NYC POPS:

EXPLORING HUMAN AGENCY OF THE PUBLIC SPHERE

BY

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NYC POPS:

EXPLORING HUMAN AGENCY OF THE PUBLIC SPHERE

-A case study in New York

How might public space be re-designed to expose issues of agency? How might conceptions of “public” be broadened according to contemporary theories of public space?

Abstract

This thesis aims to investigate, through design, spatial agency within the realm of New York City's Privately Owned Public Spaces. The notion of agency in architecture is directly linked to social and political power. Starting in 1961, New York's city planners introduced an incentive zoning scheme (POPS) which encouraged private builders to include public spaces in their developments. Many are in active public use, but others are hard to find, under surveillance, or essentially inaccessible. Within the existing POPS sites, tension is current between the ideals of public space - completely open, accessible - and the limitations imposed by those who create and control it. Designed to be singular, contained, and mono-functional, POPS do not yet allow for newer ideas of public space as multi-functional, not contained/ bounded but extending and overlapping outward.

As public-private partnerships become the model for catalyzing urban (re) development in the late 20th century, bonus space is an increasingly common land use type in major cities across the world. The quality and nature of bonus spaces created in exchange for floor area bonuses varies greatly. In many cases, tensions in privately owned space produce a severely constricted definition of the public and public life. Incentive zoning programmes continue to serve as a model for numerous urban zoning regulations, so changing ideas of public space and its design need to be tested in such spaces.

These urban plazas offer a test case through which to examine agency, exploring how social space is also political space, charged with the dynamics of power/ empowerment, interaction/ isolation, control/ freedom. This thesis looks at one such site, the connecting plaza sites along Sixth Avenue between West 47th St and West 51st St. This is an extreme example of concentrated POPS sites in New York City. Here one's perception and occupation of space is profoundly affected by the underlying design of that space which reflects its private ownership. Privately Owned Public Space can be designed that is capable of/ challenging the notion of the public in public space, and modifying the structure of the city and its social life.

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THEORY

| *Research Question*
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^ Fig 1.01. Privately Owned Public Spaces mapped
 v Fig 1.02. Privately Owned Public Spaces, Classified

| Research Question

How might public space be re-designed to expose issues of agency? How might conceptions of “public” be broadened according to contemporary theories of public space?

| Introduction

This thesis proposes to use the scale of human agency as a design tool: To modify the structure of the city and its social life, and in this way to enable a broader understanding of public space. Accepting and allowing human agency to adjust a space, noting what the public desires out of a truly public space and providing it, or deliberately creating a flexible space to allow greater human agency.

The Privately Owned Public Spaces created in NYC provide a test for this proposition. The bonus plaza period began in 1961 when New York’s zoning revision included bonus floor area ratio in exchange for plazas in high rise districts. The POPS programme represents a contract between a developer and the city, in which public access is provided in exchange for private benefits (taller building heights). This program creates tension between public use and private ownership/control. These urban plazas offer a series of case studies in which to examine agency, exploring how social space is also political space, charged with the dynamics of power/ empowerment, interaction/ isolation, control/ freedom.

An initial literature review of critical texts on public space and spatial agency catalyzes the development of design-lead research in a contemporary setting. At an urban and architectural scale, the process of design lead research, uses design as a commentary to reveal (through a series of interventions on a selection of POPS sites), the issues of agency underlying previous design moves. The initial design propositions retrofit New York’s POPS, establishing a new urban infrastructure informed by an understanding of public interactions, in terms of authorship, community and space

creation. The final design proposition completely re-designs a particular POPS site at Sixth Ave between West 47th St and West 51st St. Through critical reflection on what was learned about agency in public space, both the design process and the nature of contemporary public space can be analyzed. This thesis proposes that conceptions of “public” space can be broadened through design and engaged with to benefit the urban environment and its users.

This research investigates possibilities for creating intensified, integrated public space along the network of urban POPS created in NYC since the 1960’s. The process of design-lead research was as follows:

- Step One (simultaneous):

Literature review

Precedent analysis

Analysis and categorization of POPS
- Step Two: Using design as a commentary, create a series of interventions on POPS sites that reveal the issues of agency driving previous design moves.
- Step Three: Redesign of a particular POPS site to accommodate a broader idea of “public” activity/action in public space.

| Aims and objectives:

- To expose agency through iterative design studies which reveal mechanisms of control.
- To test how a ‘privately owned public space’ can be modified to critically address the human scale and the needs of the human condition, expanding spatial agency.
- To use design to prioritize the social significance of space.

| Literature Review

Public space

Spatial agency

The concepts of public space and spatial agency are two interacting themes essential to the research question. They help us understand how agency in space creation can be understood, exposed and designed. Contemporary theories of public space allow us to test the ‘publicness’ of POPS, while an understanding of human agency within the design process is vital for the creation of true public space.

| Public space

The following literature survey explores; how the nature of public space in contemporary society is changing; how design reinforces certain conceptions of the proper use of space; how, as public space is increasingly privatized or otherwise brought under greater control, possibilities for democratic action are minimized; and describes the way in which the social infrastructure network has become more significant than the static political and spatial boundaries.

In his book *The End of Public Space? People’s Park. Definitions of the Public, and Democracy*, Don Mitchell relates the controversial decision for UC Berkeley leadership to partner with the City of Berkeley (in 1989) to take the People’s Park from its marginalized users and turn control over to middle-class and student interests, in the belief that for public spaces to work, they must be safe and orderly. Mitchell discusses two competing definitions of public space: representational space and representation of space.¹ Mitchell argues that the battle over People’s Park is a battle between the park’s experienced representational space – appropriated, lived-in, used for and by many, including the homeless – and the City’s

¹ Mitchell, Don. “The End of Public Space? People’s Park, Definitions of the Public, and Democracy” (Annals of the Association of American Geographers 85, no. 1. 1995), 115.

desired representation of space - planned, controlled, orderly.

As Mitchell describes, the University's idea of People's Park differed greatly from the local community. The struggles during this specific occasion showed that this is a social conflict in which those with power felt that "People's Park was a space that had to be reclaimed and redefined for 'an appropriate public' suggesting that the homelessness is in a sense are 'illegitimate users.'"² "Activists see places like the park as spaces for representation. By taking place, social movements represent themselves to larger audiences."³

Without this park and other public spaces, these and all similarly affected homeless struggle and fail to "represent themselves as a legitimate part of 'the public.'"⁴ Mitchell's essay sympathizes with the homeless and expressed his view on contemporary public space today, stating that "corporate and state planners have created environments that are based on desires for security rather than interaction," thus creating "dead space."⁵ In the contemporary city, privatization has been prioritized, "social difference has increasingly been replaced by a celebration of constrained diversity"⁶ – largely a product of design wanting privatized and filtered occupants. This filtering more narrowly stipulates the public and has implications for homeless deemed undesirable by the private owners. Bonus spaces must be critiqued and the importance of social elements and integration of the publics designed. This wide view of the social public sphere is also Nancy Fraser's favoured view.

In *Rethinking the Public Sphere*, Nancy Fraser corrects the dominant model of the bourgeois public sphere put forward by Jurgen Habermas, in the process developing a "new, post-bourgeois model of the public sphere."⁷ Habermas, Fraser contends, makes four dominant assumptions in his model:

² Mitchell, "The End of Public Space," 110.

³ Ibid., 125.

⁴ Ibid., 115.

⁵ Ibid., 119.

⁶ Ibid., 120.

⁷ Fraser, Nancy. "Rethinking the Public Sphere," in *Habermas and the Public Sphere*, ed. by Calhoun, Craig J (MIT Press, 1992), 111.

(i) social equality isn't necessary for democracy, (ii) one comprehensive public sphere is preferable to a multitude, (iii) only the 'common good' should be discussed, not individual affairs, and (iv) there must be a sharp line demarcating civil society and the state. Habermas' "bracketing of differences"⁸ naively presumes a space devoid of culture and, more troubling, pushes the dominant group agenda.

Fraser examines these four assumptions, concluding that social inequality will always foster discussion; a multiplicity of publics is actually a good thing, rendering a more complex set of public discourse; the exclusion of private interests in the public sphere often works in the interests of masculinist ideology; and finally that allowing for slight difference in the civil/state divide-through her concepts of weak and strong publics-would more accurately reflect a parliamentary authority in a representative democracy.

Through the essay, Fraser dissects Habermas' conception of the public sphere in an attempt to make it simultaneously broader and more accurate. Fraser ultimately argues for us to think about "strong and weak publics, as well as about various hybrid forms"⁹ to integrate the publics into the decision-making process-of democracy.

While Mitchell's theories question ownership of public, William H. Whyte questions how design reinforces certain conceptions of the proper use of public space. In the 1970's, Whyte assembled a group of researchers and filmmakers to apply methods from cultural anthropology to modern urban spaces harder to investigate the way urban dwellers interact with each other. In particular, Whyte's research questioned the publicness of NY POPS.

The investigation focused on POPS using field observation, film, and time-lapse photography, through which Whyte provided the foundation for our current understanding

⁸ Fraser, "Rethinking the Public Sphere," 127.

⁹ Ibid., 136.

of human behaviour in public spaces. Whyte offers sharp conclusions drawn from the volumes of data his team collected. The lessons it teaches are astonishingly simple, yet imperative. His work identifies physical elements that tend to produce effective public spaces such as a variety of seating and its proximity to busy paths. His most famous finding that “what attracts people most, it would appear, is other people,”¹⁰ emphasises the importance of social elements of design.

Whyte’s study also found that tree canopies, water features, sculptures and food vendors all played a role in attracting people to urban plazas and parks. The study concluded that the greater the number of these key features, the more people gravitated to these public spaces. The most popular gathering spots are where people have voted with their feet. Failed projects include places where streets faced blank walls and were devoid of shops, windows or doors. Whyte’s studies of the behaviour of people in public places form a basis for understanding the effectiveness of certain interventions in enabling the appropriation of public space. As originally concerned, POPS were designed to be singular, contained, and mono-functional, while newer ideas of public space emphasize the multi-functional, not contained/bounded but extending and overlapping outward.

Alex Wall’s essay in *Recovering Landscape: Essays in Contemporary Landscape Theory* is important to the proposed project through its identification of the new role of the urban surface. Wall has a more contemporary understanding of public urban space, with his essay addressing the complexity and density of contemporary cities and landscapes. He claims that the conditions that the architectural discipline engages – mobility, density, congestion, and instability – demand new techniques of practice and new modes of representation. In particular, Wall explores the word landscape, interpreting “landscape as active surface, structuring the conditions for new relationships and interactions among the things it supports.”¹¹

¹⁰ Whyte, William H. *The Social Life of Small Urban Spaces* (Washington, DC: The Conservation Foundation, 1980), 19.

¹¹ Wall, Alex. “Programming the Urban Surface” in *Recovering Landscape:*

He sees the ground-plane of the city as an extensive and inclusive “field that accommodates buildings, roads, utilities, open spaces, neighbourhoods, and natural habitats.”¹²

The essay puts into perspective what architecture can do: Wall states that “a primary design strategy is to extend its continuity while diversifying its range of services...active accelerant, staging and setting up new conditions for uncertain futures.”¹³ Essentially, this text addresses the issues of complexity of activities taking place in urban public spaces, arguing they are always multi-functional, not mono-functional, as modernist design implied.

With regards to the traditional 19th century notion of the city, it has been replaced by what Wall describes as a more polycentric and weblike sprawl: the regional metropolis, where “the infrastructure and flows of material have become more significant than the static political and spatial boundaries.”¹⁴ The new urban surface is dynamic and responsive; “the surface literally unfolds events in time,”¹⁵ leaving the network flows to become the responsive city. In terms of POPS, the exact boundaries become less important as the emphasis shifts from forms of contained urban space to processes and flows of urbanization.

Wall’s version of landscape is space considered as urban surface and networks. Similarly, Stan Allen addresses urban space as a field made up of parts from ensembles which in turn form larger whole. Allen defines a field condition as any “formal or spatial matrix capable of unifying diverse elements while respecting the identity of each.”¹⁶ This term is the basis of his book, *Field Conditions*. Allen describes a way of thinking about space/volume as a continuous field of activity, not a series of isolated and autonomous events. Allen’s discussion is based

Essays in Contemporary Landscape Theory, ed James Corner (New York: Princeton Architectural Press, 1999), 233.

¹² Ibid., 233.

¹³ Ibid., 233.

¹⁴ Ibid., 234.

¹⁵ Ibid., 233.

¹⁶ Ibid., 2.

on field logics and their relationship with architecture and urbanism. Allen places ‘field conditions’ in opposition to the Modernist ‘object’ approach to architecture, explaining it as a system responsive to the complexity of the urban context.

According to Allen, field conditions are bottom up events, defined by intricate local connections. Such connections and pathways are an effect emerging from the field itself – “as moments of intensity, as peaks or valleys within a continuous field.”¹⁷

This research into the potential of POPS uses the ‘field’ not just in plan dimension, but as a fully three-dimensional field integrating with the buildings. Analyzing “moments of intensity, linked to the wider network of the urban field,”¹⁸ the field condition idea informs a research method in order to produce a public design scheme better integrated with the wider urban context.

Field conditions offer an opening for design to “address the dynamics of use, behaviour of crowds, and the complex geometries of masses in motion.”¹⁹ The behaviour of crowds links to Whyte’s study of human behaviour in urban settings, and the importance of social elements of design to be prioritised through (re)development of the POPS site.

| *Spatial agency*

This research draws on contemporary literature that describes public space in terms of creating a greater range of user/users and more active community agency. Agency currently provides the tension between the ideals of public space and the confines imposed by who creates and controls it. The following readings discuss new ideas of spatial agency in public space: Hou (2012), Crawford (1995), and Wall (1999). All have a basis in Henri Lefebvre’s theories, particularly his idea that public

¹⁷ Allen, Stan. “Field Conditions,” in *Points + Lines: Diagrams and Projects for the City*, (1st ed. New York: Princeton Architectural Press, 1985), 7

¹⁸ Ibid., 8.

¹⁹ Ibid., 11.

space is co-curated by those who use it, not just the creation of professional designers.

Beyond Zuccotti Park: Ed. Ronald Shiffman, is a collection of essays about the impact of the Occupy Wall Street movement and the thinking about assembly and public space that has been generated as a consequence of that movement. The boundaries of Zuccotti Park in Lower Manhattan acted as an encampment of symbolic power as a concentrated place of significance. However, as the writing in this anthology imply, the idea is more important than the physical occupation of a particular public space. The contemporary analysis of the social significance of space begins with Henri Lefebvre, who argued that “space must be understood as more than a neutral container of activity. Space is actively produced, not only in its physical disposition but its social meaning, by the activities that go on in it, or that go on in some spaces but not others.”²⁰ Henri Lefebvre was a French social theorist and philosopher whose work has been important in urban studies, including a generation of geographers, architects, planners and academic intellectuals in the English speaking world. Lefebvre is an important theorist for the discussion of agency in space creation, with the conceptual triad dialogue in *The Production of Space* between ‘spatial practice,’ ‘representation of space’ and ‘representational space’ as a recurring theme in the book. Spatial practice “embraces production and reproduction, and the particular locations and spatial sets characteristic of each social formation.”²¹ The representation of space is “conceptualized space, the space of scientists, planners, urbanists, technocratic subdividers and social engineers” whom “identify what is lived and what is perceived with what is conceived” and is the “dominant space in any society.”²² Representational space on the other hand is “space as directly lived through its associated images and symbols, and hence the space of ‘inhabitants’ and ‘users.’”²³

²⁰ Hammond, J. L. “The significance of space in Occupy Wall Street,” *Interface: a journal for and about social movements*, Volume 5(2), (2013):500.

²¹ Lefebvre, Henri. *The Production of Space* / Henri Lefebvre; trans. Donald Nicholson-Smith (Oxford, U.K.: Blackwell, 1991), 33.

²² Ibid., 38-39.

²³ Lefebvre, Henri. “The Production of Space”, 33.

For Lefebvre, “repetition has everywhere defeated uniqueness that the artificial and contrived have driven all spontaneity and naturalness from the field, and, in short that products have vanquished works.”²⁴ It is Lefebvre’s insights on space, seeking to bridge the gap between theory and practice – mental and real space, spatial agency and spatial design – that are so essential to contemporary writing by architects and urban commentators.

In his essay, *Making Public, Beyond Public Space*, Jeffrey Hou examines the distinction between the politics of what he terms ‘institutional public space’ and ‘insurgent public space,’ suggesting that transformative actions result from the appropriation of space beyond the intent of its design or beyond the boundaries of the appropriate. While the territory occupied was physical, this was only so as to open other ways of doing and being together.

Hou’s book *Insurgent Public Space* expands on the ideas of institutional public space and insurgent public space, with institutional spaces including “privately owned public spaces, and are defined and produced by governments and corporations.”²⁵ These spaces are by nature, codified, regulated, and institutionally maintained. Furthermore, they often assume a generic public that may be served by these spaces, but for the most part is not actively engaged in their making. In contrast, insurgent public spaces are those created or initiated by citizens and communities, often outside or at the border of the regulatory and legal domain. In this way, the term ‘public’ is no longer just an adjective but rather an active body of citizens in the broadest sense. Hou identified the Occupy Wall Street protests in Zuccotti Park - as well as in many other locations around the world - as a prime example of insurgent public space. Through camping out, “making and putting up protest signs, setting up stations for communication and participating in shared decision making, the protesters transformed an

²⁴ Ibid., 85.

²⁵ Hou, Jeffrey. “Making Public, Beyond Public Space.” *Beyond Zuccotti Park: Freedom of Assembly and the Occupation of Public Space* (2012): 91.

otherwise passive and mundane urban space into a site of political expressions and active collective action.”²⁶ In a related essay, Margaret Crawford, proposes that the “public activities that occur, suggest that urban politics and urban space can be restructured from the bottom up as well as from the top down.”²⁷ Crawford offers different ideas of agency and recognizes users as creators of space. In ‘Contesting the Public Realm: Struggles over Public Space in Los Angeles,’ Crawford explores the narrative of lost public space through the example of Los Angeles. She calls for rethinking public space by recognizing “street vendors and the homeless demanding access to public space.”²⁸ Her essay addresses the way new forms of insurgent citizenship affect societies locally and worldwide.

The scale of human agency as a design tool: instances of action which modify the structure of the city and the society, and also the very notion of the public in public space; these are the essential ideas that inform this design research proposition. Accepting and allowing human agency to adjust a space, or deliberately creating an open space as to allow a greater range of human activities.

Crawford argues that urban residents are constantly remaking public space and redefining the public sphere through their lived experience, and questions the desire for fixed categories, and the rigid concepts of public and private space that characterize the public sphere. Crawford proposes instead contestation, competing ‘counter-publics,’ and the blurring of private and public as equally significant aspects of the public sphere. In Los Angeles, the struggles of two ‘counter-publics,’ street vendors and the homeless, over use of the streets and public places reveal the emergence of another discourse of public space, suggesting “new forms of insurgent citizenship and revealing new political arenas.”²⁹ Insurgent and institutional public space

²⁶ Hou, Jeffrey. “Making Public,” 92.

²⁷ Crawford, M. “Contesting the Public Realm: Struggles over Public Space in Los Angeles,” *Journal of Architectural Education*, 49(1), (1995): 5.

²⁸ Ibid., 8.

²⁹ Crawford, “Contesting,” *Journal of Architectural Education*, 4.

is an important concept when considering spatial agency. Crawford acknowledges that the homeless and street vendors, both demanding access to public space, are just two of many social groups articulating new demands, and “these emergent sites of citizenship accompany the processes of change that are transforming societies.”³⁰ This text directly addresses public space-through Crawford’s analysis on Los Angeles, in which she states that public spaces are “shaped by the lived experience more than built space.”³¹ This suggests the process of design might anticipate the uncertainties, recognizing that function is not pre-determined, in order to allow for greater range of future uses.

Tatjana Schneider and Jeremy Till’s article *Beyond Discourse: Notes on Spatial Agency* investigates the word ‘agency’ in relation to the role, responsibility and power of the architect. Using Anthony Giddens’s formulation of agency, they discuss the transformative potential of architecture where the lack of a predetermined future is seen as an opportunity and not a threat. Four examples describe related instances of architectural practice as a form of spatial agency: muf, OSA, Santiago Cirugeda and The New Architecture Movement. Architectural knowledge can be deployed in multiple ways and in multiple contexts that exceed, but of course do not exclude, the design of buildings. The examples discussed by Schneider and Till, show how “architects can transform themselves into something other than being the deliverers of buildings on the back of so-called expert knowledge.”³² Santiago Cirugeda’s strategies for Subversive Urban Occupation, lead an approach of how spatial agency is “embedded in a temporal continuity, in which the architect acts as a catalyst of change for an unspecified period of time.”³³ Cirugeda acknowledges that as a citizen it is almost impossible to take action to improve your own environment. His work questions what it is to be an

³⁰ Ibid., 8.

³¹ Ibid., 9.

³² Schneider, Tatjana, and Jeremy Till. “Beyond Discourse: Notes on Spatial Agency,” *Footprint* 3, no. 1 (2014), 108.

³³ Ibid., 106.

architect in this context: he tries to empower citizens to act in their own locality by showing how it is possible to subvert laws, regulations, and conventions.

Cirugeda’s work reveals the possibility for action, appropriation, occupation and use, and that “institutions cannot limit the complex human realm. Institutions cannot limit architecture.”³⁴ Schneider and Till provide examples of the skills of architects to provide instances where such knowledge and skills are used trans-formatively. The paper concludes with an urgent call for architects to face up to their political and environmental responsibilities.

For Till and Schneider, the notion of agency in architecture is directly linked to social and political power, with agency described “as the ability of the individual to act independently of the constraining structures of society.”³⁵ But as the subtitle – Other Ways of Doing Architecture – suggests, far from disregarding “any role for architects the intent is to posit a much richer set of activities that give new scope, and hope, for architectural activity.”³⁶ In questioning the constraining structures present in POPS sites of NYC, this research uses design to increase explore increase empowerment, interaction and freedom.

³⁴ Spatial Agency, Santiago Cirugeda, Web site, <http://www.spatialagency.net/database/santiago.cirugeda> (accessed March 28, 2017).

³⁵ Awan, Nishat., Tatjana. Schneider, and Jeremy. Till. *Spatial Agency: Other Ways of Doing Architecture* (Abingdon, Oxon [England] ; New York, NY: Routledge, 2011), 30.

³⁶ Ibid., 30.

| Precedent Analysis

The following precedents draw out issues, both positive and negative, related to ideas of public space and spatial agency. The precedents show; how one dominant purpose shuts down other possible uses of the space; a temporary, site-specific installation transforms an existing environment into a new experience; how anticipating the uncertainties of future development through a framework for flexible uses adapts to future desires. The movement of Tactical Urbanism is an example of a space-making practice that maximizes spatial agency that is directly related to public spaces, with a focus on small scale intervention.

Tilted Arc (Fig 1.03), Richard Serra, 1981, Federal Plaza, New York, NY.

In 1981 Federal Plaza in lower Manhattan was an open space framed by two government office buildings, it was defined by a curvilinear pattern in the pavement and an inoperative fountain. There were no plantings and no place to sit except the rim of an empty pool. Installed 1981, and removed 1989, *Tilted Arc*, a wall of steel 12 feet high and 120 feet long carved the space of the Federal Plaza in half. Serra said of the design, “The viewer becomes aware of himself and of his movement through the plaza. As he moves, the sculpture changes. Contraction and expansion of the sculpture result from the viewer’s movement. Step by step the perception not only of the sculpture but of the entire environment changes.”³⁷ The work was site-specific, in this case, Serra said the sculpture was “meant to interact with the commuter passing through the plaza, a location usually passed through quickly on the way to somewhere else.”³⁸

As an art piece, *Tilted Arc* questioned the purpose and physical reality of the site in which it sat. Art historian Harriet Senie states that “*Tilted Arc*, with its sweeping form and precipitous

³⁷ Michalos, Christina. “Murdering Art: Destruction of Art Works and Artists’ Moral Rights” in *The Trials of Art*, edited by Daniel McClean, London: Ridinghouse, (2007), 73-193.

³⁸ Ibid.

tilt, could be neither ‘used’ nor ignored, and that made its value as public art both suspect and enraging.”³⁹ The formal and political aspects of Serra’s significant project offer a critical response to its surrounding urban environment. The public space setting typical of the open space that had proliferated since the 1961 zoning regulation determines much of the response to public art. An empty plaza in front of a building, *Tilted Arc* interrupted the cherished ‘icon’ of open space in Manhattan. Senie notes that “in the media *Tilted Arc* was blamed both for not improving Federal Plaza and for rendering it useless”, and further, “in the art world it was criticized for not clearly addressing the larger problems of the public sphere.”⁴⁰

By placing *Tilted Arc* in the hectic urban centre of the Federal Plaza in downtown New York City, Serra gave the opportunity for a dynamic conversation between the piece and the viewer, creating an interactive dialogue of exchange. By engulfing entire fields of vision, blocking views, and redirecting foot traffic, the sculpture impeded upon people’s lives and the overall utility of the Federal Plaza. The monumentality of *Tilted Arc* lies in its ability to actually disrupt the otherwise unstoppable pace of the ever-moving city. Within the context of this research, *Tilted Arc* acts as a provocative precedent, showing the result when one dominant designer a piece whose purpose is singular - to critique the dominant model of public space - without opening it up to other uses.

Wrapped Reichstag (Fig 1.04), Christo and Jeanne-Claude, Berlin, 1971-95.

The vast project involved wrapping the 100+ year old German Parliament building in more than a million square feet of aluminium-coloured polypropylene fabric, and 16,000 meters of bright blue rope holding it tight. *Wrapped Reichstag* is a work of art, cultural event, and a political reference. Christo and Jeanne-Claude’s works are temporary, site-specific

³⁹ Senie, Harriet, *The Tilted Arc Controversy: Dangerous Precedent?* (Minneapolis, MN: University of Minnesota Press, 2001), 148.

⁴⁰ Ibid., 149.

Fig 1.03. Serra, Richard, *Tilted Arc*, 1981, Federal Plaza, New York, (© flickr user Jennifer Mei, licensed under CC BY-NC-ND 2.0)

Fig 1.04. Christo and Jeanne-Claude, *Wrapped Reichstag*, 1971-95, Berlin, Germany, (© flickr user txmx-2, licensed under CC BY-NC-ND 2.0)

Fig 1.05. LeWitt, Sol. *Wall Drawing 15: Drawing Series II 1B (A&B)*. 2002. Drawing, coloured pencil on wall. 48 in. x 48 in. (121.9cm x 121.9cm) (@flickr user rocor, licensed under CC BY-NC 2.0)

installations, designed to transform an existing environment into a new experience. They transform familiar landscapes or structures in unique ways, allowing the audience to experience them in a completely different way. In Berlin they created art at a monumental scale by temporarily transforming the man-made landmark, while also stating that their art is as much about process as product, with the actual wrapping the final chapter in a 24 year work. The entire work, in their view, is as much a study in the way attitudes are transformed over time as a pure object.

Through wrapping, some of the most basic features and proportions of the object are revealed, by concealing the actual item. In no way, however, does the Reichstag become insignificant, a fear that was expressed by many opponents of the project, including Chancellor Helmut Kohl, who argued that wrapping the building would trivialize it. Indeed, this huge structure covered in silver-grey fabric remains every bit as monumental as it was before -- perhaps more so, because “the wrapping forces the eye to confront the Reichstag anew. The building is shimmering where it once was solid, refined where it once was gross and heavy. But it has lost none of its power.”⁴¹

Wall Drawing 47 (Fig 1.05), Sol LeWitt, 1970.

Comprises of a wall divided into fifteen equal parts, each with a different line direction, and all combinations. First drawn by Kazuko Miyamoto, June 1970, black pencil, *Wall Drawing 47* is representative of Sol LeWitt's systematic exploration of lines going in four basic directions: vertical, horizontal, diagonal left, and diagonal right. This pencil drawing shows increasingly darker gradations of tone as the piece is read from left to right.

The artist Sol LeWitt uses formulae of his own invention hinting at math equations and architectural specifications. The directions for producing become the work of art. Deliberately vague, so the end result was not completely controlled by

⁴¹ Goldberger, Paul. 'Christo's Wrapped Reichstag: Symbol for the New Germany'. *The New York Times*, 1995, June 23, sec. Arts.

Fig 1.06. Bernard Tschumi, Parc de la Villette, 1982-1998, Paris. (<http://www.tschumi.com/projects/3/>. © Bernard Tschumi Architects. Reprinted with permission.)

Fig 1.07. Bernard Tschumi, Parc de la Villette, 1982-1998, Paris. (<http://www.tschumi.com/projects/3/>. © Bernard Tschumi Architects. Reprinted with permission.)

the artist. LeWitt himself observed in 1971 that “each person draws a line differently and each person understands words differently.”⁴² In this way, LeWitt challenged some fundamental beliefs about art, including the authority of the artist in the production of a work. The authority of the designer in the use of a public space comes into question when considering Le Witt’s beliefs on art. However, in the way a master conceives and apprentices carry out, the designer and the public have a similar engagement. The engagement with the outcome of the 1961 reformed code resulted in POPS with limitations imposed by those who creates and controls them. This design research reframes that tension with the engagement of a new phase of design for one of the most high profile POPS in the city.

Parc de la Villette, Bernard Tschumi, Paris 1982-98.

Parc de la Villette (Fig 1.06, Fig 1.07) was part of an international competition, held in 1982-83, to revitalize the abandoned and undeveloped land from the French national wholesale meat market and slaughterhouse in Paris, France. Consisting of a system of dispersed points—the red enameled steel follies that support different cultural and leisure activities—is superimposed on a system of lines that emphasizes movement through the park.

Parc de la Villette project is noted for its new strategy of urban organization. Although each folly is unique and formally different, there is no designated program, just a space that can harbour activity. As in ‘*Programming the Urban Surface*’ Alex Wall discusses the Parc de la Villette competition designs as “framework for developing flexible uses as needs and desires changed.”⁴³ The new strategy of urban organization addressed the problem, less in terms of styling identity, representation, or formal composition, and much more one of strategic organization, in which the park was to “both anticipate and accommodate any number of changing demands and programs.”⁴⁴ *Parc de la Villette* anticipates the uncertainties

⁴² Searle, Adrian. ‘Second Thoughts’. *The Guardian*. December 7 2006. <http://www.theguardian.com/culture/2006/dec/07/2>.

⁴³ Wall, “Programming the urban surface,” 237.

⁴⁴ Wall, “Programming the urban surface,” 238.

Fig 1.08. Anthony Garcia and Mike Lydon, *The Tactical Spectrum: Where does your project fit?* 2015. In *Tactical Urbanism: Short-term Action for Long-term Change*, Island Press-Center for Resource Economics, 2015, P.9. Copyright 2017. Reprinted with permission. Courtesy of The Street Plans Collaborative/Island Press

Fig 1.09. Didier Faustino, *Double Happiness*, 2009, 6,4 x 3,7 x 6,6m. Shenzhen-Hong Kong Bi-City Biennial of Urbanism and Architecture. Photograph by Xiaoxi Sun. <https://www.dezeen.com/2009/12/08/the-unbearable-lightness-of-being-by-mesarchitectures/>. Reprinted with permission)

of future development, and uses design in which function is not pre-determined, this allows for greater range of future functions.

| *Tactical Urbanism*

Tactical Urbanism is an example of a space-making practice that maximizes spatial agency. The concept of tactical urbanism can proactively test new approaches in small ways that can lead to bigger shifts to occur in cities (Fig 1.08).

Tactical Urbanism is a movement which introduces prototypes of physical urban interventions. *Tactical Urbanism: Short-term Action for Long-term Change* by Mike Lydon and Anthony Garcia acts as a foundational guide for urban transformation, which can convey a message, as well as enable a better urban mechanism. “Really, tactical urbanism is how most cities are built. Especially in developing nations,”⁴⁵ Lydon says, “It’s step-by-step, piece-by-piece,”⁴⁶ in the form of collective projects, urban events, mini constructions and other creative initiatives. This text directly addresses issues of agency - who designs, for whom, and why. A key element of the guidebook is ‘making things work.’ The goal is not to simply do a project that will get cleaned up by the city or thrown away, but to make something – even something small and/or temporary – that will change how a place works and is perceived. And once that change has been made, to figure out how it can be made again or made permanent. The small-scale and seasonal pop-ups are viewed as a contemporary tactic for reclaiming public space, with the small-scale changes leading to long-term results.

The examples cited below are a few tactical urbanism projects with key design features of whimsy reactivate public spaces, creating an effective moment in the public realm. The use of short term changes are effective in the way the interventions and policies catalyze long term change.

⁴⁵ Lydon, Mike, and Anthony Garcia. *Tactical Urbanism: Short-term Action for Long-term Change*. (Island Press-Center for Resource Economics, 2015),
⁴⁶ Ibid.

Fig 1.10. Umbrella Sky Project, Facebook post. January 19 2017. Sextafeira, Productions from Portugal. <https://www.facebook.com/UmbrellaSkyProject/photos/a.1569361956413901.1073741870.681867858496653/1569364359746994/?type=3&theater>. Reprinted with permission.

Fig 1.11. Umbrella Sky Project. Facebook post. January 19 2017. Sextafeira, Productions from Portugal. <https://www.facebook.com/UmbrellaSkyProject/photos/a.1569361956413901.1073741870.681867858496653/1569363649747065/?type=3&theater>. Reprinted with permission.

Double Happiness (Fig 1.09): Didier Faustino. This piece of urban furniture allows the reactivation of different public spaces and enables inhabitants to reappropriate fragments of their city. They will both escape and dominate public space through a game of equilibrium and disequilibrium. Faustino states that “by playing this ‘risky’ game, and testing their own limits, two people can experience together a new perception of space and recover an awareness of the physical world.”⁴⁷ The billboard also highlights the possibility of repurposing this universal type of urban infrastructure.

Umbrella Sky Project (Fig 1.10, Fig 1.11), Sextafeira (2011), is a laneway transformation in Agueda, Portugal. The umbrellas provide shade, with bright colours adding whimsy to the street, while the installation turns the street into a venue for events. The sea of umbrellas forms a unique geometric pattern overhead as well as changing shadows on the roadway below. Programming like outdoor workout classes give this shaded area an added layer of functionality, enabling high-energy and fitness activities despite high summer temperatures. Since the project began, these pop-up shade structures have become an annual summertime installation. Creators of the *Umbrella Sky Project*, Sextafeira, have also launched offshoots of this work in other cities such as Lisbon, where they have added to the streetscape by stringing multi-coloured balloons over urban alleyways. As with all their projects, the polka-dot shadows that project onto the street below add more colour to people’s lives in everyday settings.

⁴⁷‘Didier Fiuza Faustino,’ *Double Happiness*, Web site, http://cargocollective.com/didierfaustino/2009_Double-happiness (accessed May 3 2017).

INTERVENTIONS

| *Phase One*

| *Expression as Commentary*

| *Design Oriented Critique*

| *Summary of Design Phase One*

| *Design Review One Reflection*

^ Fig 2.01. Privately Owned Public Spaces mapped

The map shows these spaces across Manhattan and that they are a factor of high real estate value concentrated in midtown and the financial district

| Phase 1

How might public space be re-designed to expose issues of agency?

The initial design phase involved choosing a series of POPS and making relatively simple interventions in them. The sites were chosen to represent the different formal types of POPS, including:

plazas, urban plazas, residential plazas, public plazas, elevated plazas, arcades, through block arcades, through block connections, covered pedestrian spaces, sidewalk widening, open air concourses.

These interventions revealed and reflected mechanisms of control within each site. Using design as a commentary, the issues of agency driving previous design moves on POPS were revealed. The exposure of agency reveals subtle efforts to control the use of each space. As the initial zoning resolution regulating POPS did not stipulate strong design guidelines or regulations regarding usage, many 'first generation spaces' - which account for one third of current POPS - lack the fundamental assets that make public space appealing and practical for public use. William H Whyte's book, *The Social Life of Small Urban Spaces* (1980), and Richard Serra's sculpture, *Tilted Arc* (1981) were strong influences on these experimental interventions. Whyte explored the publicness of POPS, including what makes public spaces succeed (Fig 2.02), and what makes them fail (Fig 2.03).

The initial design interventions take two forms:

| *Expression as commentary*

| *Design oriented critique*

They are intended to reveal tensions present in POPS between the needs of private builders and the characteristics of true public spaces. This was achieved by using design as a commentary to reveal the design aspects complicit as a mechanism of control. The series expressed and challenged the very notion of the public in public space, and further revealed the tension between public use and private ownership/control.

^ Fig 2.02. *What makes public spaces succeed?* William H Whyte. Whyte, William H. "The Social Life of Small Urban Spaces" 1980. Archive film. Uploaded by Chronomex. 58:15. Posted April 23, 2014. (@Creative Commons)/ screenshots from film

In the 1970's, sociologist William Whyte assembled a group of researchers to apply methods from cultural anthropology to modern urban spaces in order to investigate the way urban dwellers interact with each other. In particular, Whyte's research questioned the publicness of POPS. His work identifies physical elements that tend to produce effective public spaces, and what makes public spaces fail.

^ Fig 2.03. *What makes public spaces fail?* William H Whyte. Whyte, William H. "The Social Life of Small Urban Spaces" 1980. Archive film. Uploaded by Chronomex. 58:15. Posted April 23, 2014. (@Creative Commons)/ screenshots from film

^ Fig 2.04. Expression as commentary continuum

A continuum, exploring interventions which are complicit in mechanisms of control through to design oriented moves. The interventions reveal the tension between public use and private ownership/control and explore design opportunities through the range of POPS categories. The diagram shows the street relationship and interaction with the site, building and public through different arrangements.

| *Expression as commentary*

Tilted Arc inspired - shows how one dominant purpose shuts down other possible uses of the space. The iteration analyses a space complicit in mechanisms of control with a curved wall intersecting the space, views and paths of those who frequent. There are no plantings or place to sit, rejecting William H Whyte's (1970) observation of "people tend to sit where there are places to sit."

A narrow street entrance conceals the POPS and eliminates the street relationship. The iteration creates a space which is overlooked by pedestrians for not being an obvious public space. Through an elusive small entrance, the ideals of public space - completely open, accessible are rejected.

The notion of agency in architecture is directly linked to social and political power. The threshold defines the spatial boundary of the privately-owned space, with the iteration emphasising the present boundary to deter entry, creating an inhospitable space.

William H Whyte's research states that tree canopies entice the public to sit under and around them. The iteration shows one tree in the vast space, analysing that in the eyes of the developers, the planting of a single tree can be a token symbol of invitation, denoting the idea of public space, if not the reality.

POPS were designed to be singular, contained, and mono-functional. The iteration expresses the pedestrian thoroughfare as a singular pathway, forcing an express path through the space. The walkway is dropped down to emphasize the deterrence of idling and wandering through the space.

As one's perception and occupation of space is profoundly affected by the underlying ownership of that space, the privately-owned spaces are strongly linked to private developers. Blurring the spatial boundaries of the POPS creates confusion about what is public and what is private.

A transitional space intervention - The threshold of the space expands to increase the political boundary of the space. Intersecting more boundaries maximises the scale of such a threshold and the mental presence of such.

The iteration uses the surrounding plaza space and tilts the space, looking at the effects of tilting both towards and away from the street. Both angles create a large obtrusive structure, tilting up at the street makes an empowering canopy while sloping up towards the building eliminates the ability to occupy the plaza.

| *Design oriented critique*

The wall intersecting the through block plaza explores materiality, through options for interaction (opportunities) and tension across the two sides of an intervention. The two sides of the wall communicate different levels of invitation. Rough creates and invitation to pause/stop, while smooth, to move more quickly.

Thoroughfare intervention creates moments within the space while the materiality creates interaction opportunities - rough texture. The introduction of texture acts as an invitation to stop and linger in the space, which increases publicness.

The wall splitting into two creates moments of opportunities - open and inviting. Giving materiality to space further explores mechanisms of control, as a sleek materiality mimics the sterile nature present on the site and surrounding buildings, and creates an undesirable public space.

The wall expanding to a larger surface deters opportunities for use through taking up public space - closed and rejecting publicness of the public space.

Rough and sleek explores the influence of materiality on a person's experience of space. The two sides of the wall communicate different levels of invitation. The texture acts as an invitation to stop and linger in the space, which increases publicness.

The sleek materiality mimics the sterile nature present on the site and surrounding buildings, and accelerates pedestrians through the plaza, creating a more dominant and intrusive wall. The rough surface slows pedestrians and creates interactive opportunities within the plaza, and along the wall.

Through block plazas explore the street relationship of the boundary, and the volumetric negative space. A design intervention which includes the whimsy (bold gold pathway), acts as a hospitable gesture, inviting greater public use.

The iteration explores the wall as a mechanism of control, designing a space with a site-specific installation breaking up the thoroughfare space and creating points of interaction.

Layering of screens create a protective quality, and desired oasis. A pocket park site between two buildings has the opportunity to engage not only as a thoroughfare but as a moment to slow occupants and change the pace of the city within that moment. Pockets of possible occupation are created for small scale interventions.

The intervention is above the plaza pedestrian movement creating a sculptural quality and removing the mechanisms of control. The iteration has an ethereal quality, analysing the intrusive nature of previous design controls.

The iteration lifts and engages the public to the viewpoint of the design/designer: agency. The layering of varying levels creates different vantage points of the surroundings giving different views of the city.

The iteration critiques the current boundaries of privately owned public spaces creating an unconfined design. Engaging with contemporary theories of public space the infrastructure and flows of material become more significant than the static political and spatial boundaries of the site.

| Summary of Design Phase 1

The nature of public space in contemporary society is changing. POPS were designed to be singular, contained, and mono-functional, while newer ideas of public space are multi-functional, not contained but extending and overlapping outward.

The design interventions express the tensions between public use/users and private ownership. Each intervention addresses previous design moves made by private developers either by revealing the mechanism of control or suggesting other uses and experiences through a design oriented critique.

Taken together the series suggested that single interventions might be combined into a larger synthetic design. Through incorporating a multi-functional programme, more use/users are effectively added to the site; an increase in variety of social uses adds value to the building owner and the city. Using the current site considerations of key public space zones (POPS plazas), and developing a network through the connection opportunities, the bounded sites are expanded and connected.

| Phase 1

| Design Review 1 Reflection

18.05.2017

Proposition, Background Research and Concept Design

Critiquing the initial interventions, the project is an investigation of space between buildings with the primary aim being to create social interaction within a public space known previously for private /public tensions. New York has been used as it is an extreme condition of Privately Owned Public Spaces.

Whyte's research in the 70's was about the link between POPS and behaviour. His research is not as current now, and so what is this research adding to his observations of POPS? The research is on the threshold of some social science investigations. The possibility is to use Virtual Reality as a way to test the users' experience in the spaces. It is probable that the abstract and miniature models will generate different responses than "immersion" via VR.

The aim for the developed and then detailed design is to propose a design which will change the way people act/behave in this space and not to come up with a recipe book of solutions, but a specific solution to this site. Tactical urbanism is associated with the small scale and temporary, however using it as a precedent, the goal is to create something permanent, with moments/spaces for temporary programmes.

<< Fig 2.05. Photograph of design review one

SITE

| *Phase Two Research Question*

| *Site Zone*

| *Site Analysis*

| *Current State*

| *Potential to Change state*

| *Site Analysis Summary*

Exposing agency was the goal of the intervention studies: returning it to a broad public is the role of the developed design. Phase two of the research questions...This design phase asks how conceptions of “public” might be broadened according to contemporary theories of public space?

| Site Zone

The connecting plazas along the major thoroughfare of Sixth Avenue in Manhattan between West 47th St to West 51st St were chosen as the site.

The plazas are an extreme example of concentrated Privately Owned Public Space sites in New York City. Here one’s perception and occupation of space is profoundly affected by the underlying design of that space which reflects its private ownership. This design lead research investigates possibilities for creating intensified, integrated public space along the network of urban POPS. The McGraw-Hill sunken plaza is in the middle of a row of three large plazas along Sixth Avenue. Together with the plazas at 1211 Sixth Ave and 1251 Sixth Ave [‘XYZ’ buildings], the spaces are iconic modernist urban plazas. Combined with the non-POPS plaza at 1271 Sixth Ave, and 1285 Sixth Ave side street POPS they create a linear site zone along Sixth Ave. The suggested linearity of the site inspires an urge to connect them together, emphasizing the dynamic flow of people and goods across the combined site.

<< Fig 3.01. Site zone within Manhattan

| Site Analysis

| *Observations about current state*

| *Potential to change current state*

Site driven research was explored, and observations about the current state of the site (Fig 3.01 - Fig 3.16) lead to the analysis of the potential to change it (Fig 3.17-Fig 3.26).

The analysis of the existing programme arose from understanding the direct surroundings on a Privately Owned Public Space site in Manhattan (Fig 3.15).

This analysis focused on:

Public transport, multi user, open public space and programme

Informed by an understanding of the present programme of the site (Fig 3.16), the potential to change the site was informed by thinking about what public space could be (Fig 3.17).

The design intervention focused on:

not contained + multi-functional,

open + accessible,

community + opportunity

At an urban and architectural scale, the site driven research investigated possibilities for creating intensified, integrated public space along the network of urban POPS in the site zone. The analysis pushed the site analysis to use design to prioritize the social significance of space and create a series of social design iterations (Fig 3.21-Fig 3.26).

<< Fig 3.02. Privately Owned Public Spaces (white) within site zone

1211 Sixth Ave. 'Z' Building, POPS

1221 Sixth Avenue, McGraw Hill Building, POPS

1251 Sixth Ave. 'X' Building, POPS

1271 Sixth Ave. Time Life Building

1285 Sixth Ave. Equitable Tower, POPS

<< Fig 3.03. Proposed site zone, Map data: Google, DigitalGlobe/ colour manipulation from original

^ Fig 3.04. Left. Sixth Avenue as it looked in 1974. Twitter post. @NewYorkologist.org. 19 October 2014. <https://twitter.com/NewYorkologist/status/523928383374512128/photo/1>/ colour manipulation from original

Fig 3.05. Middle. The Traffic of Sixth Avenue. (Photograph by Gelio Vostok, live journal. <https://gelio.livejournal.com/79041.html#79041.html> (accessed August 2017).

Fig 3.06. Right top. XYZ Buildings. Authors image.

Fig 3.07. Right middle. Sixth Avenue as it looked in 1974. Twitter post. @NewYorkologist.org. 19 October 2014. <https://twitter.com/NewYorkologist/status/523928383374512128/photo/1>/ colour manipulation from original

Fig 3.08. Right bottom. 1221 Sixth Ave, McGraw Hill Building Sunken Plaza, 1987. (© Flickr Wally Gobetz, licensed under CC BY-NC-ND)

^ Fig 3.09. Negative current site conditions

This site currently has negative site conditions and positive opportunities to further engage through a public space. The row of plazas were designed to project New York City as a centre of corporate power, while the large plazas now create an opportunity for a design intervention. On the site, there is a large fountain, questioning how usable a public space is if it is largely covered with water, strong spatial and political boundaries of each individual plaza, and interactions of publics such as tourist and office worker, protester and shopper. The site gives possibilities for creating an integrated public space along the network of plazas.

^ Fig 3.10. Positive current site conditions

| Current grid of rationality

The grid of the current site suggests the possibility of extrapolation into three dimensions as a volume to analyze current conditions within the boundaries. Currently the existing boundaries of each plaza are both spatial and political. This thesis proposed that conceptions of “public” space could be broadened through design and engaged with to benefit the urban environment and its users. The current state of the site is therefore critical to explore before developing into an urban surface responsive to the public.

Through an understanding of the current site conditions, the design process can test how a ‘privately owned public space’ can be modified to critically address the human scale and the needs of the human condition.

<< Fig 3.11. Top. Volumetric diagram creating a grid over the current site boundaries of the plazas both above and below street level.

<< Fig 3.12. Grid of rationality physical model

>> Fig 3.13. *Programme analysis*
Site analysis explored the zoning of private, public and POPS areas within the site zone - public at street level to the private levels of corporate buildings.

>> Fig 3.14. *Spatial zoning*
The zoning of stagnant, active, interactive and fast movement spaces: The stagnant space showed points of limited interaction with undesirable environments, while interactive zones were street corners with food vendors and high movement of foot traffic crossing roads. Currently the street vendors notorious in NYC activate the corners, and by adding to those points and engaging public space in the centre of the plazas and away from the traffic, the site as a whole will benefit through an overall public landscape.

Public transport Multi user Open public space Programme

Fig 3.15. Site analysis extrapolating four key incorporation concepts derived from site conditions. The nature of public space in contemporary society is changing. The singular, contained, and mono-functional design of the spaces do not allow for newer ideas of public space.

Fig 3.16. Present site programmes

Fig 3.17. How the proposed site programmes expand the use of the site

| Potential to change current state

Site analysis was looked at in terms of observations about the current state of the site to the potential to change, informed by new thinking about what public space could be. Present site programmes are controlled and mono-functional, but by expanding the site programme the use of the site also expands.

Fig 3.18. Site design analysis. Current site considerations for design proposal

Fig 3.19. Schematic design iterations

The suggested linearity of the site inspires an urge to connect the plazas together, with initial site considerations emphasizing the flow of people across the combined site, and developing a network of social uses. Opposing the current car precedence and giving pedestrians priority, expands the connection opportunities through the volumes of space, rather than constricted boundaries.

In terms of Privately Owned Public Space, and the design response, the exact boundaries of the site become insignificant to the urban surface as the emphasis shifts from strictly contained forms of urban space to processes and flows of urbanization. Therefore, the proposed site is not exactly defined by edges or boundaries, but flows across the existing boundaries. This allows the infrastructure and flows of people and material to be engaged rather than focusing on static political and spatial boundaries. Engaging critically with the previous tensions present in POPS; of private builders and public spaces, the proposed urban surface will be dynamic and responsive as a true public zone.

«Fig 3.20. Schematic plan, elevation and programme

Expanding the connection opportunities up through the volume of space. Through occupying different levels, it gives people a different view of the city, and a different experience of it.

^ Fig 3.21. Qualities to enhance the current site based off contemporary theory of public space.

Fig 3.22. Sign announcing public space

The majority of these privately-owned spaces are not clearly signed, and the public does not know they are available. Enhancing the street relationship and are a key design factor.

Fig 3.23. Vertical connections and nodes

Connections up through the volume of space with nodes of interest to draw the public up and through the space.

Fig 3.25. Crossing empowering pedestrians as opposed to current car precedence conditions

The movements of people and traffic were analysed and mapped creating an iteration where pedestrians are priority.

Fig 3.24. Level variances along a pedestrian route

The level variances currently on the site are from subway entrances, sidewalk crossings and the sunken plaza, giving opportunities to further enhance these level changes.

Fig 3.26. Network of interactions

The site carries a lot of foot traffic and mapping current individual movements across the site creates interaction points and therefore opportunities for high contact zones. Such social interaction creates a network based off an individual's route.

| Site Analysis Summary

Site analysis produced observations about the current state of the site and the potential to change, informed by new thinking about what public space could be. Present site programmes are controlled and mono-functional, but by expanding the site programme the use of the site also expands.

The grid of rationality expressed the site as a volume in which the current state of the site was analyzed. Through incorporating contemporary ideas of public space and the potential to change what public space could be on the site, social iteration outcomes which will push a design proposal:

The site conditions of being bounded create an opportunity to expand and connect the key public space zones and link to create a network of connection opportunities. The outcome of the analysis is a design aim for a public space as multi-functional, extending and overlapping outward.

Expanding the connection opportunities up through the volume of space allows occupying of different levels and gives people a different view and experience of the city.

A pedestrian priority as opposed to the current car precedence.

Through incorporating a multi-functional programme, the use/ users of the site are expanded, and the variety of social uses add value to the building owner and the city.

DEVELOPED DESIGN

***| Phase Two Design Development
| Design***

| Design Review Two Reflection

| **Phase Two Design Development**

The initial research used specific design interventions as a form of commentary intended to reveal mechanisms of control. Phase two shows/demonstrates how human agency lead design can activate public spaces. The design focus was to give:

Priority to pedestrian movement

Different experience of the city

Elevated viewpoints

Interaction at multiple levels

The development of key design moves creates interventions which enhance the site informed by analysis of the current state of the site and contemporary theories of public space. Bold gestures are required to enhance such a cosmopolitan site and shift the priority to public space. These gestures consist of:

Fig 4.01. Precedence of movement

Sixth Avenue is a major thoroughfare in New York City's borough of Manhattan, on which traffic runs northbound, or "uptown" along the six lane street. Sixth Ave is served by the New York City Subway with the IND Sixth Avenue Line (B D F M trains) north of Houston. Shifting the current priority from cars to pedestrians through an elevated walkway will give precedence to the public space and the people using the space.

Fig 4.02. Initial design intervention sketches

Fig 4.03. Initial form models

Fig 4.04. Space creation from intervention

| Building Ribbon

To define the street level public space as a zone and destination in its own right, a system of horizontal ribbons was inserted into the site, oriented in two directions. One ribbon was suspended above the street to create a pedestrian walkway privileging the experience of the tourist and the commuter over vehicular traffic. Other ribbons wrapped around the existing buildings to create a protected and sheltered space on the plazas underneath.

The wrapped and extruding structure interacts at multiple levels. It is not only the interaction with the structure but also the space between intervention and street which enhances the public space of the site. The form interrupts the nature of the buildings above and creates opportunities for programme underneath. The linear connection of Sixth Avenue connects the plazas together with the repetition of the structure emphasizing the flow of people and goods across the combined site.

Fig 4.05. Perspective of initial iterations

Fig 4.06. Programme within canopy form

Fig 4.07. Connection via the building

Fig 4.08. Formal spatial elevation

| Building Ribbon

Currently the site's active points are at street corners where food vendors and pedestrian pathways converge. Drawing people into the site through these congestion points enhances social interaction along the plazas and allows for multiple programmes to develop rather than being used as a thoroughfare.

The series of building ribbon canopies intensify interaction at multiple levels through varying the height of the structure and elevated viewpoints and interaction levels through the raised up canopy.

Fig 4.10. Elevated walkway over Sixth Avenue

Fig 4.09. Plan of canopy and elevated walkway structures

| Building ribbon and elevated walkway

An elevated walkway connects the entire site, linking the current separated plazas and turning the individual spaces into an urban park network. The site reads as connected through the linear form, with the public being able to bypass the traffic below and walk at their own leisure as opposed to the current breaks in the sidewalk by roads. The platform acts as an elevated public space and commuting route. The space offers new opportunities and social benefits to meet changing needs in the urban environment. The bold gesture of the design would attract public life to the space and engage with the current site.

| Design

The design draws on the site analysis and initial research iterations to design public space with a broader contemporary view of public life. A modification of this part of the city and its social life challenges the very notion of the public in public space. The design allows the infrastructure and flows of material to be engaged as more significant than the static political and spatial boundaries.

This is done through prioritizing pedestrians over the current car traffic, having interventions at different levels for public interaction and elevating the public to different levels, offering the user a different experience of the city. Enhancing the current site conditions while designing bold key elements which would change the public activity within the space. The developed design reinforces a street relationship, and the linear proportions of Sixth Ave. The design proposal features an elevated sidewalk which prioritizes pedestrians over vehicle traffic along Sixth Ave and a canopy structure which wraps and extends out from the current buildings with different properties:

Interior and exterior elevated space/ viewing platform/ reflective underside over current fountain/ glass materiality sculpture.

BUILDING RIBBON

- exterior viewing platform
- interior elevated space
- connection via building

BUILDING RIBBON

- viewing platform
- connection via building

SUNKEN PLAZA

- step plaza
- connection opportunity

BUILDING RIBBON

- reflective underside
- over current fountain

PEDESTRIAN STREET

- elevated sidewalk
- prioritising pedestrians
- over sixth ave vehicle traffic

BUILDING RIBBON

- glass materiality

Fig 4.11. Design key moves

^Fig 4.12. Looking south over site

◀◀Fig 4.13. Design proposal overview

| Phase 2 Developed Design

| Design Review 2 Reflection

24.08.2017

Critiquing the initial design outcome, the primary design strategy is to extend its continuity while diversifying its range of services. Exposing agency is the goal of the preliminary studies (phase 1); returning it to a broad public is the role of the developed design. The detailed design (phase 3) needs to show how an increase in variety of social uses adds value to the building owner, the city. The design outcome does not aim to remove agency from one group to give it to another. Recovering agency for everyday users, prioritizes the importance of a public space, and the benefits of such space returns to the developer. The design strategy enables a public-private partnership for catalyzing urban (re) development, as bonus space is an increasingly common land use type in most major cities.

The initial design (phase 2) incorporates newer ideas of public space; multi-functional, not contained/bounded but extending and overlapping outward, proposing a new public space that increases potential uses and users. The initial design occupies different levels, and the detailed design will need to drive people to move off the ground plane. The developed design for an urban park outcome will give people a different view of the city, and a different experience of it (calmer and tranquil). Establishing a view of Central Park from the elevated walkway will frame the outlook from Sixth Avenue and reframe the city around it. The initial design pushed the proposal to show bold design gestures. The repetition of the canopy structures became too intrusive to the site however, and they could have been developed and refined to be less extensive than what the initial design proposed. The reflected canopy at street level was successful in having a grand, sculptural quality. Using colour as a key part of the design strategy was effective, and so continuing with the use of bold colours through the detailed design will further create connection and cohesiveness. Specific connections between interventions will develop the public nature and urban park plan.

<< Fig 4.19. Photograph of design review two

DETAILED DESIGN

| ***Design Development***
| ***Structural Integration***
| ***Final Design Proposal***
| ***Detailed Design Summary***

| ***Design Review Three Reflection***
| ***Process***
| ***Outcome***
| ***Conclusion***

| Design Development

Fig 5.01. Initial sketches of interventions on site explore opportunities for connecting the current plazas further

Bridge the street for pedestrian priority. Allowing no interruption from traffic upon public space. A moment of interest also draws the public up off the street plane to interact at another level

Fig 5.02. Connection to street level without interrupting walk thoroughfare

Replacing the existing McGraw Hill sunken plaza, the sloped plaza allows more moments of interaction with a gradual slope

Fig 5.03. Sloped step plaza for movement thorough and also creating seating for pausing in the space

Fig 5.04. Connection via the building

Fig 5.05. CBS New York. People's Climate March. New York, Sept 21 2014. Photograph by Andrew Burton/Getty Images. <http://newyork.cbslocal.com/photo-galleries/2014/09/21/935187/> (accessed September 2017).

^ Fig 5.06. Exploring developments of connection via the sunken plaza

^ Fig 5.07. Further development of a stepped plaza with a wrapping down edge

Exploring the uses in which the current McGraw Hill sunken plaza could be developed:

Sloping the sunken plaza as a gradual change rather than the current boundary drop enables opportunities for wrapping down over the decline with a subway entrance at the lowest point of the space and negative slots along the slope to allow multiple entrances. The development and change to the current McGraw Hill Sunken plaza was not continued. This was due to the varied height developments across the whole site in different interventions, allowing the existing sunken nature to enhance the bold gestures of the whole proposed design.

ELEVATED WALKWAY

^ Fig 5.08. Development drawings of the elevated walkway with a viewpoint cut out and a lip edge as a balustrade

>> Fig 5.09. Iterations of the lifting end of the walkway at northern point

An elevated walkway creates public space off the ground plane and extends the street relationship. Priority is given to pedestrian movement, with elevated viewpoints giving a different experience of the city. The walkway offers a new opportunity to experience the city like the high line. Both as ways for occupying space differently. Lifting the northern point of the walkway and cutting a gap creates a viewpoint straight to Central Park, and an interest point within the linear form of the walkway.

^ Fig 5.10. Iterations of cut out form framing Central Park from the platform

Fig 5.11. Digital model developments of points along walkway

^ Fig 5.12. Physical model of walkway within site and details along the platform

^ Fig 5.13. Development of building ribbon with the space created on top and underneath

^ Fig 5.14. Physical model of building ribbon with the site

The building ribbon wraps and extrudes from the current buildings and interacts at multiple levels. The form adds onto the current buildings and creates opportunities for programme on top and underneath. The repetition of the structure emphasizes the dynamic flow of people and goods across the combined site. The elevated ribbon allows for interior and outdoor habitation, while the ribbon at street level interacts with the sunken fountain below.

| Structural Integration

^ Fig 5.15. Structural consideration to elevated building ribbon

Ties will act in tension to support the cantilever of the canopy in compression with the ties fed back to the floor diaphragm of the building. The slender cables are an opportunity for design integration through dispersing the tie back point, and the need for a beam resisting torsion can be integrated into the bridge connection.

Section: Box Beams - are flexible for torsion, can be curved

^ Fig 5.16. Structural consideration to building ribbon at street level over fountain

To resist up lift gravity loads of the canopy, columns are needed. To integrate this need into the design slender columns are used which outline the recessed fountain below, also creating a safety barrier. The canopy skin is lightweight with a diaphragm structure top or bottom. In section this is supported with box beams which are flexible for torsion and can be curved to the shape of the canopy.

| Final Design Proposal

The final design proposition re-designs the row of large privately owned public spaces at Sixth Avenue between West 47th and 51st St. Through critical reflection on what was learned about previous design tensions on similar sites, the design process and the nature of contemporary public space, the redesign of the POPS site accommodates and enables a broader idea of “public” activity.

The design reinforces a street relationship, and the linear proportions of Sixth Ave. The proposal features an elevated walkway which prioritizes pedestrians over the current car traffic, and two canopy structures which wrap and extends out from the existing buildings, interacting at multiple levels and creating a privileged zone of public space underneath.

The design aims to retrofit the plaza sites, establishing a new urban infrastructure informed by an understanding of public interactions, in terms of authorship, community and space creation. The design enhances the street level by connecting the plazas together and developing further public space within the site. A view from the elevated walkway through to Central Park frames the viewpoint from Sixth Avenue and reframes the city around it.

BUILDING RIBBON
 -exterior viewing platform
 -interior elevated space
 -connection via building

BUILDING RIBBON
 -reflective underside
 -over recessed fountain
 -mirrored sunken form of
 neighbour sunken plaza

ELEVATED WALKWAY
 -prioritising pedestrians
 -elevated over sixth ave vehicle traffic
 -elevated viewpoints of central park,
 downtown and side streets

AA 1:1200

BB 1:1200

STREET LEVEL PLAN

1:1500

UPPER LEVEL PLAN

1:1500

Fig 5.17. Entrance points to elevated walkway and moments of contact with the ground plane of Sixth Avenue

Fig 5.18. Space creation of design intervention on site

Entrance points up onto the elevated walkway create moments of contact with the ground plane. The south end entrance is a stepped plaza, with the two north end entrances slicing down to the existing sidewalk. The north end of the platform features an elevated view of Central Park, while the elongated form allows viewpoints downtown and through side streets. It is not only the interaction with the structure but also the space between intervention and street which enhances the public space of the site.

Programme can be explored by every patron, from a place to escape the city to enhancing current events such as the NY People's Climate March. The design outcome gives people a different view of the city, and a different experience of it. Through incorporating a multi-functional programme, a variety of social uses are added to the site, adding value to the building owner and the city. The elongated form breaks the spatial and political boundaries imposed by the previous design and creates a contemporary public space extending outward. The existing boundaries of each individual plaza become less important as the emphasis shifts from forms to processes and flows of urbanization.

^ Fig 5.19. Final design proposal within site context: crowds of people within the space, looking uptown towards Central Park and Downtown

>> Fig 5.20. Reflected canopy over recessed fountain

The building ribbon at street level extends out over the plaza with a reflective underside giving a grand sculptural quality, multiplying the people and the recessed fountain below. The sunken form is mirrored from the existing neighbour sunken (McGraw Hill) plaza further developing levels of interaction over the site.

Fig 5.21. South end entrance point and elevated building ribbon

Fig 5.24. Building ribbon over step seating and sunken fountain

Fig 5.22. North end entrance point

Fig 5.23. North end of platform and elevated Central Park viewpoint

^ Fig 5.25. Physical model

» Fig 5.26. Aerial view of physical model

| **Detailed Design Summary**

This thesis proposed that conceptions of public space could be broadened through design to benefit the urban environment and its users. These modifications to the structure of the city and its social life challenge the very notion of the public in public space.

The detailed design critiques the current site design, and incorporates analysis of the preliminary studies (phase 1), in which the iterations revealed the tensions between public and private, and the initial design concept (phase 2). The final design creates an urban surface that acts as a dynamic and responsive urban public, returning the space to a truly public zone.

The site of West 47th St to West 51st St at Sixth Avenue was chosen as the series of POPS present connect and create a network opportunity for a public urban landscape. The resolved re-design of the Sixth Avenue network of POPS engages with contemporary theories of public space and allows the infrastructure and flows of material to be engaged overriding the artificial restrictions of the site boundaries of individual plazas.

«Fig 5.27. Aerial render view of design proposal

| Phase 3 Detailed Design

| Design Review 3 Reflection

14.11.2017

Through critical reflection on what was learned and implemented about agency and public space, both the design process and the nature of the contemporary public space proposed can be analyzed for further development:

| Process

One of the most important aspects of any city or community is its public space. New York is the first city to provide the unique initiative of public space that is privately owned. It is now more important than ever to discuss past mistakes and learn from them. This thesis studied POPS since the 1960's and examined the past tensions evident in the designs. The use of control mechanisms were revealed, and other uses and experiences were suggested. Through a design oriented critique the series suggested that single interventions might be combined into a larger synthetic design, and that, through incorporating a multi-functional programme, more use/users could be effectively added to the site.

| Outcome

The developed design proposal for the connecting POPS along West 47th St to West 51st St at Sixth Avenue, focused on: *priority for pedestrian movement, elevated viewpoints for a different experience of the city, and interaction at multiple levels*. These focii were informed by the current site conditions, but could be applied to the privately owned public spaces of the past and future, in their various forms and capacities. The outcome considers the direct surroundings specific to the site. The approach therefore would have to be altered to also work in different cultural, social and environmental contexts to reflect such considerations. The priority to pedestrians over vehicle traffic is consistent through similar cities, however the approach may not be as successful in other less densely urban sites.

<<Fig 5.28. Photograph of design review three. Visual presentation

CRITICAL REVIEW

| ***Conclusion***

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| Conclusion

From the 1960's zoning scheme, corporate and state planners have created environments that are based on desires for security rather than interaction, creating a priority for privatization and control of occupants. *NYC POPS: Exploring Human Agency of the Public Sphere* has established an insight into the opportunities that public space can provide for the development of POPS in Manhattan. These opportunities can be seen through the success in translating contemporary theories of public space to the redevelopment of the POPS plazas at West 47th to 51st St.

This thesis argues for a rethink of architecture's typical approach to public space. Where past code initiatives have shaped the public space of an urban environment the results have been less than successful. The need for that space in a contemporary environment is changed in the context of expanded ideas of public space in the early 20th century. The design response has been to develop from the scale of singular plazas to create a network between current plazas and creating a truly public space within the intensified urban space of Midtown New York.

This thesis proposed that conceptions of public space can be broadened through design and engaged with to benefit the urban environment and its users. This research investigated possibilities for creating intensified, integrated public space along the network of urban POPS created in NYC since the 1960's. The process of design-lead research repaired the existing environment of the site to create public space as a connecting and interlinking landscape rather than an isolated and restricted one.

Promoting architecture's renewed engagement with the public and public life, this thesis acts as an initiative to redevelop the POPS sites across Manhattan. The design can be celebrated as a singular site solution, but as a strategy for redevelopment of future urban spaces. The strategy being a space that can harbour activity, developing flexible uses as needs and desires change,

and anticipate and accommodate changes in programme that coincide with the uncertainties of future urban development. The design can act to initiate new projects in the nearby neighborhood, furthering the aim to broaden conceptions of public space.

In recognizing the limitations of this thesis, but also in considering future research directions, it is worth emphasizing public space as an evolving, interdisciplinary concept which requires a multitude of stakeholders - including practitioners, local government, private owners and community input. To identify what approach would best benefit and engage with the surrounding neighbourhood/ community, and the future of the environment, consultation and connection between these partnerships are essential.

The reflection was as opportunity to retrospectively examine the design process and expand upon the project's successes and limitations. The initial research in chapter two discussed the past tensions present within POPS sites over Manhattan - notably the mechanisms of control imposed upon the public through private ownership.

These discussions of past designs then lead to design iterations and the final design proposal. This thesis structure - reflect through design then design to site conditions - was important in developing a link to the POPS sites over Manhattan as a whole.

| Further Research

Further research might focus on the following issues:

Urban intensification: Further research could be conducted on other POPS sites throughout Manhattan, and also countries across the world that use the Privately Owned Public Space scheme, to enable broader understandings of public space within an urban environment.

Architectural foci: The site specific design proposal was derived from site analysis to enforce a design. The result focused on: priority to pedestrian movement, elevated viewpoints for a different experience of the city, and interaction at multiple levels. These strategies are able to be used on other sites, however the weight of these strategies would be different if a different site was chosen due to site specific considerations being important.

Master planning: Contemporary theory of public space - the drive for infrastructure and flows of material to be engaged as more significant than site boundaries - pushed the design-lead research. This was achieved through the site spanning neighbouring POPS plazas, and so the option of connecting the spaces through an architectural intervention was possible. On a different site, where a POPS is not linked to others, the design approach would change. The engagement with master planning however, at a design stage would successfully engage the surrounding environments and other buildings to benefit social interaction of the urban landscape.

Design interventions: Retrospectively, further exploration of different design options within different architectural scales could have been conducted. This would allow for more detailed moments of interaction to be designed. The opportunity to use the plane of the elevated walkway as a contoured landscape would enhance the notion of an oasis to the surrounding city. The bold gestures and forms were successful and needed in a site such as this, however, between the wrapped ribbon canopies, development is required to establish a stronger linear connection between plazas at street level, to match the successful connection of the elevated walkway.

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| List of Figures

All figures not attributed are author’s own

Figure 1.03.

Serra, Richard, *Tilted Arc*, 1981, Federal Plaza, New York, (© flickr user Jennifer Mei, licensed under CC BY-NC-ND 2.0)

Figure 1.04.

Christo and Jeanne-Claude, *Wrapped Reichstag*, 1971-95, Berlin, Germany, (© flickr user txmx-2, licensed under CC BY-NC-ND 2.0)

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