation of a collective and performative realm, and aimed at implementation. Infrastructural urbanism "is a way of working at the large scale that escapes suspect notions of master planning and the heroic ego of the individual architect" (Allen, 1999, p. 52). Both Morphosis and Asymptote subscribe to a different, more autonomous, kind of urban insertion. Weiss/Manfredi, engaging several of Allen's propositions for infrastructural urbanism, created a project that: is flexible and anticipatory; is constructed through the construction of the site; allows for broad participation in forming the intentionally collective city; accommodates the local yet maintains broad continuity; organizes and manages complex systems of flow and movement; operates as an artificial ecology; and maintains an architectural approach to infrastructure through detailed design (Allen, 1999).

Final Thoughts on OSP

In the end, the OSP team -- architects, landscape architect, artists, museum leadership, project manager, city, citizens -- was strong and unified in their ambitions. The objectives were clear and when they did change, grew toward a shared vision for Seattle's waterfront. The team was well-supported, well-connected, and well-qualified to implement the project, and it has, as expected, become both a destination and an icon for the new Seattle. The project seems a nearly ideal public/private collaboration resulting in a tremendously successful public space that contributes to the artistic culture of the city, reclaims a once-toxic industrial site, reconnects the city to the waterfront, improves the ecological footprint and experience of the city -- all while celebrating the urban energy of the highway and railroad. It also breaks ground on a new urbanism discourse, one that prioritizes implementation and collaboration over autonomy and abstraction. In addition,

OSP provides the kind of programmatically flexible spaces that allow for impromptu, informal gatherings among a vast variety of occupants. Its environmental, ecological agenda has created an inherent politics of place as has its relationship with its surrounding context. As an extension of the bicycle path, a brownfield remediation site, and restored salmon habitat, it reifies its environmental values, at least, in space. Though there was a conflict with event organizers over access to the adjacent park which does imply some access limitations and behavior controls, the negotiation played out in a way that allowed all parties to be seen and heard through civil channels. OSP, like nearly all public space today, is still in some ways a controlled, surveilled environment, but it does provide opportunities for moderate disorder with both pre-existing and new infrastructure as the ground for interactivity.

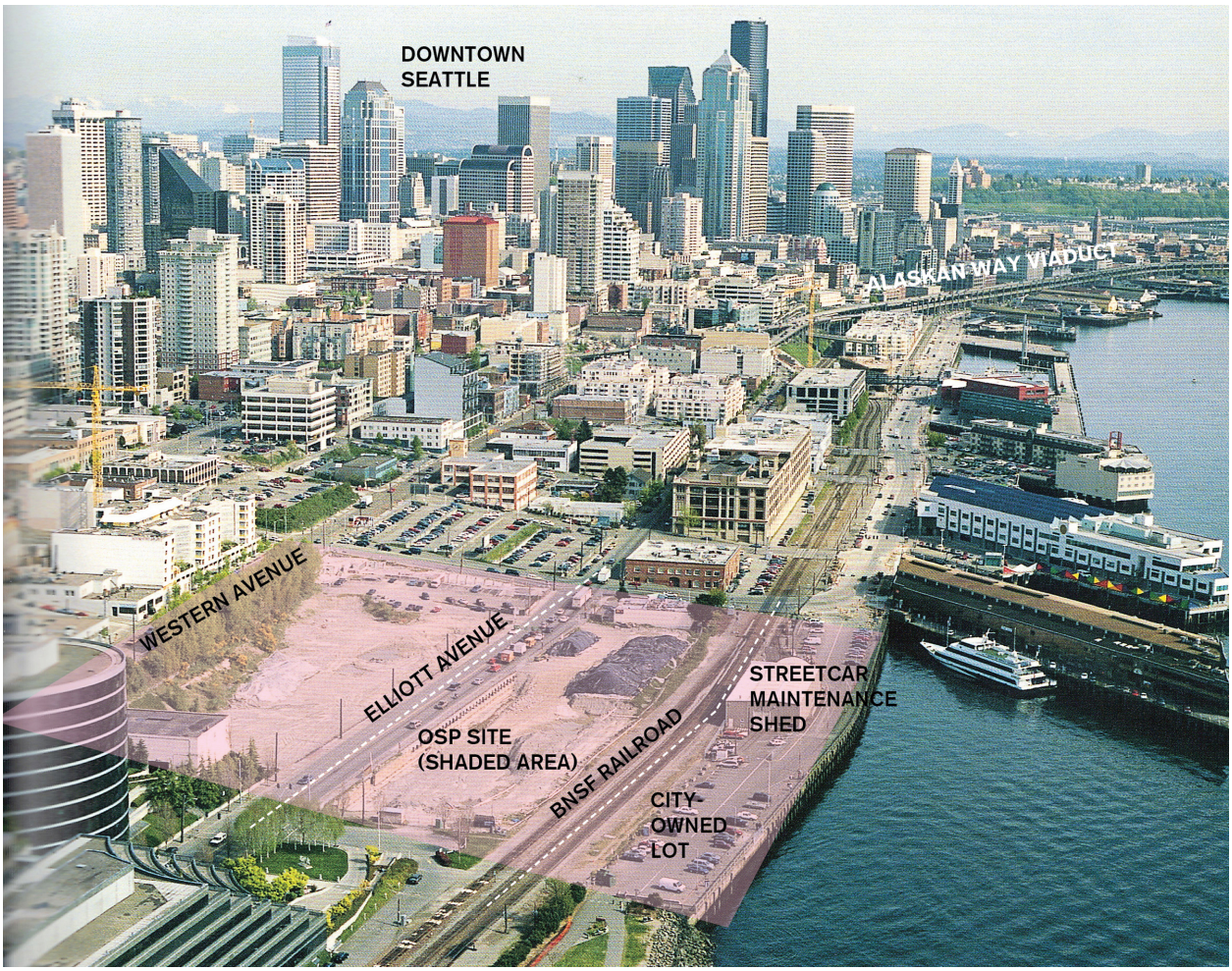
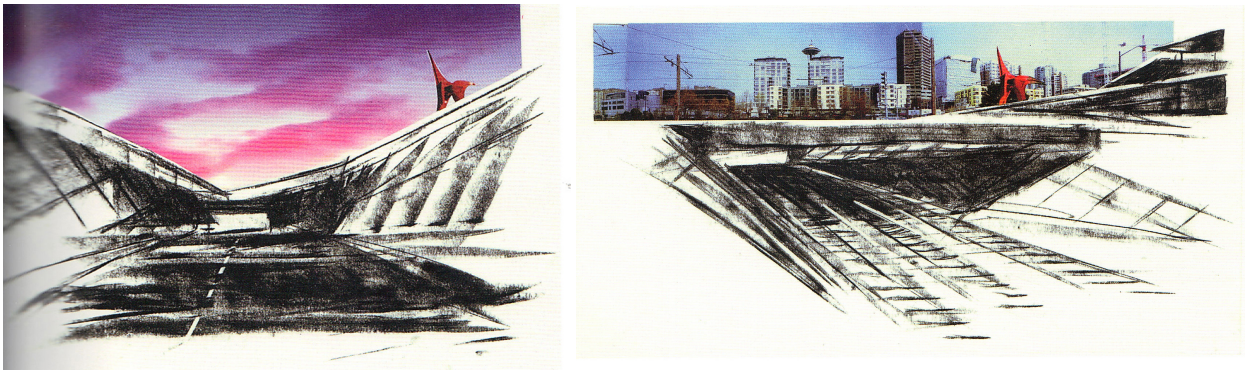


Figure 5.1
Olympic Sculpture Park, Weiss/Manfredi (site diagram)
three site parcels separated by road and railroad prior to project implementation (by author)



Figures 5.2
Olympic Sculpture Park, Weiss/Manfredi (architect's sketches)
view from Elliott Avenue and BNSF Railroad
images from Seattle Art Museum's publication, Olympic Sculpture Park (2007)

Figure 5.3
Olympic Sculpture Park, Weiss/Manfredi (before and concept collage of z-shaped spine)
images from Weiss Manfredi, Surface Subsurface (2008)

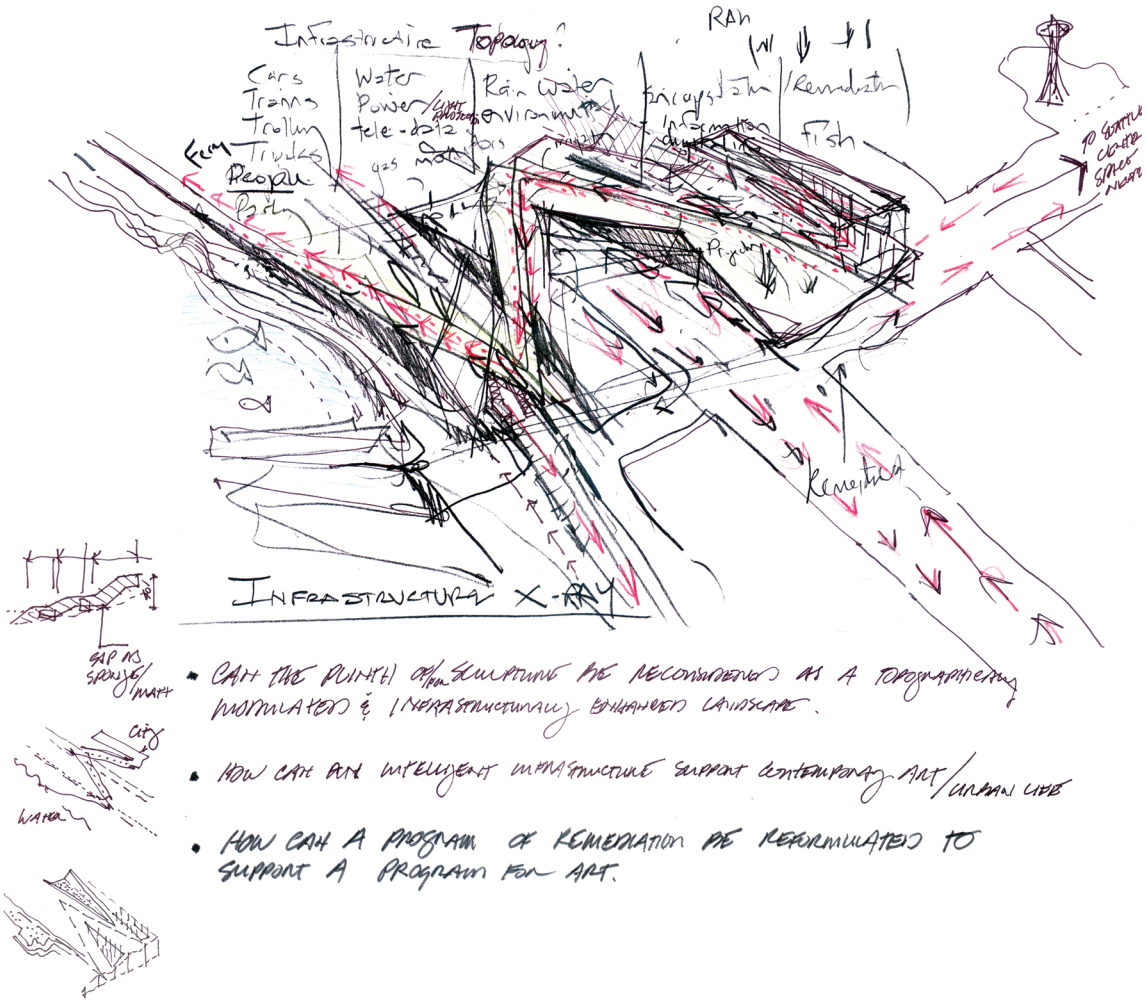


Figure 5.4
Olympic Sculpture Park, Weiss/Manfredi, Infrastructural X-ray Diagram
courtesy Michael Manfredi (2011)

Figure 5.5
Olympic Sculpture Park, Weiss/Manfredi, original parti diagram
courtesy Michael Manfredi (2011)

Figures 5.6
Olympic Sculpture Park, Weiss/Manfredi, Western Avenue site entrance
(photos by author)

Figures 5.7
Relationship between Elliott Avenue and Olympic Sculpture Park
(photos by author)

Figure 5.8
Relationship between BNSF railroad and Olympic Sculpture Park art as infrastructure: *Seattle Cloud Cover* by Teresita Fernandez (photo by author)

Figure 5.9
Relationship between BNSF railroad and Olympic Sculpture Park art as infrastructure: *Seattle Cloud Cover* by Teresita Fernandez (photo by author)

Chapter 6. CONCLUSION

Cross-examination: How the Olympic Sculpture Park differs from Steel Cloud and the 101 Pedestrian Bridge

In some ways the Olympic Sculpture Park seems very different from the Los Angeles cases, yet many of the reasons for failure, once explored, can be traced to surmountable conditions. These contrasts corroborate the findings regarding many of the implementation research criteria as they are evident and strong in the success case and weak or lacking in the failures. They also reinforce the accuracy of the six categories of evaluation, with minor adjustments. Finally, several new issues emerge in the success case which are added to the conclusions. Again, the objective here, utilizing the same criteria in all cases, is to identify gaps, corroborate or dispute the conclusions of the failure cases, and challenge their assumptions and preconceptions.

Objectives: competition brief, jury, winners

Regarding the implementation criteria derived from Pressman and Wildavsky and updated by Mazmanian and Sabatier, the Los Angeles cases fell apart in very fundamental ways. Both Steel Cloud and the 101 Pedestrian Bridge lacked consistent and agreed upon objectives from the conception of the competition brief through the project selection phase. Hints of diverging objectives are first evident in the actual written content of the competition brief. As previously mentioned, the West Coast Gateway brief was vague and grandiose, leaving room for any variety of interpretations which may or may not have aligned with the real or appropriate objectives of the site. The 101 Pedestrian Bridge brief was conflicted from the start, divided between the bare bones

transportation objectives and the subtle hints for an architect-led, artist-inspired LA icon. The make-up of the jury established a second round of priorities. The jury for the West Coast Gateway, encouraged by the freshly minted Aks Runo clan from Harvard, tilted that selection towards a high-design solution. Not only did the objectives vary among the original project stakeholders, jury members, and architects, these variations were fundamental to the defining of the project and ultimately created divisive conditions, project delays, and combative agency relationships (in the case of the Morphosis project). In the case of the 101 Pedestrian Bridge, those delays and divergences then caused a deterioration of momentum and investment in the project resulting ultimately in the erasure of the design solution all together.

In the success case, a consensus on project objectives, including the insistence on design innovation, was unanimous. Site neighbors and other constituents were consulted prior to the writing of the brief and stakeholders from private art philanthropists to representatives from the city bought into the project agenda even before the RFQ went public. The RFQ and the Program Brief expressed these objectives clearly and specifically in terms that made them achievable but still allowed for creative vision. The jury, made up of mostly project initiators, selected lead designers who were both committed to and capable of achieving these goals. Weiss/Manfredi was an excellent match as their design philosophy fit the hybrid nature of the landscape/architecture/urban design questions that OSP posed. Their response to the infrastructural challenges of the site provided a simple, flexible diagram for the design that encapsulated the original objectives and translated them into powerful form and space.

Context: political, social, economic & physical

The discontinuity of objectives suggests a deeper misreading of the context. For Steel Cloud,

that was as much the social as the economic context; for the 101 Pedestrian Bridge, it was more the political context. In both cases, the physical context also maintains deficits still insurmountable to building on this site -- a lack of immediate density, introverted surrounding buildings, struggling development particularly at the LA Mall site, weak pedestrian emphasis, disconnected object buildings. Neither project got something as simple as the scale exactly right (nor were the entrants helped by vague requirements) -- Steel Cloud ultimately being massive and unwieldy, the 101 Pedestrian Bridge the opposite. Those physical site detriments were reinforced by the ongoing dearth of political support for committed building in the civic realm; they were further undermined by competitive rather than collaborative, systemic visions by the city and its agencies.

In comparison, the context was highly amenable to the new sculpture park. Physical, social, and economic conditions were ripe for a cultural, public open space on this site. Seattle city leadership was pushing for a move livable city and a more accessible waterfront; Belltown was up-and-coming, with residential, retail, and office development already happening in the neighborhood. Economic conditions were strong. The site was partially remediated, vacant, but demand for development was growing. Physically, the Weiss/Manfredi design worked well with the section, scale, and surrounding density of the site. Weiss/Manfredi capitalized on the pre-existing opportunities of the context: views to the sound and the mountains; need for connection from the city to the waterfront; link to Myrtle Edwards Park to the north; extension of bike and pedestrian paths; beachfront and salmon habitat; and, of course, lots of donated sculpture which needed a celebratory, public home.

In a *New York Times* article, Marion Weiss was quoted as saying, "There was an insanity to the brownfield site...But the dynamics of crossing the highway and the train tracks make it spectacular too. So we started to think of how you could slow down this city. The Z-shaped path

brings focus to the radically different views and amazing environment" (Sheets, 2007). The infill that would become Olympic Sculpture Park was not only cartilage bridging the existing infrastructure east to west and the city high to low, but a new public program weaving together other sites of burgeoning success and fanning the flames of inchoate urban gentrification through cultural impetus.

Politics: public stakeholders, project champion / shepherd, political will

Politics surrounding the LA projects ranged from passive deterioration to volatile disruption. Patsaouras struggled to maintain the momentum behind Steel Cloud, trying to capitalize on its controversy and disciplinary-specific infamy, but beyond gaining the air rights to the trench and verbal support from a voluntary review board, the project remained in speculative territory. The 101 Pedestrian Bridge, on the other hand, stirred little media response but loud resistance from local politicians and agency representatives who had competing objectives for the site. The grandstanding of those people and demands of those agencies resulted in a design-free stalemate on the second round. Public support of the LA projects was also non-existent. In neither project was the public consulted regarding their own needs or desires, either in the initial development of the competition brief nor in response to the selected winners. This gap may have contributed to the seeming lack of understanding of the reality of the contextual situation and certainly to the lack of greater momentum and investment in either project. Both projects, in comparison to OSP, seem, in retrospect, somewhat removed from the complex realities -- social, political, and material -- of the north side of downtown.

The lack of an attentive and powerful project champion or shepherd devoted to guide the project through the bureaucratic hurdles and to nurture political and economic support meant energy and commitment dissipated, then disappeared. As OSP showed, this is a full time job -- in

passion, in pay, or both. Ideally on board from the beginning, the shepherd differs from the champion in that he or she does both grassroots, day to day logistics and leadership. Patsaouras -- a champion, but not a shepherd -- was politically well-connected, but lacked the ability to build consensus around Steel Cloud and lacked the jurisdiction on the 101 Pedestrian Bridge. Regardless, he held more the role of Mimi Gates than Chris Rogers. No devoted project shepherd, someone committed exclusively to the project's day to day success, existed for either LA project, though Koo at the BOE was the closest comparison. Assigned numerous other responsibilities simultaneously and resigned to a weak facilitator's position, Koo had no power to assure design played a role in the final outcome or to even generate project support. Rogers, on the other hand, was invaluable to the large and small scale progress towards implementation of OSP.

Mayors, council members, and city planners backed Olympic Sculpture Park both because of the larger objectives for Seattle's waterfront and Belltown neighborhood and for the power and influence of the wealthy arts patrons and the Seattle Art Museum as an institution. Key players were engaged before the RFQ was issued; officials were given the chance to get invested early and some of the complicated negotiations preceded the public unveiling. An architecturally-savvy mayor and billions of dollars in other public building projects set a political and financial context claiming value for civic design. This further generated support at the governmental level. The museum's advisory council, project manager, and design team all served as ambassadors for the project as well. When complications like the maintenance barn arose, Gates was quick to write a guest column in the paper explaining the museum's interest in a viable, exciting, and public waterfront for all -- while ultimately steering public opinion and political will her way. The still unresolved issue of the viaduct and replacement tunnel was leveraged as an opportunity to offer an alternative seawall solution that ultimately enhanced the Olympic Sculpture Park and waterfront access -- and brought in millions of

dollars of funding from conservation organizations.

Finances: a variation on previous findings

In terms of financial context, it is unlikely that LA does not harbor hidden wealth equal to that in Seattle. Select arts patrons certainly emerge again and again (namely Eli and Edythe Broad, the Getty Foundation, the Disney family) though, as much as they try, one or two families cannot support the cultural institutions of a city, particularly one the size of Los Angeles and particularly an objective as amorphous and difficult as reimagining the 101 trench. A civic patronage culture is weak in Los Angeles, at least compared to the scale of need. The city has never experienced a grand scale civic investment campaign like Seattle's in the 90s that impacted neighborhoods across the city. The recent near-bankruptcy of a stalwart like the Museum of Contemporary Art proves how close to the brink many of these organizations operate. Other infrastructure redesign projects like the Cornfields or the LA River redevelopment are low on the city's list of priorities. The LA River redevelopment survives largely due to ongoing grassroots engagement. Even private development projects like the Grand Avenue plan with its large central park struggle to make progress, twenty years later. Once again, Southern California faces a particularly terrible time economically, partially strapped by restricted property taxes, high living costs, and great income disparities.

Impressively, OSP generated financial support from every level of government, numerous types of agencies and organizations, and a wide range of private citizens, many of whom were first time museum supporters. Momentum certainly helped this process, as DOT funding then spawned HUD and environmental agency funding among others. Those successes, though seeming somewhat effortless, relied on perseverance and the skilled ability to reframe the project in opportunistic ways. OSP was an arts endeavor and public space, but also a strong and sellable environmental

remediation, transportation, and habitat restoration project. Still, over $60 million came from private philanthropists, many who earned their wealth in the technology boom and who were big arts supporters in the region. A strong public/private partnership provided key momentum through private financing that instigated early success then tapped public funding to help carry the project through weakened economic moments in the private sector.

Divergences and Delays: a dispute of previous findings

The LA projects dealt with divergences and delays to much different degrees. Steel Cloud did not make it very far into the real process of implementation, in effect dying before the challenges of implementation structure were even tested. The 101 Pedestrian Bridge project, however, was more engaged in a structured process simply because of its agency-based origins; divergences and delays originating in competing objectives by combative agencies were its early downfall. Though Patsaouras tried to turn obstacles into opportunities (namely the press attention), and Morphosis adapted repeatedly to the options given for revision, neither project was able to turn the tides and gain momentum in its favor.

SAM, on the other hand, wielded much more control over the OSP project. Because the museum was a private entity and held an MoA from the city granting it control over the process, clarity of decision making was consistently structured and extraneous bureaucracy was minimal. The project never changed hands, shifted departments, or altered in scope, other than to grow more inclusive and stronger with arising opportunities. Though curator Lisa Corrin left early in the process, causing a bit of a stir, Chris Rogers in particular is heralded in his role as project shepherd, a constant guiding presence from start to finish. But without a partner project champion to his project shepherd, he would have likely struggled to overcome some of the larger bumps. Gates' scale of

influence allowed for savvy political clearing for Rogers continued progress.

Though there was no real dissent from the stated project objectives, a few complicated negotiations required the "perseverance" and "patience" that Chris Rogers refers to as key aspects of the project's success, namely the permit process for the pedestrian bridge over the railroad, the streetcar maintenance barn removal, and the negotiations with WASHDOT over the possible tunnel below the project site to replace the Alaskan Way viaduct. A primary difference in the success and failure projects is how such bumps in the road were handled. When unexpected problems arose in the Seattle project, the OSP team inevitably was able to turn them to their advantage, leveraging opportunities for funds and publicity as well as more systemic, well-designed, and affordable solutions to the new problems. The innovative mindset, agility and leadership strength of the team along with the commitment of project stakeholders to buy into positive alternatives made this possible.

Identify Gaps

In analyzing the success case, two real gaps emerge in comparison to the previous cases -- the idea of project imageability and the structure of the competition to select the final architect. Neither Steel Cloud nor the 101 Pedestrian Bridge created the kind of readable imageability OSP made so evident. The z-shaped parti diagram that captured the primary conceptual and organizational idea of the design was easy for people to understand, simple but flexible enough to absorb and reflect the numerous forces evident in the site, and brandable. "In our case, that design idea was simple enough that a lot of different people could rally around it," Manfredi said in our interview, "that potential critics early on in the process couldn't pick it apart. If you've got a clear design idea that people can image immediately, from a very broad constituency, you've got the beginnings of a more successful

process. A complicated design idea will never survive a complicated process, and all of these projects and processes are extremely complex." The diagram helped communicate a certain kind of logic, consistency, and near inevitability to the Weiss/Manfredi solution. Its transparency communicated to all types of people with all ranges of design understanding. The collages of the z-shaped ground plane superimposed on the site from the competition boards made it feel as if nature emerged from the bay and rose to greet the city. The photographs of the cut paper diagram in the hand of the designer had a safe, nurturing quality and seemed to imply that the distance between the current condition of the uncut square and the final condition of the zigzag were just two simple steps apart.

This issue of marketing is not unrelated to Steel Cloud's problem with the press, but goes beyond it. It reproduced poorly in the newspaper, but was inherently not an easily imaginable or readable project (see in particular the December 11, 1988 *LA Times* article that had model photos and a section drawing, See Figure 3.12). This is not to say that any project of that aesthetic automatically shared that problem, as Tschumi's La Villette is known for its clarity of easily readable grid, line, and folly diagrams. Zaha Hadid's early work, though not as transparent, is certainly sublime and seductive in its representation in a way Steel Cloud was not. Morphosis's project would seem to have a capturable image with the graphic power of the billboard scheme, but that element of the project proved controversial rather than enticing. Another billboard, and a physically divisive one at that, had none of the positive qualities of a green plinth unified through a pedestrian spine.

Secondly, the two stage process of selecting an architect for OSP, as mentioned, shifted the emphasis from the jury choosing a speculative solution to the jury choosing first an experienced team and then a speculative solution. Notably, Weiss/Manfredi were not chosen because they were the most experienced, but because they were the most appropriately experienced for the project. Their hybrid architecture/landscape practice and their particular emphasis on infrastructure as a form of

architecture (and vice versa) made them an excellent fit for this challenge. This selection process required a much greater investment of time and resources than the single stage competition. The process of choosing a winner from the five finalists included site visits to their built projects to directly engage their work first hand and visits to their offices to get to know the finalists and teams personally. In the end, Weiss/Manfredi's expertise and ability to manage a public process won out over the potential star quality of other firms.

This process, though, conflicts with the rationale often behind design competitions. That desire to reach beyond the predictable and tap the unknown and unpredictable is watered down if the finalists are so meticulously pre-screened. Maya Lin's Vietnam Veteran's Memorial, one of the most popular competition successes, would not exist had the jury eliminated the unknowns or inexperienced. Perhaps SAM's compromise to choose the experienced but not the most famous or prolific was a compromise on this account. Perhaps, also, this is part of project objectives and real risk assessment. If one of the primary objectives is implementation, then choosing a firm with the expertise necessary to implement seems a logical criteria, regardless of the degree of innovation of the design solution. In that light, Morphosis (selected as the result of a less risky competition/RFQ) was plenty capable of following the project through, had they been given the chance.

Challenge Assumptions

The assumption that money matters most and that project champions lead (or bully) stakeholders towards success is only partially true. What OSP suggests is that financial momentum and flexibility are key aspects to the financial picture. Investment certainly can generate attention and start a project in motion, but broad investment has ongoing advantages that narrow yet deep investment lacks. This may be one key as to why the LA picture continues to stagnate. SAM's

diligence in developing funding opportunities for the project included contributors at every level and agencies at every scale. This created a vast pool of project supporters and an agility to both go after untapped resources and cover weaknesses when the economic context changed. Much of this was possible because of the public/private partnership, a model though implied by the private funding intentions of the West Coast Gateway, never tried at the trench.

The Robert Moses project champion model (which Patsaouras in some ways resembles) tends to use the power of the bully pulpit to convince or coerce support, in often positive and sometimes suspect ways. Even Gates at OSP was occasionally accused of flattening small dissent through her wealth and influence. But the partner key to project success is the project shepherd, the consistent, devoted, diligent project facilitator who manages the day to day logistics but also is capable of assuring that the project stays on the innovative path intended. Koo was forced into that role for the 101 Pedestrian Bridge, but lacked the influence, agency support and, realistically, the personality for such a task. Rogers was an ideal project shepherd, connected with OSP from the very first moments, educated in relevant fields, experienced with similar projects, and committed to Seattle's civic success.

Moving Towards Success

Overall, the most successful projects combine an imageable, comprehensible, and innovative design solution that stakeholders at every level are motivated to support led by a skilled and committed leadership team. This may be a bottom-up or top-down process, assuming some committed project shepherd is designated to lead the project through the complicated politics of multi-agency work. Mires of bureaucracy, typically more prevalent in the public sector, can derail the best intentions. Yet smart, agile and attentive leadership can turn even divergences into

opportunities. A8ernA, a successful under freeway reinvention project by NL Architects and shepherded by two very capable city officials in Zaanstad, proves that even public projects of this sort can succeed with dogged commitment, extensive outreach, and supportive partner agencies. Though the conditions surrounding each project are certainly different, I would argue there are identifiable factors that increase the likelihood of project implementation. Based on the analysis of the failed projects at the 101 trench site, cross-examined by the success case of Olympic Sculpture Park, seven factors, if present, can improve the likelihood of project success.

1. Clear and consistent objectives

Though Mazmanian and Sabatier downplayed this factor in their critique on Pressman and Wildavsky's implementation findings, clear and consistent objectives are a critical component of project success. Particularly exposed in the competition format, discrepancies in objectives that emerge in the brief and continue in the jury, ultimately result in a project that lacks support or worse, generates contention to the point of collapse. That lack of support undermines project momentum and potentially exacerbates divisive politics. A well-crafted brief -- specific, clear, appropriately programmed and scaled, but not limiting -- with extensive upfront buy-in, means corroboration from a wide range of necessary players. Vetting -- not necessarily setting -- the objectives should include a range of project constituents, namely community members, key politicians, relevant agency leaders, and possible financial supporters. This helps identify future conflicts while allowing for some flexibility without sacrificing the primary goals that are the main motivation for the competition in the first place.[88] Stakeholder consistency means these objectives

[88] For example, though OSP consulted local residents, they were very clear that this project was intended to be a sculpture park with museum-based programming and not, say, ball fields (Rogers interview).

are clearly understood and as the project proceeds, they hold priority. An unequivocal commitment to good design is a non-negotiable objective, as is the strived for symbiotic relationship between architecture and infrastructure.

2. Amenable physical, social, and economic context

A successful design is both inspired by and improves its physical context, seeming nearly inevitable and masterful at the same time. Fit is not about blending in, but about capitalizing on site opportunities in ways that achieve project objectives through skilled design vision. A site can have excessive deficits, so the scope and scale of project objectives must be an appropriate match with the real contextual condition. Strong economic and social contexts ease project progress, though the alignment of all three at feasible levels may take a protracted period of time. The real estate recession of the late 80s and the justice riots of the early 90s in LA may seem like extreme examples of antagonistic economic and social contexts, but clearly they exist and recur. The fact that Disney Concert Hall slowly progressed towards completion across the same time period but Steel Cloud did not encourages the reading of these factors as interdependent rather than isolated; a strong project champion and more viable physical context may more easily persevere through a weak economic context. Additionally, a strong cultural context, one where city leadership and constituents recognize the value of cultural institutions, means a more rich team of advocates and structure of support.

3. Political support, collaboration amongst stakeholder agencies, existence of influential project champion, and consistent engagement of skilled project shepherd

Politics involve the overt or covert negotiated relationships among individuals, agencies,

institutions, and the public. A good project champion is highly influential in those negotiations, particularly at critical moments; a good project shepherd cultivates and sustains them. Both are critical to project success. The latter should be skilled, committed, and well-supported; the former should be persuasive, compelling, and well-connected. The presence of those two figures, along with the well-crafted brief shopped around to stakeholders to gain early buy-in, paves the way for political support and collaborative agencies. Having all parties on the same team with shared objectives unites them in a cooperative goal and, as a bonus, provides them their own opportunities to gain political points with constituents. Working collaboratively also means that when complications do emerge, otherwise impossible solutions can occur across agencies and through a variety of political channels. The seawall and beach added to OSP emerged from earthquake concerns for the Alaskan Way Viaduct. Not only did this increase the project's environmental contribution, it allowed atypical source money to be channeled towards this new phase of the project. In addition, the extended time frame of these projects means that these relationships must be nurtured and renegotiated on an ongoing basis. Gaps and untended changes (as when a new Mayor gets elected) can result in diversions and delays if key stakeholders are not brought on board early with project objectives.

4. Clarity and strength of implementation structure

How a project goes from conception to completion is extensive and complicated, but should be understandable and evident with attainable knowledge and appropriate commitment. The passing off of the Morphosis project from one agency to the next drastically reduced its viability; the ineptness and myopia of those agencies ultimately killed it. Excessive bureaucracy can be an enemy to project advancement and weaken the structure of the implementation process, yet consistency,

early investment, and a strong project shepherd can help offset that detriment if unavoidable. An interconnected network increases the resilience of the structure. The consistency of key participants on OSP and the tenacity with which that consistency was pursued was part of what made the project operate as if it were inevitable. The identification of potential barriers and necessary negotiations early in the project meant complicated processes were underway through key partnerships even before the final land purchases were made. A clear path to success with persistent guides improves the probability of its arrival.

5. Financial agility

A strong economic context (see #2 above) certainly allows for greater financial flexibility, but successful projects of this scale rarely start and finish in equal economic times or under consistent economic advantages. Substantial initial investment like the gift from Lilian Disney or OSP's founding donors certainly establish possibilities and generate momentum, but sustained, consistent financial success means broad investment and deep resourcefulness. In addition to a series of high-end donors, thousands of new museum members joined as part of the larger capital campaign, which also meant a growing and long-term base of consistent support. Strategically reformulating the project meant OSP received numerous and varied federal, state, and local grants. Public/private partnerships also broaden possible sources of funding. OSP's art and galleries were mostly privately funded, but the site infrastructure, particularly in relation to the road, railroad, and beach, received funding from a variety of public sources. Getting this money relied on those same diligent, committed, and well-connected leaders but also greatly benefitted from a city-wide culture of support for creative endeavors. Personal wealth generated momentum and covered early up front costs. When personal finances were diminished in the market downturn, public finances were able

to fill the gap. After the earthquake, OSP leaders repackaged the project as part of a larger coastal revitalization that further increased visibility and public discourse around the project and brought funding to its revised later phases.

6. High quality design solution that is imageable, comprehendible, and ingenious

A successful design solution for these complicated public projects must balance innovation and inspiration with clarity of representation and communication. A strong design parti serves as a consistent thesis statement for a project, one that is imageable, perhaps even brandable, to coalesce support and generate broad appeal. Comprehensible big ideas encourage everyone from public participants to politicians to readily imagine the benefits of implementation. That does not necessarily mean a successful design is not complex, it simply recognizes that intentional obscurity and unnecessary over-complication, particularly in the communication of design ideas to the public, may complicate the process. At the same time, a lack of design vision can fail to inspire passion and commitment. Powerful design transforms a mundane site into a new realm of possibility.

High quality design also relies on the experts chosen. Though Asymptote and Morphosis are clearly accomplished and talented firms (though the former was unknown at the time), it's questionable as to whether it was possible then to match their skills with the objectives of the project, namely because the objectives were either unclear or disputed. In some ways Steel Cloud is a perfect match for the radical ideas promoted in Aks Runo's take on LA's reinvention, the Metapolis plan. But that plan and the competition brief it helped inspire lacked consistency and clarity. Weiss/Manfredi, on the other hand, were chosen as finalists because of the firm's match with SAM's objectives, not because of their one-off solution for the site. Their mission, backed up with experience on similar projects, pointed to a context-specific process that drew inspiration from

infrastructure, geology, history, and ecology. In phase two of the firm selection process, their solution reinforced the appropriateness of their experience combined with their ability to create innovative, site-specific design solutions.

7. Disciplinary hybridity

Olympic Sculpture Park is the inaugural built example of the urbanism discourse framed by the scholars of Landscape and Infrastructural Urbanism. The 101 Pedestrian Bridge and Steel Cloud emerged from a stream of thinking about the city as episodic and mechanistic or fractured and expository, respectively. Infrastructural Urbanism, on the other hand, prioritizes a hybridized disciplinarity -- where collaboration among architects, planners, and landscape architects works towards coexistent, even integrated, built ecologies, based on real material conditions with the aim of actual implementation. The goal of implementation is not aesthetic but performative. As Stan Allen says, these projects "do not work primarily with images or meaning, or even with objects, but with performance: energy inputs and outputs, the calibration of force and resistance They are less concerned with what things look like and more concerned with what they can do." (Allen, 1999). In addition "Material practices are not about expression -- expressing either the point of view of an author or of the collective will of a society; rather they condense, transform, and materialize concepts" (53).

These changes in the urbanism discourse represent a variety of resistances to the postmodern city of both Jameson and Sorkin. This urban discourse moves away from the pessimism of the previous era, away from unproductive condemnation towards proactive alternative solutions. Its practitioners overtly attempt to revive the death of public space outside the neoliberal frame. The autonomous building and the hierarchy it (and its architects) so often demand is replaced by

collaborative multiplicities, flexibility, ecological networks, systems and flows, and instrumentality at the urban scale through specificity at the architectural scale (Allen, 1999). If the city is a reification of our collective urban values, and slowly but surely our collective urban values are changing, then so is the form and space of our city. OSP is the first of this new era; it is the materialization of a concept, and that concept is unifying, ecological, hybridized, and synthesized, exemplifying a broad discipline intent on creating a broad public realm.

The Newest Generation: Park 101

Unlike the previously discussed projects on the 101 trench site, the currently ongoing Park 101 is presented as a collaborative, exploratory effort with a steering committee made up of county supervisors, city planners, city engineers, and representatives from the Mayor's office, Caltrans, Metro, LADOT, Friends of the LA River, and others. The proposal was generated during a summer internship program held at Caltrans headquarters in 2008 and run by AECOM, an internationally recognized Architecture and Engineering firm.[89] Guided by Vaughn Davies, Director of Urban Design for the firm, the project has continued through a formal feasibility study and numerous planning meetings over the last four years.[90] In May of 2012 the Park 101 Steering Committee released its final Government Analysis White paper. The project does not meet criteria as a case study because it lacks architectural significance and hides rather than hybridizes the freeway (as well as having an inconclusive outcome). It does, however, allow for some extended analysis of the possibilities for implementation at this critical site.

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[89] This claim that the initial idea of Park 101 was conceived by interns in 2008 is suspect. AECOM was charged with conducting a feasibility study for the Hollywood Cap Park, a few miles north on the 101 freeway, in 2006. A very similar project, it was apparently conceived of by a Los Angeles investment banker, though numerous precedents exist, particularly Halpern's Freeway Park in Seattle built in the 1970s. http://www.exemplaryenvironments.com/volumeII_issue1/newground2.aspx (accessed June 26, 2012)

[90] This feasibility study was funded by SCAG (Southern California Association of Governments) and conducted by AECOM.

In the decade since the 101 Pedestrian Bridge project failed, some progress has been made to increase activity around the 101 trench. Most notably, Coop Himmelb(l)au's performing arts high school was completed on Grand Avenue and a new Latin American cultural center, LA Plaza de Cultura y Artes, opened in the El Pueblo area directly adjacent to the original project site. Metro has repurchased Union Station and the development rights to the surrounding area, LA's subway system continues to expand, and downtown seems to be experiencing a minor resurgence. The possibility of high speed rail entering Union Station from San Francisco is as close as it has ever been to being real. Still, a project at the magnitude of Park 101 -- a billion dollar master plan of park, residential, office, and retail development -- would require a much greater infusion to rationalize moves in that direction.

The white paper, therefore, is suggesting an initial phase that includes only a half-mile cap park exactly in the same location of phase one of previous projects, connecting El Pueblo and the LA Mall site between the single block of Main Street and Los Angeles Street. If analyzed based on the findings of this research, the Park 101 proposal has little chance of implementation success. In addition to lacking the design vision necessary to inspire real and persistent commitment, the study reveals four critical problems already evident: unclear leadership, lack of a project champion (and a long way from a project shepherd), weak economic context contributing to already weak financial resources, and an undefined implementation structure. In addition, the recommendation to create a Joint Powers Authority (JPA) between Metro, Caltrans, the City of Los Angeles and possibly other related agencies screams bureaucratic nightmare, design mediocrity, and endless delays and decision points. Their suggestion that the Mayor or a city council member be identified as project champion simply points out a deeper gap -- passionate leadership cannot be externally designated any more than constituent support can. Though it might be masked with grand public intentions, Park 101,

not so unlike its struggling Grand Avenue Park cousin a few blocks away, is an effort by private industry to "maximize the development potential and revenues" in this still underutilized area of the city (AECOM, 2010). As much as that might also result in more green space in the area and finally provide a pedestrian link between El Pueblo and the civic center, it runs the risk of simply being another semi-privatized, under-utilized, and very expensive failure.

A Credible Vision of the Collective: Visionary Objects and Fluent Processes

One aspect of Pressman and Wildavsky's implementation literature is the inherent assumption that the given policy is the right policy to begin with, and, that, if implemented with enough of its original objectives intact, it will effectuate positive change. That degree of collusion -- particularly when translated from policies to urban-scaled design projects -- implies some form of consensus over the values the city reifies, or at the very least, some lack of significant contestation. In actuality, the objectives of design professionals, city officials, and citizens are rarely in easy alignment, either physically or philosophically. If the form of the city is the result of competing social, political, and economic aspirations, then some sustained moment of agreed upon vision -- or some authoritarian hand -- must occur for any project to persevere.

If, as Henri Lefebvre says, "a space is not a thing but rather a set of relations between things" (Lefebvre, 1991, p. 83), then understanding the social, political, and economic relationships latent, contested, or desired on a site becomes a conversation about values and power. If even the most seemingly straight-forward public projects (if there can be such a thing) are a reification of the contestations and motivations of their stakeholders, then those struggling to redefine the public realm (physical public space plus political public sphere) and perhaps the image of the city at large

run the risk of presenting an exacerbation of those rivalries and bargains -- and institutionalizing their long-term meanings.

The reinvention of mobility infrastructure comes to the table even more loaded than other sites in the city. Historically, such conduits of flow embodied the conflicts of mass modernization, reified the questions posed by progress, and imposed lines of governmental power that provided access for some but challenged the structure and suppressed the rights of others. Since the implementation of the interstate system, roads have grown to represent a fictitious, inalienable right to speed and unfettered access. These new infrastructure alternatives, at their core, question the myopic purity of such notions, rebelling against a half century or more of normative practice. Hence, they ask those assigned to protect that purity -- primarily local, state, and federal transportation agencies, budget officers, and politicians -- to productively challenge their preconceptions. Most are not encouraged to think so broadly about their mission nor given that degree of leeway in their professional mandate. Add multiple agencies of myopic restriction and limited leeway, as these projects have, and the possibilities for compromise and creative solutions are severely restricted.

That challenge is, in essence, a challenge directed at the stalwart remnants of the pure modern city to be reappropriated for the sake of a more diverse, multi-speed, multi-scale, multi-functional public realm. Unlike the utopian projects -- Archigram's Walking City, for example -- which attempted to supplant the existing city with entirely new forms of infrastructure/architecture hybrids, these projects create varying degrees of symbiosis between architecture and infrastructure. The implementation of symbiosis at such a scale requires a sea change in urban values. That sea change in values, in turn, requires new processes and relationships to be successfully implemented.

In the introduction to Roger Sherman's *LA Under the Influence*, Bob Somol reflects on the instrumentality of the design process to instigate new demands and desires on the public realm

rather than appease expectations. "The challenge for a design politics today, therefore" he says, "is not to cater to aesthetic and economic difference, but rather to *project a credible vision of the collective*" (Somol, 2010, p. xviii). The argument that design alone can create this collective vision through its autonomous contextual negotiations is a myth -- particularly at the massive scale of infrastructure reinvention. Steel Cloud, with its radical aesthetic and resilient presence in the canon, serves as proof of that failure. The set of relations between things of this magnitude includes both objects (their form and content as well as their contextual relationships) and processes (negotiated among people, under multiple agency rubrics, and across long spans of time). At the same time, the opposite argument that processes without visionary objects can create this collective vision is also a myth. The vision must be both credible *and* ingenious to inspire the degree of commitment necessary for projects of this complexity to survive. Though Steel Cloud continues to survive as an ingenious object, it held questionable credibility and outright failed as a fluent process.

The discourse of postmodern urbanism that emerged primarily in the late 80s and early 90s under the "L.A. School" designation was named as such for a very good reason. The theories of that era that reflected the increasing similarity of all growing American cities of the time -- generic, departicularized, scattered, obsessed with security, consumption and technological simulation -- were epitomized in the LA condition. Formally, perhaps even economically, that was true, but LA had been a polycentric, heterogeneous, rabidly individualistic city from much earlier days. Downtown Los Angeles struggled to maintain its status as both a physical and philosophical center (and still does), so the insertion of an iconic gateway intended to celebrate a heterogeneous public at the moment such public space seemed intellectually condemned made for additional antagonism. Though downtown development has increased in the last five years and a modicum of new businesses populate the city center, its position as the center of any vast, viable public realm --

particularly an iconic one -- is improbable, at least until a drastic change in values occurs. That change relies on a reinvestment in the public realm and a renegotiation of relationships between the producers of downtown. Interestingly, much of the new energy is bottom-up rather than top-down, spawned by a growing arts scene, bicycle activism, a resilient piece goods industry, and a handful of popular new bars and restaurants. Informal vending and a still vibrant, if poor, street population continue to generate a kind of multi-ethnic everyday urbanism; yet these players struggle for a voice at the vast LA political table.[91]

LA is now known more readily as the infrastructural city (Varnelis, 1998). Descendants of Banham even further tout the primacy of its infrastructural ecologies of water, oil, technology, and mobility. The nature of such demanding public works with the staunch individualism, parochialism, and weak civic tendencies of its citizens, makes the reinvention of such critical lifelines as the 101 freeway more difficult yet more vital as the city attempts to negotiate its twenty-first century values. LA is not alone, though, once again both an exceptional and prototypical example of urban freeways all over the country growing more expensive and at the same time outmoded, obsolete, and unsound. Their reconsideration provides numerous opportunities for answering a pragmatic question with a visionary solution. Perhaps nowhere else is the control and meaning of infrastructure as contested and significant, however, as in LA. Breaking the stalemate here, then, could be a model for not only successful project implementation, but for the revised role infrastructure might play in the credible -- and ingenious -- vision of the new public realm.

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[91] The population referred to in the text is primarily the Latino shoppers and vendors around the historic central core area of downtown. There is no question that downtown Los Angeles also has a large and struggling homeless population. Though the total population of Skid Row dropped in the mid-2000s, it surged again with the economic downturn beginning in 2008. Police statistics put the number of homeless near Skid Row at close to 1700 people (See http://articles.latimes.com/2012/mar/31/local/la-me-skid-row-homeless-20120328, accessed 15 August 2012).

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