NEW AGORAPHOBIA

RECLAIMING CONTROLLABILITY IN A SOCIETY OF TOTAL SURVEILLANCE

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Abstract

Increasingly ubiquitous forms of surveillance networks and methods are becoming commonplace in today's societies. While their application is rational and for the most part beneficial their presence effects the perception of space, eroding margins of privacy, increasing pressure on public space, and in some cases perpetuating unjustifiable feelings of persecution and mental unrest. These consequences reduce individual control over one's environment and furthermore represent an instance of a type of space itself creating anxieties, similarly to the onset of agoraphobia in the 1860's.

Applying a tripartite design approach of three different scales to a hypothetical scenario of an escalated total surveillance society in an urban setting leads to an exploration of physical space and the spatialisations of power and emotion in the issues of overexposure, crowding, and loss of control.

Through the resulting designs it is demonstrated how an informed application of thresholds, materiality, and physically reconfigurable environments in built form can allow for instances of relief and grounding, the gesture such a relief provides itself also embodies intent and reaction, furthering the physical with a symbolic and psychosocial response.

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1. About the Research

1.1. Introduction

Increasingly prevalent forms of surveillance networks and methods are creeping into our life, assuming the semblance of a total surveillance society. This type of society effectively changes the way we perceive space and erodes our margins of privacy. Pervasive surveillance systems put pressure on public space and perpetuate unjustifiable feelings of mental unrest. In general, while surveillance has beneficial applications in its field it creates problems in a variety of others.

The ubiquitous spread of surveillance networks envelops a large portion of public space to the point where interaction in one's own surveillance becomes almost inadvertent, reducing individual controllability of the environment. Furthermore the driving force behind surveillance is related to a set of conflicting territories, implicit and actual, that act out within the public realm. These issues have a spatial manifestation and as such, an architectural response has potential to mitigate the negative impact of space under constant surveillance.

To this point there has been no significant architectural confrontation to the loss of privacy and control brought about by a surveillance society, any resistance has mainly been psychosocial or performative in nature, leaving much room for exploration on the architectural level.

In this thesis I establish a connection between the first appearance of agoraphobia as a product of the new types of metropolitan spaces that came about in the 1860's (Vidler, 2000) and the new types of space that are being created by the growth of surveillance, as such a new state of spatial malady is achieved.

In the following pages I aim to develop architectural methods to mitigate the consequences of a hypothetical scenario of escalated mass surveillance; primarily the emotional impact of life under constant scrutiny, the disintegration of the concept of privacy, and the loss of controllability in the participation of one's scrutiny. Addressing the issues from a spatial perspective I will demonstrate how psychosocial goals can be realised in space.

Chapter 2 explores the background of the concepts of surveillance and demonstrate their effects on the psychosocial and spatial environments. I will review the composition and functions of surveillance systems to determine their drawbacks and discuss their criticisms. Exploring the psychosocial impacts of constant scrutiny will determine key problem areas as well as key thought on the subject. An impression of spatial understandings will form a framework for further analysis and development of response to the psychosocial on spatial terms.

Chapter 3 relates to review of existing concepts and practice related to the outlined issues. In this section I will discuss overreaching spatial design concepts that may contribute to formulating a response and discuss related psychosocial contrivances. The final part of the chapter is concerned with space and architectural constructions that shape it in ways that may inform particular approaches to spatial issues of surveillance.

Chapter 4 reiterates the design intention and outlines an evaluation framework by which the success of the consequent

design explorations may be interpreted. In this chapter I also talk about the selection of site and its relevance to the research as well as going over an analysis of the elements and situations present in the site.

Chapter 5 is split into three sections documenting my design explorations on three different levels, from the small scale design working with the public scale through to the building scale concerned with the private scale. Each sections relates the goals for the specific scale, the design process, the outcome, and an evaluation of the main elements.

In Chapter 6 I bring the research to a conclusion, summarising the design response and the resulting findings in more holistic detail. In this chapter I relate the outcomes of the design stage to the issues and concepts outlined in Chapter 2 and the design intention in Section 4.1 I further reflect on improvements that could be made if a similar research was repeated and discuss potential related directions for further research.

1.2. Research Methodology

This goal of this thesis is to discover ways in which architectural methods may be used to reduce the negative impacts of a hypothetical scenario of escalated mass surveillance in the urban setting. The negative impacts referred to encompass the emotional impact of constant scrutiny, the disintegration of the concept of privacy, and the loss of controllability in the participation of one's scrutiny. To achieve this goal I will employ the method of research through design.

The purpose of design in this method is to generate responses that deal with the context as well as the designed instances' place within this context in terms of function and symbolism as well as the human and social implications (Wolfgang, 2007). Wolfgang (2007) points out that in such an approach each designed instance changes the contextual situation revealing new factors and influences for consideration and the provision for re-evaluation, a cyclic system of trial or action based on an expectation and the experience or reflection on the outcome.

The research will first review literature relevant to the subject of surveillance and the effects thereof in order to gather a better understanding of the theoretical concept in terms of its background, psychosocial, and spatial aspects. With the theoretical foundation a further review of concepts and projects whose effect relates to exposure, self control, and the individual's relationship to surveillance and one's environment will gather techniques and elements that may be of use in a design response.

Following these underpinnings a reiteration of the intent of design in their context will form a framework for evaluating successive design iterations as well as lay the ground for the relevance of the following site selection and analyses.

I will undertake the design exploration in three iterative stages, each addressing the context at a different scale so as to cover a broader spectrum of interaction, from the public to the semi private and the private. Each successive stage will build on the concepts generated by the previous stage and

the resulting designs will be able to either stand on their own, representing a response on a single scale, or act as part of a network that spans the three progressive scales.

The approach to each stage of design will be that of the cyclic system suggested by Wolfgang (2007) where the initial design will test expectations and reveal further contextual factors for consideration to be re-evaluated, tested again, and further re-evaluated until a refined result is reached.

Once all design scales have been refined and evaluated I will reflect in more detail on the implications of each scale relative to each other and their context and reiterate the cumulative findings.

1.3. Interpretation of Data

While certain aspects of design can be easily quantified, such as light distribution, sound attenuation, and air exchange rates, others are less tangible. Factors relating to human emotional interactions for instance are more complex without an in-depth psychological study, but with a well founded intuitive interpretation and an extrapolation of existing conditions may reach a good approximation of the expected outcome. Rittel (1972 from Wolfgang, 2007) supports this commenting that there is no large gap between an intuitive approach to solving a problem and a more “controlled, reasonable and rational” approach and in fact “the more control one wants to exert, the more well founded one wants to judge, the more intuitive one has to be.”

As a large amount this thesis deals with psychosocial and implicit spatial conditions an exact quantification would be hard to establish, therefore my analyses will be based on interpretation of established theories rather than formulae

and measured figures. This approach is more analagous to an intuitive approach than a scientific one as defined by Rittel (1972 from Wolfgang, 2007).

The gathering and relevance of data will be based on similarities to elements and conditions discussed in Chapter 2, with an extrapolation, or a slight exaggeration, to correspond to a perpetuated application of surveillance and scrutiny networks. As the aim of the research is to deal with an escalated total surveillance society such extrapolation and exaggeration is logical and necessary.

Data interpretation will be based upon further reflections on the conditions discussed in Chapter 2, and their documented counterparts within the site context discussed in Section 4.2, in terms of the extent to which their cause or source is affected.

2. Understanding the Issue

2.1. On Surveillance

Surveillance of the public domain is growing more widespread and pervasive, Haggerty and Ericson (2006) describe it as a “feature of modernity,” stemming from the needs of the society and the possibilities of technology. In fact it is largely an urban construction, although it does spread outwards to an extent, and as it is widely agreed upon that the proportion of world population living in urban environments is ever increasing (Castells, 2004; Day, 2002; Gehl, 2010; Langenbrinck, 2004) the significance of surveillance is also becoming relevant to a larger proportion of the population.

Haw (2008) talks about CCTV as a common example of the pervasiveness of such technology, and while referred to as Closed-Circuit TeleVision it is a collection of monitoring technologies rather than purely cameras as the name suggests. Haggerty and Ericson (2006) affirm that the power of surveillance comes from the ability to collate disparate data, pulling together many elements to form a greater informed body of knowledge. Hadjiyanni and Kwon (2009) describe

how through this collation of data surveillance systems have the possibility to keep track of people’s personal lives and enable the operators to identify and pin-point particular individuals, link them to events and even triangulate their geographical position as supported by Monmonier (2002). Mitchell (2006) elaborates, and is backed up by Haw (2008), that the infrastructure for this kind of all encompassing scrutiny is already in place all that is needed is the link to bring it together, which may well be the next step.

McGarth (2004) explains that one of the main worries surrounding the development of surveillance is the fear of the information getting into the wrong hands. Koskela (2000) however points out that there are more privately owned cameras in operation than ones maintained by authorities, dispelling the illusion that surveillance is necessarily for the greater good of the whole population. These privately operated surveillance systems are primarily focused with mediating the territories which the operators have either implicit or actual ownership of.

Another main source of unease is the transgression of privacy, perceived or otherwise. Solove (2009) points out that there is in fact a difficulty in a clear definition of the term “privacy”; while privacy is a fundamental human right, often quoted alongside freedom, it is often ambiguous, lacking precise definition, and is as such hard to codify. In terms of the concepts and issues surrounding surveillance Stewart-Pollack and Menconi’s (2005) definition of privacy as the controllability of our environment in order to meet our needs as well as to mitigate over exposure is the most meaningful and relevant. This definition includes control over how and when to interact with others and what information about oneself is available to them, which constant scrutiny clearly undermines, causing individuals to feel less in control of their daily life and motions, creating the feeling of an external force acting on them.

Hadjiyanni and Kwon (2009) reiterate that people often feel uncomfortable around video cameras in general, Koskela (2000) elaborates that a prime reason for this is the impersonal aspect of a camera, or any other form surveillance. We are

only able to have a one sided relationship with these as the observer and the observed, without knowing the observer’s specific intentions, preconceptions and prejudices which may well differ from the institution they represent. This type of relationship, along with the impossibility of knowing whether someone is actually watching, goes back to Foucault’s concepts of the panopticon, first conceived as a method of prison organisation with the intention of internalising control and creating subservience.

Hadjiyanni and Kwon (2009) comment that there is disparity between the conceptual definition of security as “freedom from fear” and surveillance’s practical application as “control.” Monmonier (2002) in fact defines surveillance as the “use of monitoring to control human activity.” These claims are paralleled by Koskela’s (2000) discussions on the ambivalent feelings of both security and fear instilled by surveillance systems.

Sandercock (2005) however points out “the history of planning could be rewritten as the attempt to manage fear in

the city,” and when Laclau’s (2005) reference to public space as having a “multiplicity of programmes and uses” the unease and social friction can be seen to originate from conflicting efforts of various parties to mitigate their own fears and assert their control over their environment.

Among the above criticisms of surveillance as a panoptic form of control, impersonal subjection and antagonistic relationship to personal controllability there are also practical criticisms as to the effectiveness of the system. For instance Haw (2005) points out that despite the sprawling CCTV system in Britain it has little effect on crime rates. Atlas (2004) also postulates that of the three primary objectives of building security, to detect the presence of threat, deter its occurrence, and respond accordingly, electronic surveillance only meets the first two. While my intention is not to improve the surveillance systems themselves, rather to mitigate their negative consequences, this underlines the shortcomings of the concept of total surveillance and justifies the desire to bypass or evade its grasp. However Haggerty and Ericson

(2006) point out that reasons for resistance vary and a distinction needs to be made between avoiding unjustifiable intrusions and breaking the law.

2.2. Psychosocial Aspects

Aside from defining managing fear in the city as the main historic goal of planning, Sandercock (2005) elaborates on this as “fear of disorder, of dis-ease, fear of minorities,” where “security is equated with the absence of a threatening otherness.” Here surveillance is used as a tool to eliminate this otherness and perpetuate a homogeny and as such is a product of the society more than an external force exerted to govern; Haggerty and Ericson’s (2006) feature of modernity if you will. While this force originates from society it “belongs to no one” directly (Deutsche, 1996), instead there is a “phantom public” not physically manifest which holds the power.

Domosh (1998, from Koskela, 2000) argues that public space can be seen as “places under public scrutiny,” in the context of the surveillance society this underlines the involuntary submission to external scrutiny. The individual is an object in this system rather than a subjective participant with the ability to influence the situation (Koskela, 2000). In this there is the aspect of a near panoptic space of constant

implied scrutiny, to which McGarth (2004) argues instead that today’s cities do not follow a panopticon model of a single observer from a central vantage point but instead there is a multitude of vantage points and a multitude of observers, forming multiples panoptic zones.

Stewart-Pollack and Menconi (2005) refer to the control over how and when to interact with others as well as what information is made available as a personal freedom contributing to quality of life, here that freedom is forfeited in the urban realm. While this is also true in the traditional case, to some extent the proliferation of surveillance systems makes this loss of privacy more acute. Considering this and the hierarchy of power and powerlessness of watching and being watched, as discussed by Koskela (2000), new levels of anxieties can be seen to manifest in the city.

Stewart-Pollack and Menconi (2005) talk about concepts of crowding and territories, where crowding is defined as a “feeling caused by too much interaction (with others) within

a (perceived) limited space," within the public context this alludes to the primary territory, or an extension of the self, where the overexposure to scrutiny contributes in no small amount to feelings on crowding.

Jensen (2001) elaborates on this form of territory as a personal cultivation, a radius containing our perceptions, desires and experiences. Jensen argues that this has a dual effect of contributing to our surroundings and being affected by them. He calls them virtual, not concretely physical but with the potential to become very tangible. Altman (1975, from Stewart-Pollack and Menconi, 2005) asserts that violation, or crowding, of a primary territory can affect self identity, "especially if it is repeated and we are unable to make the adjustments necessary to prevent the violation." Burgin (from De Bruyn, 2006) suggests that "in psychotic space an external object ... is usually perceived as having penetrated the individual," reinforcing the tangible quality of private territory and the violent image of transgression as related to the individual.

Among these violations there is also an approximation of paranoia present in the experience of urban space, Burgin (2006) defines paranoia as "a feeling of persecution unjustified in reality," with the connotation of psychological disease. This definition summarises the feelings of internalised control and subservience as a response to the autonomous presence of surveillance systems pointed out by Koskela (2000). As such, the space created by surveillance systems can be seen to induce an unjustifiable state of mental unrest.

The manner in which these anxieties can be seen to stem from a type of space that is created brings to mind agoraphobia, which Vidler (2000) recounts was first noted in the 1860's as a direct response to the spatial phenomenon of the Metropolis. As such it was the first mental illness attributed to urban space. The common definition of agoraphobia is a morbid fear of social places, especially large open squares. Carter (2002) equates agoraphobia to a state of immobility caused by excess direction. While this may be so for the literal definition of agoraphobia, when applied to a space under

constant scrutiny it is less valid. As outlined before the unease of this type of space is brought on by an overexposure to the powerlessness of being seen, therefore it is not the excess of direction that causes immobility but rather the lack thereof, for when every public space can be seen to be equally scrutinised there is instead a lack of a clear path of escape.

Milun (2007) refers to agoraphobic persons as having a heightened or surplus spatial sensibility, arguing that the anxiety arises from specific kinds of urban space and that is not necessarily a product of the internal projection of the subject but a reaction to spatial elements not as strongly felt by others. Vidler (2000) relates to Simmel's (1903) analysis of agoraphobia, as well as claustrophobia, as being brought on by rapid oscillation between two characteristic moods, suggesting that a mediation of urban space is needed to reduce the rate of this oscillation in order to bring calm to the urban environment. Milun (2007) suggests one such strategy is a series of conceptual contours to bring clarity to the public self.

Koskela (2004) refers to two typologies of response to surveillance, both with the intent of reclaiming control; one of resistance and the other of a counter surveillance. While resistance deals with avoiding surveillance, counter surveillance embraces the mode to create false or counter images.

A further response is that of completely embracing the exposure, Langenbrinck (2004) recounts Simmel's (1903) reference to the creation of Metropolitan man, "an identifiable type who felt his life to be fascinating and threatening at the same time," to this Koskela (2004) adds exhibitionism, a refusal to be humbled. The example put forward here is the use of webcams and blogs to willingly bring to the fore what is otherwise normally obscured, the crux of which is that act of presenting oneself rather than that of being seen and many such reveals are in fact very mundane (Koskela, 2004).

Similarly Tuan (1979) talks about the concept that while anxiety can drive us to seek security it also makes us turn

curious and that “the study of fear is therefore not limited to the study of withdrawal and entrenchment” but also deals with growth, daring and adventure. This however is more of a personal choice and may seem unappealing to some, particularly to ones of “surplus spatial sensibility” as described by Milun (2007).

2.3. Spatial Implications

On the subject of surveillance, Vidler (1999) remarks that “...architects must ask not how to accommodate the digital revolution in space ... but in what way might space ... set up a mild resistance to its virtual surveillance?” This underscores the changing nature of space brought about by the “digital revolution,” which according to Hadjiyanni and Kwon (2009) has lead to a compressed space where interactions, social relations and interfaces are now greatly constructed through digital and electronic means, combined with the propagation of surveillance systems the bounds of public space can be seen to extend further than they have before and overlap space previously conceived of as private.

Through the changing nature and implications of space, the way we experience space shifts, which is as important as its physical definition yet ignored in most traditional analyses and typologies according to McGarth (2004). In particular he refers to Lefebvre (1991) who proposes three typologies to define space; perceived space of spatial practice, conceived space as

representation of space and lived space as representational space defined by use.

Koskela (2000) proposes three typologies for the experience of space to interrogate the issues of surveillance; space as a container, power space, and emotional space; these can be seen to overlap and interrelate as opposed to being three separate measures. Space as a container relates to the physical frame for social interaction as well as the physical relation of the objects between each other and this space, power space relates to hierarchies of who is seen and by whom, submissions and exertions made over space as well as how behaviour effects this, and emotional space deals with personal and individual reaction to space, affected by things such as background and emotional disposition.

Concepts of territoriality also apply to the spatialisation of surveillance. Stewart-Pollack and Menconi (2005) define three forms of territory; primary territories, secondary territory and public territories. Primary territory can be seen as an extension of self, as discussed in the previous section, secondary territory

refers to space of temporary occupancy, with uninhibited access and no exclusive owner, public territory refers to sections of public space that are claimable, such claims and control over the territory being fragile and subject to invasion. Hall (1990, from Gehl, 2010) goes on to quantify the distances for intimate, personal, social, and public interactions, which helps lay down a framework for the design of such territories, to enhance or encourage certain types of experience.

Sandercock (2005) poses the image of life as a series of primary territories suffering routine intrusions from external forces which erode our controllability, reflecting Stewart-Pollack and Menconi's (2005) concept of crowding also touched upon in the previous section. As such occupancy or claims in the secondary and public territories can be seen as the spillage of the primary territory into surrounding space, leading to a sense of ownership and authority over space. Maki and Mulligan (2008) in fact postulate that all modifications and transformations of space can be viewed as a narrative revolving around authority, the desire to regulate and uphold one's territories.

The spillage of these territories outwards from stakeholders in public space as well as those dictated by the “phantom public” Deutsche (1996) alludes to contribute to the spread of surveillance to regulate the ownership of these territories. Thus the urban environment can be seen to harbour a myriad of territories of different nature in close proximity, leading to overlap and attrition. Tuan (1979) comments that such conflict among a heterogeneity leads to the creation of what he calls “fortified landscapes of fear,” a duality of psychological states and tangible environments, projections and compensations for insecurities to discourage interaction.

Tuan (1979) recalls a much earlier period when “...mountains and sprawling forests were landscapes of fear. ...mountains and forests injured only those who encroached upon their domain.” Here the terrains were physically treacherous and conversely became symbolically so, thereby “...by its commanding and ominous presence [the mountain] was able to induce dread in the people of subjacent valleys.” On such symbolism Milun (2007) refers to Freud and the externalisation of internal fears

due to the increased ease of avoiding an external force as opposed to an internal one.

Translated to the modern urban environment this speaks of buildings with intimidating features, such as alienating scale or harsh materials, as well as the symbolism of the internal function of the building itself. Hertzberger (2002) supports this claiming that “our sense of space is attuned to things that impress through their sheer size,” furthermore Milun (2007) states that anxiety in agoraphobic individuals commonly relates to monumental public spaces that bear a “symbolic semblance of greater power.”

Maki and Mulligan (2008) refer to individuals’ search for a stable relationship with their surroundings and with the city, yet amidst such impersonal forms and symbols personal relations are not encouraged, or can instead be discouraged. The relationship between a space and an individual defines a place, somewhere “where you recognise yourself, something familiar and safe, especially to you” (Hertzberger, 2002), where there is

an opportunity for grounding of the self to the surroundings. When this is missing Tuan (1979) refers to the manifestation of anxiety; a diffuse sense of dread and state of anticipation that “commonly occurs when an animal is in a strange and disorientating milieu, separated from the supportive object and figures of its home ground.” Carter (2002) supports this by reiterating the Latin word *agora*, market place, as the origin of the term agoraphobia, suggesting agoraphobia as a response to a particular kind of space. Yet he argues what is more accurate is a fear of non-place, the reactions stemming from a lack of relation to the self and a loss of meaning rather than the otherwise implied over stimulus.

The function of the territories inscribed in the urban environment in the majority is twofold; it discourages the personal association of place, instead pushing its own sense of place, its authority and controllability. The territory becomes a signal for encounter with an external force, similar to Milun’s (2007) description of large open space as signal for agoraphobic encounter, a physically defined “container” for the experience.

Simmel (1903, from Vidler, 2000) and Milun (2007) both suggest forms of mediation are needed to bring calm to the urban environment, methods to negotiate the conflict of territories. Koskela (2004) brings one such suggestion to mind, relating to “obscuring gestures” that are made to regulate one’s private life, the manifestation of this would in fact form a counter to the push of public into the private and regulate the overexposure to surveillance networks. Architecture as a series of forms of envelopment and exposure (Carter, 2002) provides the opportunity for such gestures as an oscillation between the two forms rather than a traditional example provided by Carter (2002) as the room and the façade. Forms of secondary territories to this effect may also provide the grounding and personal relation to space referred to by Maki and Mulligan (2008) and Hertzberger (2002).

3. Existing Conceptualisations

3.1. Conceptual Antecedents

Construction in the public realm is entwined with at least some level of mediation of its context, the most notable of these is the concern for security, which incidentally has given birth to the concepts of surveillance. There have been a number of views and conceptualisations of how public design should best be approached in order to achieve heightened levels of security and ease, some thriving better than others.

One of the most successful concepts of design and functionality in the public realm is that of Crime Prevention Through Environmental Design (CPTED), first introduced in a book bearing the same title by Jeffery (1971) and further elaborated into spatial terms by Crowe (1991). The crux of the concept is “the proper design and effective use of the built environment [to] lead to a reduction in the fear of crime and incidence of crime, and to an improvement in the quality of life” (Crowe, 1991). The main concerns of CPTED are control of access, surveillance of intruders, and territorial reinforcement to extend the sphere of influence; most methods are passive

by design, allowing an “ease of use” for the inhabitants of the designed space, these include lighting design, orientation, reinforcement of intended use of space, sight lines, and material quality.

A similar but alternate approach is that of Defensible Space, first postulated by Newman (1972), which works with the idea of territories and surveillance as based around urban housing as opposed to public space, establishing a strong sense of territory as belonging to the occupants and alienating anyone else as intruder and one to be watched. Here territory is defined by symbolic and physical boundaries which define a “safe” zone for occupants and a “no-go” zone for outsiders. However, this conversely defines the external region as a “danger” zone for the occupants.

A perpetuation of the defensible space concept can be seen in recent responses to the threat of terrorism in America, such as the publication by Hopper and Droge (2005) which takes the approach of architecture as a target and constructs concentric zoned territories with very tangible barriers. These

barriers include designs to halt vehicular approach via the surrounding lawn at the perimeter, a “safe” distance from the architecture and dual uses in public furniture as physical barriers.

The above concepts aim to alienate “undesirable” behaviour rather than necessarily abhorrent or questionable behaviours as such, the definition of undesirable being wider encompassing and free to mutate based on operators’ and users’ outlooks. Defensible design in its approach of target hardening creates a more threatening environment with an implicit presence of threat takes on a somewhat hostile stance to design, while CPTED acts on a more psychological, and yet material, level to create calmer, less threatening environments which are nonetheless more resistant to misdemeanour.

A significant portion of CPTED relies on increasing visibility and reducing anonymity and while generally achieving adequate results on some levels it denies the opportunity for self orientated “obscuring gestures” that Koskela (2004) talks

about. It is my aim to incorporate CPTED elements in design yet to allow for a measure of anonymity, which differs from invisibility, with the purpose of autonomy of the individual.

3.2. Psychosocial Devices

The psychosocial aspect of public space deals primarily with the interactions and interfaces, those among individuals, individuals and infrastructure, individuals and architecture, the public and the private, the public and the individual, the public and architecture, etc.

In a time where the digital presence is growing, there are a number of methods and instances of architecture incorporating interactive media, whether it is to display a particular brand or in order to prompt interaction from passersby. *Fig. 3.2a* shows a selection of interactive surfaces designed primarily to engage individuals, either directly such as projecting their movement in a different medium or responding with mechanical movement to proximity, or indirectly such as displaying shifting patterns and images. These incorporate the prevalent medium of surveillance and in fact use facets of its functioning, such as motion response and digital recording, in a way that can merely be engaging or playful but has the potential to be targeted towards addressing the nature of their applications.

Fig. 3.2a - Examples of interactive media surfaces

To that extent Diller + Scofidio have pushed several concepts to confront the public's perceptions of surveillance and the recorded image. *The Jump Cuts* (1996) installation at the United Artists Cineplex in San Jose, California, USA, by Diller + Scofidio and Paul Lewis for instance consisted of a row of twelve large liquid crystal display panels on the theatre's glass façade, cycling through live images of people in the theatre's lobby and on its escalators. The underlying concept of the digital image and its distortion further perpetuated by use of large angle lenses on the cameras.

This confrontation with a distorted, alienating and one sided image of the interior space at once dramatises the use of the space and brings to mind the disconnected relation of the surveillance media to the physical space. The screens encourage pause and contemplation while incorporating the means of that which it questions, allowing individuals and the public to experience surveillance and one of its modes first hand.

The *iSee Project* (2002) from Schinke and the Institute of Applied Autonomy on the other hand is more a performative initiative than architectural in nature but aims to mitigate the lack of control of being watched. The project maps the locations of CCTV surveillance cameras in urban Manhattan and pairing it with a path finding system, determines a "path of least surveillance," giving the user the choice to decline participation in their own surveillance, "allowing them to walk around their cities without fear of being 'caught on tape' by unregulated security monitors" (<http://www.appliedautonomy.com/isee.html>, 2009).

This initiative forms a "counter surveillance" where the state of overexposure is completely avoided or alternatively the entering of the contested space is voluntary and consensual. Deutsche (1996) talks about being in public as an experience of "being-in-common" with a greater homogeneity and the public space as a "container for this experience where you can pass into or out of it," the role of the *iSee Project* in such a definition clearly inscribes the bounds of this container, and makes the experience an act rather than an incidence.

Contemporary forms of minimalism are often concerned with heightened exposure of the interior space while disintegrating the presence of detail, and when architecture strives for this sleek look with diminished presence of detail what is achieved is a focus on space. In the context of art galleries this works to set the art on its own without external distractions leading to potential misinterpretation; when applied to architecture the object that is on display is the building's use, the space within, the occupants, their lifestyle, and activities (Cerver, 1997).

While this may create idealistic forms of architecture it puts pressure on the habitation of the space and Spector (2006) describes the prevalent typology of contemporary minimalism projects as "empty boxes of limited colour" which strive to display "exclusion of signs of middle class habitability". While the increased transparency of the enclosing barrier lets the occupants project their life and its furnishings outwards in an exhibitionistic gesture that establishes their pride of ownership or attained status symbols, the revealed space also becomes bound by external expectations, detracting

from its practicality (Spector, 2006). This demonstrates the push of the public into the private; when the occupant and interior habitation is decontextualised and put on display, an individual from the outside has little relationship to the interior of the object, yet the "phantom public" described by Deutsche (1996) forms a hierarchy of observer and observed, the external force and the subject.

The above "empty box" scenario points to the ability of architectural form to form a decontextualised container for interaction, with implicit subservience to external function, which should be avoided. Instead an attempt to decontextualise the exterior from the interior can help to destabilise the hierarchy, allowing a more self contained, self controlled, more personal, space.

Where the above deals with architectural methods, *Jump Cuts* and *iSee Project* instead draw attention to the media employed in surveillance, and mimicking facets of its functions the two projects facilitate a more informed approach to, and a choice of participation in, one's re-representation.

Fig. 3.3a - Examples of invitations and retreats in Wellington

3.3. Spatial Devices

In the context of the city there are a number of spatial gestures that work to present an invitation to a space otherwise obscured or removed from sight and proximity, such as doorways, stairs, lobbies, and gates that create a threshold with implied differentiation of the spaces beyond. *Fig. 3.3a* shows a number of examples of these around Wellington. These are signifiers of a retreat or withdrawal from the surrounding space into something different, for instance the gallery or the beauty therapy, spaces which are self orientating and self contained. Supermarkets and stores would also fall in this category even though the purpose of the space in those cases is centred on facilitating purchases rather than a calming or a disassociating envelopment.

Structures such as lookouts and shelters often use a limited amount of material or surface areas to create complexities of space, inscribing space within space, creating or reinforcing axes of vistas, blocking the same, and resisting natural elements. *Fig. 3.3b* shows some examples of structures I have

looked at that demonstrate such overlapping spaces. I was particularly interested in designs that define multiple adjacent areas that are nevertheless distinct and clearly form part of the structure.

In particular *Winnipeg Skating Shelters* (2011) in Winnipeg, Canada by Patkau Architects take the form of a small cluster of shelters in a large field. Through a small gesture they provide a rest stop and facilitate a form of envelopment in an otherwise very open space. The individual shelters are formed of a single surface wrapped around a set of seats, tightly spaced but with the openings of each orientated in such a way that sight lines do not cross, providing separation and individualism within a small area.

These shelters create a secondary territory with temporary occupancy and no exclusive ownership (Altman, from Stewart-Pollack and Menconi, 2005), the small scale, semi-enclosure and exclusive sight lines acts to heighten the sense of occupancy and temporary control of the area. The bent plywood material is unobtrusive and the natural materiality is welcoming and contextual to its surroundings.

Fig. 3.3b - Examples of shelter forms

Fig. 3.3c - Examples of physically manipulatable architecture

The Forma Store (1987) in São Paulo, Brazil by Paulo Mendes Da Rocha (*Fig. 3.3c*) shows an interesting spatial approach. It is designed as a showcase with its façade effectively forming a long continuous display window, elevated to the first floor, almost as a billboard. While its wares and interior are clearly visible the only entrance is via a retractable staircase, allowing the entrance to not only be sealed off but made physically inaccessible.

The physical withdrawal of an otherwise clearly defined entrance allows full control of the permission of entrance and gives the building two separate states, open and closed. While clearly visible when open the entrance is folded out of sight into the floor slab when not in use, creating a somewhat enigmatic state of inaccessible architectural object when closed. The physical act of opening and closing of the building is a gesture of participation or non-participation.

Whangapoua Sled House (2011) in Coromandel, New Zealand by Crosson Clarke Carnachan Architects (*Fig. 3.3c*) shows some parallels, situated in a coastal erosion zone it

is designed to completely close up against the elements, featuring a double skin of internal glazed window openings covered by a second layer of macrocarpa timber clad physically operated hatches. The façade incorporates a double height opening of glass doors and winch operated folding hatch to open up, or seal off, the interior completely. When closed the hatches match the exterior cladding, giving the feeling of a single closed solid object.

Similar to *The Forma Store* the act of opening or closing off the house is a physical one, however whereas *The Forma Store* regulates its entry *Whangapoua Sled House* has the double functionality of also resisting the forces of weather. The act of operating the winch mechanism here is also a physical one, with two clearly defined cranks, one on the interior and one on the exterior, to operate it. The articulated and logical function of the cranks relates much more clearly to the individual than an electronically operated interface would in its place making the act personal rather than a disconnected motion. The mechanism also grants clear physical control of the private territory.

I appreciate the subtle materiality and orientation of the *Winnipeg Skating Shelters* as well as their clear relation to scale and territory. The two physically operated buildings present a direction of controllability that distances itself from the media of surveillance modes and in weaving a more personal relationship through their use reinforce the distance from the one sided relationships that can otherwise form through digitally enhanced interfaces.

4. Design Intention

4.1. Aim of Design

In previous chapters I discussed surveillance as an urban product of the society, an almost inseparable part of life in the city, and while there are a number of issues that arise from the increasing spread and penetration of surveillance systems they do have their role. It is therefore not my intent to argue a need for or the use of surveillance in the urban context but rather to seek methods in which the negative impacts of unease and loss of personal control can be mitigated through architectural intervention.

In *Fig. 4.1a* I summarise the issues pointed out in Chapter 2 under Koskela's (2000) proposed typologies of power space, emotional space, and space as a container, including the areas of overlap. The central points are the blurring of public and private spheres, crowding of personal territories, and assumed illegitimacy of actions; falling within an overlap of all three typologies of space these are essentially the crux of my discussion and the starting point for my design explorations.

My intention is to work with the concepts of territories, crowding, and privacy defined by Stewart-Pollack and Menconi (2005) to develop a response to the summarised issues. The aim is to restore a degree of controllability of one's environment to be able to limit or avoid the effects of overexposure and crowding, to work to define thresholds of privacy by way of primary and secondary territories, and to provide opportunity for anonymity with the purpose of autonomy from the feelings of assumed illegitimacy. It is important here to remember a distinction between justified autonomy and malicious intent as pointed out by Haggerty and Ericson (2006).

Working in the urban environment I intend to design a tripartite response addressing the three levels of territory, from the public through the secondary to the primary, or private, territory. In developing these responses it is important to keep in mind concepts of CPTED and security discussed in Chapter 3 as well as the "multiplicity of programmes and uses" of public space (Laclau, 2005). Thereby the ideal intervention will be minimally disruptive but will enhance its environment

Power

Traditional visibility; observer vs observed
Imposing presence; size, form, material

Defined territories and contested space

Lack of direction or proximity of escape

Orientation of space around dominant objects

Blurring of public and private spheres

Crowding of personal territories

Assumed illegitimacy of actions

Emotion

Lack of control over own image or environment

Unjustified subservience and persecution

Lack of opportunity for obscuring gestures

Container

Relation of objects in space

Segmentation of space through multiple vantage points

Inside vs outside

Fear as anxiety; lack of supportive objects

Space as projection of subject or externalisation of fear

Thresholds of interaction and personal territories

Enclosure vs overexposure

with its presence, and any obscuring methods will be to create an anonymity and autonomy as opposed to an invisibility, wherein the presence of an individual remains evident while their direct visibility may not.

4.2. Evaluation of Design

The evaluation of the extent of success of the following design explorations will be based on a number of factors, interpreted in reference to the previously discussed theoretical concepts. The following is summarised again and reflected upon in terms of the design outcomes in Section 6.1.

One of the main measures of affectivity will be the degree of *controllability* of one's environment that is facilitated by the designs. In particular this refers to the level of control of *one's surroundings, interactions with others*, and control over *one's image* that is achieved, meaning the extent to which one is able to use the designs to *achieve a desired change* in their context. This concept relates to Stewart-Pollack and Menconi's (2005) discussions on privacy, the pervasiveness of scrutiny in the public domain (Domosh, 1998 from Koskela, 2000; Haw, 2008), and the emotional implications of "violations" of personal territories and the lack of control thereof (Altman, 1975 from Stewart-Pollack and Menconi, 2005; Burgin, from De Bruyn, 2006).

The *methods of control* and their implications on the opportunity of *crowding* and the extent of *exposure* will also be important factors to consider, helping to restore a sense of privacy and positive *emotional* states (Sandercock, 2005; Stewart-Pollack and Menconi, 2005).

These relate closely to concepts of *territory* and *thresholds*, the application of which can help to reinforce a sense of *grounding*, or personal relation to and recognition in space (Hertzberger, 2002; Maki and Mulligan, 2008), of self (Milun, 2007), and *control* (Sandercock, 2005; Stewart-Pollack and Menconi, 2005).

The degree to which the design interventions respond to and the method in which they approach *obtrusive elements* in their environment, *external forces*, and contested *territories* will relate to the mitigation of feelings of *subservience* and *anxiety* (Burgin, 2006; Koskela, 2000; Tuan, 1979), one of the key aims of the design response. Tuan (1979) had described fear in terms of *alarm* and *anxiety*, relating to *obtrusive elements* and *lack of supporting objects* respectively, therefore amount to

which *obtrusive elements* are removed from the environment, or their presence *withdrawn* from, will reduce *alarm*, while the introduction of *supportive elements* and environments into the surroundings will reduce *anxiety*.

The manner in which the created spaces relate to their surrounding context and define an exterior and interior will show how they fit, or are *contained*, within the larger system, and how the new type of space and experience is contrasted to the same.

The last two factors relate to more practical concerns, namely the reduction of *disruptions* to existing programmes and *safety*. *Disruptions* of surroundings will encompass structure footprint, added or subtracted usability, and circulations, where the overall goal is to minimise impact. Matters of *safety* will take into account visual permeability, access, illumination, and discouragement of illegitimate use.

4.3. Site and Analysis

As the basis for my design explorations I have chosen a section of Lambton Quay in central Wellington, New Zealand (*Figs. 4.2a-b*, p38-39) as a site, the urban nature of the site as well as its proximity, hence ease of access for personal analysis, being the main discerning criteria in site selection. The importance of the urban setting to the issues of surveillance, as well as their relevance to an increased proportion of the population, is discussed in Section 2.1.

Specifically, as a central area of Wellington, the site presents the most relevant context in terms of concentration of overlapping territories and has several examples of dominating architecture and features discussed in Section 2.3. I had originally selected three specific open areas within the site to centre a response on but this has evolved to encompass the majority of Lambton Quay with its offshoots. In analysing the site I have a looked at the physical layout of the space as well as implicit conditions of threat and comfort within the urban fabric.

For the majority Lambton Quay has a very linear layout facilitating movement from destination to destination with the east and west side of the street separated by dense but relatively slow moving traffic, especially towards the north end where pedestrian crossings become much more sparse. The street is busy throughout the day with peaks of activity in the morning with inbound work traffic, the afternoon with lunch traffic, and the evening with outbound work traffic. Lambton Quay receives less use in the evening and night time, with most traffic comprised of thoroughfare, with a higher rate of vehicular than pedestrian use. As such it ranges from a crowded street to almost deserted at night with storefront illumination making a significant contribution to the street.

The most common building function within the area is that of office buildings, followed by a mix of retail, concentrated in the south, and cafés and restaurants. There are also a number of large banks present along the length of Lambton Quay and present but less immediately evident are a number of apartments.

The following pages show a series of analyses on the implicit and non-physical conditions present amongst the site (*Figs. 4.2c-k*, p40-53). *Fig. 4.2c* shows the areas where the spillage of territories is most evident or is felt the most, originating from such elements as strongly articulated doorways, pavement treatment, specially articulated awnings, and physically defined framing features, *Fig. 4.2h* shows some examples of these. These are commonly features that attempt to establish an entrance but conversely they define areas of influence and scrutiny, areas where one's actions may be scrutinised and questioned. *Fig. 4.2e* relates to obtrusive elements in the environment that act to exact an ominous or intimidating feeling, such as harsh building materials, objects of disproportionate scale to the individual, and objects symbolic of a larger power, such as the examples in *Fig. 4.2i*. These deny an individual sense of grounding to the environment and hold a sense of authority or power.

Fig. 4.2e documents open, exposed areas of pedestrian space, which simultaneously shows areas that offer the least

resistance to their surveillance and areas of opportunity for intervention. *Fig. 4.2g* shows existing areas and moments where a sense of grounding may be achieved or is encouraged, including retreats and withdrawals from the main circulation of the urban street, opportunities for repose, and places that may not have a strong defined use but hold something that can be related to on an individual level, some examples in *Fig. 4.2j*.

Fig. 4.2k overlays the features located in *Figs. 4.2c-g* to show them in context to each other. From the overlay the existing moments of relief can be seen to be located sparsely along the area of the footpaths, or the main circulation, and also peripheral to the same, in the instance of side streets and median strips. The spillage of territories, however, is more closely related to the footpath, and outnumbers the opportunities of relief.

The influence of obtrusive elements is most concentrated between Waring Taylor and Johnston Streets, followed by the corner of Hunter and Featherston Streets, corresponding to large exposed areas surrounded by a number of dominant

buildings. Exposed areas that lack such elements are instead more conducive to providing unencumbered vistas, axes along which clear views out of the CBD towards more natural and relatable scenes penetrate the surrounding milieu of buildings.

This suggests opportunity for the placement of interventions to form a pattern with the existing moments of withdrawal, in order to provide a more consistent corridor of such moments to balance the amount of exposed, contested, and dominated sections of space. The areas with the greatest concentration of obtrusive elements are ones that would benefit the most from intervention, whereas the sources of unencumbered vistas can potentially be integrated into the orientation and design of such interventions.

38 Fig. 4.2a - Location of site within greater context

Scale 1:2500

Fig. 4.2b - General site overview 39

42 Fig. 4.2d - Spillage of territories within the site

48 Fig. 4.2g - Grounding, pause, escape, and vistas within the site

5. Design Response

5.1. Intervention - Public Scale

The first stage of my design is based on an intervention addressing public territory. The main goal of this is to create opportunity for retreat from the surveillance of public space while providing a more intimate space that can accommodate temporary claims of ownership to help ground the individual. As such, this kind of intervention is to achieve the following;

- »Define a separate space from the public area which is related to the personal scale.
- »Provide a sense of grounding, a temporarily claimable territory.
- »Limit the visual permeability of the space so as to create opportunity for anonymity and autonomy while avoiding invisibility based on safety issues (see CPTED).
- »Consider both day time and night time application.
- »Be minimally obtrusive to the uses of surrounding environment.

My initial concepts were based on vertical elements combined to form shutter or funnel-like forms orientated about sight lines (*Fig. 5.1a*). At this point I was focusing on specific open areas within the city and the orientation was a reaction to specific placement within these sites. I further elaborated on these forms to create different seating surfaces and hinged sections that could be manipulated to close in or open out to alter the extent of enclosure within the spaces.

These forms were to be of a mixture of translucent materials such as frosted glass and perforated sheet metal so as to distort the view of the occupant yet retain their visible presence, thus creating a space that is more anonymous than invisible. Within these elements I was considering placement of digital modes of interaction, in this fashion an occupant would for instance be able to project images or operations of a portable device, a laptop or a phone for example, onto surfaces of the sheltered forms or use them to manipulate the images displayed on the screens.

Fig. 5.1a - Initial design sketches

I further experimented with more enclosed forms, forming small shelters open at two ends and grouped in clusters so as to provide relief to targeted zones (Fig. 5.1b).

These designs I found to be too densely dispersed within their environment and acting as too much of an obstruction. Furthermore the orientation of the vertical surfaces was such that they blocked view from some directions while being completely revealing to others, this was part of the intent as they were based around sight lines but essentially this only made them partly effective in limiting exposure.

On reflection I also found the material choice of glass and metal was perhaps not a good choice for while it related to the context of the surrounding architecture it was not very conducive to creating a sense of grounding, being too sleek and artificial in nature. The digital interaction modes as well were limited in their use and acted more as a perpetuation and symbolic representation of surveillance media than a mode of avoidance or meaningful evaluation.

The subsequent design was reduced in footprint and in an attempt to further engage the individual I aimed to incorporate various mechanical elements (*Fig. 5.1c*). The form of this direction of design was of freestanding curved faceted strips that would close in tighter in response to the triggering of proximity sensors, in this fashion the inward space of the curve would become more defined and enclosed in response to occupancy.

The facets of this form would be made of lightweight steel with some facets further covered with inset digital screen facets of basic geometrical shapes, intended to display fragmented live images of distant areas of the city. This was intended to create a form of counter image by displacing the image of what is there with more distant imagery while also drawing the passerby's attention to the surveillance of the public space. In night time or low light conditions these images could instead be replaced with warm colours to provide an ambient glow and additional illumination. The illumination would also increase the visibility of occupants during night time so as to reduce the risk of lingering with malintent.

Fig. 5.1b - Design mockups of sheltered forms

Fig. 5.1c - Mechanised forms designs

While this design was less cumbersome to its surroundings I found it to be by the same gesture not very effective as an enveloping feature, leaving much still exposed. The mechanised nature of the folding and unfolding also required the form of the strands to be either overly complex or quite tall when unfolded leading them to be too prominent in the context. In the concept of the fragmented screens however, I did see potential for other settings and configurations, perhaps more subtly presented to be used both as distraction as well as counter image.

From these developments I decided that instances of intervention needed to be more dispersed and respond to the characteristics of the footpath rather than specifically focusing on open spaces within the city. The footpath accommodates movement, access, and interaction within the city and as such is a significant element in the urban fabric.

Taking a closer look at the space of the footpath I was able to categorise it into three zones with varied dominant use. Fig. 5.1d shows a typical segment of footpath, divided

into these three zones. Zone A refers to an area adjacent to the buildings, used primarily for such things as movement in and out of stores and buildings, stopping to look in or at frontage, buskers, and fundraising collections. This area relates closely to adjacent buildings and the main circulation, it is to an extent removed from interaction with opposite buildings and elements beyond the road.

Zone B is mainly used for a linear circulation as medium to travel through rather than a destination, it is commonly sheltered which further defines its extent during wet weather, it does not however provide much chance for pause in the near constant flow of traffic. This area can be seen to relate both to the adjacent and opposite buildings as well as nodal points.

Zone C is uncovered and is used for transverse movement in crossing the road, loading and unloading, alighting of transport, looking across the road, and generally pause in elements such as benches and bus shelters. This area experiences a lower flow of traffic and relates to the road more than adjacent buildings due to the buffer of foot traffic

Fig. 5.1d - Zones of a footpath analysed

Fig. 5.1e - Further design sketches

between the two, it relates to crossings as well as the opposite side of the road.

From these definitions zone C, the somewhat peripheral area to the main circulation, can be seen to be less encumbered and forms an edge between the interaction of the adjacent circulation and opposite elements while conversely the flow of circulation also forms an edge between this area and adjacent elements and territories. As such, dispersed interventions based primarily in this area can both serve as elements of cover from adjacent as well as distant influence. The reduced population of this area as well lends itself to less obtrusive placement of such interventions.

Fig. 5.1e shows some initial design sketches working within this specific zone, these focus on spaces parallel to the flow of traffic through the area, so as to have a more cohesive relation to its surroundings, and semi permeable forms to envelop the individual yet give evidence of their presence. Other considerations present in the selected sketches are sight lines,

illumination, and definition of pockets of individual orientated space as well as a signalling of this.

The final design I have arrived at for this scale is in the form of a series of screen-like curvilinear shelters, documented in *Figs. 5.1f-m* (p64-71). The forms are derived from the parallel flow of traffic in plan so as to provide a smooth departure from the space, reducing obstruction. Concave sections of these forms work to help define individual zones, receding into the surface of the screens and conversely subtly pushing out into the surrounding territories, some of these pockets incorporate seating, carrying on the same curvilinear formal language, to invite pause.

To help define transition into a separated space the screens feature a spilling area of interwoven paved striations, paralleling the curves of the screens themselves, set apart in a lighter stone to the surrounding paving and unified in their directionality as opposed to the common gridded pavement layout (*Figs. 5.1h, i*).

The screens themselves are formed out of timber slats which pose a contrast to the prevailing materiality of the city composed of stone, steel, and glass. This both sets it apart as a separate object from the adjacent buildings as well as helps to create a warmer, more easily relatable, environment to the individual. These slats are also slightly staggered to avoid a single unified surface which would detract somewhat from a sense of grounding or personal relation of the individual to the environment.

The internal area formed by the screens is scaled in relation to Hall's (1990, from Ghel, 2010) quantification of distances of intimate and personal interactions (*Fig. 5.1i*) so as to further reinforce the sense of a personal space that an occupant can relate to.

These characteristics aim to create a relatable environment to encourage a sense of grounding for the occupant as well as defining the space so as to facilitate a spillage of their primary territory and create the feelings of temporary ownership and control within the enveloping forms.

The slats of the screens separate the two sides of the screen into two areas as well as help to reduce the visual exposure of the enclosed space, additionally working to limit the exposure of the space behind the screen based on the position of the point of view. While the spacing of the slats is intended to act as an obscuring screen for the details behind the screen is will still allow the perception of any occupants and their body language rather than specific features (*Figs. 5.1f, g*), in this manner visibility is maintained while providing a level of anonymity.

During night time and low light conditions the slats will allow light to pass, avoiding a darkened zone, as well as this alternate slats also house LED strips in their hollow central section, which linked to a control unit will switch on in low light to provide an ambient illumination of the screens (*Figs. 5.1g, j*).

Further obscuring gestures in the screens come in the form of steel strips applied to the road facing edges of the

slats and an inset array of LEDs on this surface (*Figs. 5.1g, j, k*). The steel strips act conversely to the warm personal nature of the timber slats to present a more contextual surface to the opposite city elements and external forces. The LED array is a continuation of an earlier concept of presenting a counter image, in this instance the LEDs are linked to a control unit to display alternating pre-recorded and live images of more distant public locations. The spacing of the LEDs will render the details of the image indistinguishable at a close distance, appearing as a movement of colours serving only as a light distraction, while with greater distance the image becomes more coherent and hence more of a distraction.

The screens are to be intermittently dispersed along the length of Lambton Quay in response to local tensions while also relating to existing moments of pause, grounding, and shelter (*Figs. 5.1l, m*). There is a variation among the screen configurations to allow for a greater or lesser extent of anonymity as well as to avoid a single cloned element stamped through the city (*Fig. 5.1i*).

The result at this scale is similar to that of an obscuring gesture as referred to by Koskela (2004) in that it does not provide a complete escape from its surveillance and the tensions implied by its presence but instead provides a method to take steps towards reducing one's exposure to it. A distancing from scrutiny and contended territories takes place. In reducing the exposure of the self and defining a precariously inscribed claimable territory where one may find grounding, what is achieved is the creation of a moment of respite where a margin of personal control is restored and one's primary territory is in less threat of invasion.

Fig. 5.1g- Typical Screen Configuration, Low Light or Night Time Situation 65

Fig. 5.1i - Alternative configurations and defined zones of interaction 67

Fig. 5.1k - LED Array Schematics 69

Fig. 5.1m - Placement and orientation of interventions 71

5.2. Shelter - Temporary Ownership

The second scale of my experimentations is orientated around a more completely sheltering form than the interventions in the previous section. As well as the previous aim of creating a retreat and a place of grounding the shelter scale is intended to accommodate a greater sense of withdrawal and a recombination of the relationship to the tensions of space. The breakdown of goals is as follows;

- »Define a separate space from the public area which is related to the personal and small group scale.
- »Provide a sense of grounding, a temporarily claimable territory with a heightened proprietary sense.
- »Create an enveloping form with a level of controllability of exposure available to the occupant.
- »Form a confrontation to the obtrusive and contested elements of space.

- »Limit the visual exposure of space so as to create opportunity for anonymity and autonomy while avoiding invisibility based on safety issues (see CPTED).
- »Consider both day time and night time application.
- »Contribute to the uses of surrounding environment.
- »Incorporate a relationship to the previous scale.

My initial designs in the this direction were orientated around sight lines, materiality, and separation of space. Some of the original thought was to limit exposure of the space while maintaining and reinforcing unencumbered sight lines. *Fig. 5.2a* shows some initial sketches featuring loosely defined space with symbolic definition in line with the footpath as well as movement towards more defined forms and the facilitation of a physical displacement from the immediate environment. These displacing shelters were to incorporate a retractable access controlled from within in order to instil a greater envelopment of space.

From this step I found the vertical movement to have potential on several levels for while at once it accommodates a withdrawal from the flow of public space it also acts as a displacement from the main medium of contending territories as well as elevating the viewpoint. This creates an altered relation to the surrounding environment as well as forming a symbolic and visual push upwards towards the heights of the proximal monumental building forms, symbols of power, and the traditional top-down location of surveillance or position of watching over.

Deciding to develop further in the direction of the vertical push my further experimentation was concerned with creating a more enveloping form, considering its relation to the ground level, and material treatment (Fig. 5.2b). At this stage of development I also began considering digital media of interaction similar in concept to the LED array of the intervention scale yet related more closely to the ground level rather than distant vantage points so as to communicate with or confront passersby.

Fig. 5.2a - Initial sketches

bounding limits of the approach, suitable for individual to small scale interpersonal interactions. The placement and nature of the digital media from this stage left room for further refinement and a more rigorous level of integration while the concept of relating to the ground level would help soften the physical presence of the form. The exposure or envelopment of the main area of the shelters as well as the approach is one that needs further development here in order to form a more deliberate step to follow on from the intervention scale.

The final design I have come to at this second scale takes the form of small structures providing a vertical removal from the public space. These are more rigorously sheltering forms than the previous screens and have a more active role in their application. *Figs. 5.2c-m* (p80-89) document the particulars of these. The shelters have a rectilinear plan and two main areas elevated to around 2m and 4m (*Figs. 5.2f, g*). The dimensions are based around the width of the stairways and, again, Hall's (1990, from Ghel, 2010) quantification of distances of interactions, in this case the lower of the two areas is scaled around the scale of an individual while the upper area is intended to accommodate

small groups at a personal interaction level (*Fig. 44.4f*). A third space is also created partially enclosed underneath the shelter, this serves as a form of threshold and flows into the entrance way to the elevated space, itself comprised of a descending stairway.

The shell of the form is comprised of a series of timber portal frames, the spacing of which striates and partially obscures the view of the enclosed space. The raised area is supported along its perimeter by a combination of steel beams and channels which are in turn attached to the timber frame via brackets welded to their flanges (*Fig. 5.2h*). The height of the frames follows a height line (*Fig. 5.2g*) which narrows on the stairs and widens on the two landing areas reinforcing the horizontal dimensions of the spaces in order to create an undulating sequence of spacious and enclosed spaces from the outside through to the two landings. This pattern emphasizes the arrival at the two landings as two destinations, where the space opens up, and the transitional nature of the stairways is conversely reiterated by the reduced dimensions. I had initially planned to incorporate a distinguished area of paving to mark

the area underneath the shelter similar to the approach at the intervention scale. However it seemed superfluous when the area was already evidently defined both by the overhead structure and its perimeter supports.

Continuing from the intervention scale I have decided to use a similar dual materiality here of warm timber textures on the interior facing surfaces and steel on outward facing surfaces to respectively reinforce an interior sense of grounding and an exterior impersonal contextual reference. The latter appears in the visible structure underneath the sheltering form as well as the outward facing surface of the barrier for the elevated space. Both the interior and exterior surfaces of this barrier are perforated which creates a texture in order to avoid too strong a solid surface which can detract from a feeling of grounding as well as allowing for some visual permeability to avoid invisibility of the interior use.

To help further envelop the enclosed space, frosted slats are mounted within the gaps between the timber frames in conjunction with motion activated servos (*Fig. 5.2h*). When a

person enters the elevated space and passes in front of the motion sensors the slats lower and further distort the view of the occupant, once lowered the slats will rise again after a time delay unless triggered again or alternatively they can also be physically raised by the occupant if the screening is not desired.

The second active feature of the shelter is the pivoted access stair which is to withdraw when the shelter is occupied, again motion triggered (*Fig. 5.2i*), so as to limit further entry into the space and reinforce the formation of a temporarily owned space. The stair will lower again once the motion sensor is triggered a second time or based on a time delay in order to avoid safety issues, after this operation there will be a further time delay until it can be repeated again. This will also operate automatically during night time to withdraw access to the shelter in order to avoid misuse.

When withdrawn, the underside of the stair is designed to mimic the adjacent fixed stair between the two interior levels in order to more effectively conceal evidence of the

entrance, creating an enigmatic perception of an inaccessible space when closed. The physical withdrawal of the space is thus twofold in its vertical displacement and the removal of access, separating the space from the surrounding interplay of contested territory.

While access is denied during night time, the space below the shelter is still free for use and as such, lighting is incorporated into the underside of the structure to illuminate the area below. Lights are also placed into the gaps between the tops of the frames to create an interior glow for the vacant shelter, turning the form into beacon and avoiding the casting of dark shadows (*Figs. 5.2e, j*).

Similarly to the previous scale, LED arrays mounted on the exterior faces convey moving shapes derived from pre-recorded and live images of distant public spaces (*Fig. 5.2k*). In this instance the arrays are arranged into strips along the timber frames of the shelter, rising up from the ground these are concerned with the plane of the passerby. While the gap between two adjacent strips of LEDs is larger a closer spacing

of individual LEDs makes the images more legible to passersby as opposed to the previous scale. In addressing immediate passersby, the LED arrays will more easily draw their minds towards the surveillance of space where the previous scale was more concerned with employing the LEDs as an obscuring gesture.

While these shelters are larger in scale than the screens, they have a similar footprint and are more conscious of the use of surrounding space; the elevated landings free up much of the ground level. Combined with the parallel orientation to the flow of adjacent space this reduces the extent of interference the shelters pose. The incorporation of bicycle docking into the bases of the timber frames the shelters also contribute use to the surrounding area that is not directly related to their immediate intention (*Figs. 5.2f, g*).

In relation to the interventions, the shelter forms require more unencumbered space around them and as such, opportunity for their placement is more limited within the site. Aside from the spatial constraint the shelters respond the most

to large obtrusive elements and axes of unencumbered vistas in respectively rising up to confront their traditional position of power and in funnelling the sight lines within the shelter along one main axis. *Figs. 5.2l, m* show possible placement of these shelters in relation to the previous interventions and the possibilities of the site.

Where the previous scale was analogous to an obscuring gesture the shelter scale offers a controllable withdrawal and plays a more active role in both creating a secondary territory of temporary ownership and in allowing modification of the nature of the area by the occupant. Along with this definition of territory and increased functionality, the confrontational vertical displacement makes the shelters more prominent entities in the issues of surveillance.

I find the physical displacement and withdrawal of entry particularly successful here in achieving a defined alternative territory to the contested, watched over space. The size of the shelters however does make them slightly cumbersome in their

context, despite the attempts to lessen their impact. However a removal to a less loaded area would lessen the intended effect of the shelters as relief. The safety factor of having such a structure where external access is cut off once it is occupied poses some practicality issues with the design. However if compared to existing structures with similar operation, namely public bathrooms, this design is more visually permeable, also the night time illumination and withdrawal of access work to further increase visibility and deny use respectively.

80 Fig. 5.2c - Typical shelter configuration

Fig. 5.2d- Interior position of typical shelter

Fig. 5.2e- Typical shelter night time situation 81

Front elevation, 1:50

Side elevation, 1:50

Motion sensor triggers shutters to close

Once closed the shutters will open again when handled

Fig. 5.2i - Pivoted stair operation 85

Section C-C showing night time conditions, 1:50

Side elevation showing LEDs during night time conditions, 1:50

Fig. 5.2m - Examples of specific placement of shelter forms 89

5.3. Structure - Private Scale

The final scale here is concerned with small scale structures to house a means of a reversal of one's position in the hierarchy of observer and observed, the power and the subject; a means of reviewing one's presence in surveillance media as well as a repository and a forum for discourse on surveillance matters. The aim of the interior programme is to provide a medium for discourse of objectionable matters and material, such as political commentary, conspiracy theories, and organisation of counter surveillance movements, and to provide access to the recorded information of oneself in the passage through a space of surveillance, and in doing this slip outside the observance of higher powers as such.

The storage of and access to such contributions in discreet physical locations will itself provide an outlet for resistance and objection to conditions imposed in a society of total surveillance that is an alternative to other more vulnerable media. The availability of such an outlet is aimed to allow a greater role for the individual than simply a subject of

surveillance with no means of meaningful participation, a means to rise above being the observed object.

The review of one's presence in surveillance media refers to an access to the information about oneself that is collected and stored through surveillance media, in order to give a more complete knowledge of what is seen of oneself and to be able to object where necessary. The access to one's image is a restoration of a more active role in the production of one's image in an attempt to reclaim a "copyright" of one's life (Koskela, 2004).

The structures themselves are intended to provide a withdrawal from an external power play and allow for control of the level of exposure and envelopment of its interior programme. Since the idea is that the structures will house objectionable and counteractive programmes to surveillance, it is ideal to minimise their impact on the surrounding city fabric while maintaining their proximity. As such, I have opted for a somewhat parasitic building type that utilises marginalised space within existing areas of withdrawal, namely the offshoot alleys from Lambton Quay, which provide a good starting

point for siting. *Figs. 5.3a-e* document four such possible sites, which can potentially each house a separate structure to form a network. However as each site would require a unique structure as a response to their individual factors I will focus on two locations in order to provide two exemplary variants of the programme.

The following is a set of criteria to apply to the structure;

- »Create a space that is present in the public area but is withdrawn from its immediate proximity.
- »Provide a sense of grounding where the primary territory is reinforced.
- »Create an enveloping form where control of exposure is available to the occupant.
- »Pay respect to the physical setting and context in order to avoid an obtrusive presence while avoiding a submission to the interplay of contested territories.
- »Respond to any adjacent sources of tension.

- »Mediate availability of entry and access to the interior defined space.
- »Consider both day time and night time application.
- »Incorporate a relationship to the previous scales.

The following spatial requirements will apply to the interior programme;

- »A meeting, discussion and forum space: to accommodate group use, seating, projection media, a podium or focal area, and have proximity to amenities.
- »Repository and information review: physical shelved storage, computers as points of access for digital storage, private review areas.
- »Reception and admin area: to handle submissions, communications, and shelving.
- »Amenities: suitable for the scale of the building.

92 Fig. 5.3a - Potential sites for private scale

Fig. 5.3b - Mansons Lane

Fig. 5.3c - Farmers Lane

Fig. 5.3d - Woodward Street

Fig. 5.3e - Plimmer Steps

The two locations I have decided on are Mansons Lane (*Fig. 5.3b, j*) and Farmers Lane (*Fig. 5.3c, t*), both lanes provide through access to The Terrace from Lambton Quay. The two are shorter in length than Woodward Street and Plimmer Steps, therefore in closer proximity to both The Terrace and Lambton Quay.

Mansons Lane is long and narrow in the form of a covered walkway between adjacent buildings. Utilising the space above the walkway, the Mansons Lane design is to partially replace the existing cover while providing an opportunity for withdrawal and housing the repository (*Figs. 5.3f-o*, p100-107). The structure is recessed within the lane with its short elevations offered to Lambton Quay on the east and to The Terrace access way on the west (*Figs. 5.3h-i*). The exterior cladding mimics the materials of the adjacent buildings while the underside is lined with timber slats, similar to those used in the intervention scale, so that the underside of the structure gives a more personal feeling. Square openings in the underside slats penetrate to light fixtures to replace the similar existing layout of recessed lit square bays (*Fig. 5.3b, n*).

Entry is gained from the underside of the building via a pivoted stair mechanism similar to that of the previous scale (*Figs. 5.3k-l, n*), which again closes flush with the underside of the building in an attempt to conceal evidence of entry when withdrawn. As a form of controlled entry the stair raising and lowering mechanism is key operated from both inside and outside the buildings, allowing it to be locked overnight as well as to be sealed from the inside if the programme calls for it.

The narrow nature of the interior lends itself to an individual orientated space with several separate pockets defined by shelving and partition walls (*Fig. 5.3f-g, k*). The spatial layout itself is based around the entry and administrative desk as a hub; the private review area is adjacent to this while the physical storage and access to the forum and meeting area stem off in the opposite direction and separate vertically.

Acoustic timber panels line the ceiling which work both to limit reverberation within the building and to bring more warmth to the palette. The dampened sound transfer limits

the permeation of outside noise as well as quietening interior sounds, creating a slightly hushed, more intimate feel. The second floor also opens up onto a planter above the stairs, serving to bring a bit of nature into proximity in an attempt to create a further instance of grounding.

Windows at each end of the building are first covered by a perforated screen, limiting their permeability especially from the outside, and secondly obscured by timber shutters, which further regulate the amount of exposure achieved. The shutters are crank operated from within in order to create a more direct physical relationship to the control of the interior space. Similarly a section of the ceiling is glazed above the shelving, with pivoted crank operated acoustic panels beneath which mimic the ceiling used through the building while also providing another opportunity to regulate the states of exposure and envelopment (*Figs. 5.3n-o*).

A gap is maintained on either side of the structure to adjacent buildings so as to avoid blocking out the overlapped windows of these (*Figs. 5.3l-n*), while a siding of timber slats

covers the otherwise flat north and south exterior walls so as to bring more texture and interest to the window facing surface.

Where Mansons Lane is long and narrow Farmers Lane is more open, however as it is used as a service access for adjoining buildings the Farmers Lane design (*Figs. 5.3p-y*, p108-115) is instead limited by a requirement to allow service vehicle thoroughfare (*Fig. 5.3v*). In paying respect to the context, I have bound the height of the structure to the adjoining building. Also, as more visually prominent materials are present at Farmers Lane, namely the ribbed concrete wall on the north, they were able to contribute more to the design than those at Mansons Lane. A prominent feature here is the south façade, as the largest outward facing surface and parallel to the adjacent building, it takes on the appearance of a single unified ribbed concrete wall, at once a physical representation of the withdrawal of the interior programme and a contextual reference. Additionally the openings and areas of varying materials present in the exterior cladding use the striations of the adjacent building as further influence.

The Farmers Lane design shares many similarities to the Mansons Lane structure as it is essentially an adaptation of the same goals to a different context. For instance, the pivoted entry stair, mechanism and its operation are essentially the same, the timber slat lined underside and the interior material palette are shared, and a similar crank operated mechanism is used for the shutters present in the Farmers Lane building.

As the Farmers Lane design is not restricted to a narrow walkway, the building appears more open and freestanding. The choice to elevate the building carries on from the previous concepts of a physical removal from the ground plane and elevation to a new reference point. Additionally, in freeing up some of the ground floor level, the building appears less cumbersome to its surroundings and when the entry stair is withdrawn it creates a more complete separation from the ground plane and hence its dependence on the surrounding space. The space beneath the structure also acts to define a threshold between territories, similar to the effect achieved in the previous scale. The vertical aspect of the design has

led to a different approach to the spaces of the programme where they are separated on different levels as opposed to the predominantly horizontal separation of the Mansons Lane instance.

While the operation of the shutters present here are essentially the same, their layout differs in that the windows present on the short east end have vertically folding shutters based on their vertically orientated context, and the those on the south façade close flush in order to create a more unified surface (*Figs. 5.3v-y*). The materials of the shutters are also more closely linked to contextual material rather than adopting the timber from the Mansons Lane. Glazing in the west façade admits light to the stairwell as well as allowing limited visual permeability, these are obscured by timber slats, also serving to bring a warmer appearance to the rear, or inward, facing surface of the building.

Of the two designs, the Mansons Lane building perhaps suits the goals better as it has a larger interior floor area whereas the Farmers Lane design has more modest spatial

allocations for the programme. Another factor that contributes to the cohesion of the Mansons Lane building is the proximity of its adjacent buildings and the amount to which it fills the gap and appears as a part of what is there while the increased exposure of the Farmers Lane design is likely to potentially draw more attention to it.

This scale of design provides a more complete envelopment than those in the previous sections, once inside the structure the level of exposure is controllable while enclosure is maintained. The structure scale presents a more effective form of withdrawal where the occupant is completely removed from the public space, achieving a container for primary territory. As the repository and other functions of the building are essentially open to all public the entry is not in itself limited, instead it offers an invitation into a space of removal; a container for primary territories.

The proximity of the selected sites to Lambton Quay means they are not so distant so as to lose relevance, however the two lanes do experience a different type of use from the sites of the

two previous design scales and as such the disparity between the previous designs and this scale is in the context as well as the physical extent of the constructions.

100 Fig. 5.3f - Mansons Lane interior, facing stair to level 2

Fig. 5.3g - Mansons Lane interior, facing east window on level 1

Fig. 5.3h - Mansons Lane from Lambton Quay

Fig. 5.3i - Mansons Lane from the west 101

Fig. 5.3k - Mansons Lane plans 103

North elevation, 1:100

Section C-C, 1:100

Fig. 5.3o - Mansons Lane ceiling shutters operation detail 107

108 *Fig. 5.3p - Farmers Lane interior, facing first floor from stairwell*

Fig. 5.3q - Farmers Lane interior, second floor facing stairwell

Fig. 5.3r - Farmers Lane from the west

Fig. 5.3s - Farmers Lane from Lambton Quay

Section H-H, 1:500

Section I-I, 1:500

Third floor, 1:100

First floor, 1:100

Second floor, 1:100

Ground floor, 1:100

- 1. Entry
- 2. Admin desk
- 3. Physical storage

- 4. Digital retrieval desk
- 5. Private review area
- 6. Forum area

- 7. Projector and media control
- 8. Bathroom

West elevation, 1:100

South elevation, 1:100

Fig. 5.3w - Farmers Lane section of interior programme 113

South façade second floor window, 1:20

Section K-K, 1:20

Fig. 5.3y - Farmers Lane east window composition detail 115

6. Conclusions

6.1. Findings

In working at the three different scales I have arrived at different forms to provide relief from the tensions and anxieties of conflicting territories, overexposure, and surveillance. Each design addresses the issues on a new level, together forming three increments of relief.

The main design intention has been to provide a level of control over one's surroundings so as to be able to limit overexposure and the effects of crowding while also achieving a state of withdrawal or escape from the pressures of the new kinds of space. As well as these, the designs also deal with responding to obstructive elements, external forces or territorial influences, working with emotional space, supportive elements, and containment of space, based on the summary of issues shown in *Fig. 4.1a* (p32). Additionally the goals of creating a minimal disruption in the surrounding space and to maintain a level of safety about the designs were adhered to. Although there is some amount of overlap between these

factors *Fig. 6.1a* summarises the effects achieved for each desired characteristic, further discussed below.

The initial intervention scale took a light approach, providing a passive control over surroundings by offering a single occupancy semi enclosed space parallel to the flow of circulation which partially distances the self from the surrounding space. As such the control available is a small gesture of entry into a differentiated space. The shelter scale provides a more interactive control where the environment can be physically manipulated to regulate exposure or withdrawal, the pivoted stair mechanism further allows the occupant, or occupants, to be sole temporary owners of the space. The larger constructions introduce further opportunity for physical manipulation of the characteristics of interior space. The programme itself also presents access to the review of information collected of oneself, therein informing the user of external viewpoints and allowing them to have a more informed response to the environment where a more controlled result may be reached.

Crowding is mitigated at the intervention scale by way of a close composition that promotes the spillage of one's primary territory while the entry to the space remains a participatory action, thereby incursions into the enclosed space while occupied are dissuaded. The design's visually obscuring slats reduce exposure to external vantage points. Similarly the shelter scale provides obscuring elements while also vertically removing the occupants from the main plane of interactions and direct sight lines. The claim to territory is more literal here as the space becomes detached from the ground plane by way of the pivoted stair mechanism. The siting of the final scale in itself is a withdrawal from the immediate proximity to crowding and exposure, the defined interior spaces are a further complete separation from the issues. The scale of the interior spaces also promotes the heightening of personal territory.

Thresholds are loosely defined at the intervention scale by way of pavement differentiation and concavity of curvilinear form, the interior and exterior are also differentiated by

way of contrasting steel and timber materials. The shelter form more strongly defines these through the incremental approach towards the upper platform, first entry is by passing underneath the structure then upwards via two sets of stairs until the final point is reached. The designed buildings have suggestively defined entry thresholds, again attained by passing underneath the construction, that signal of a space beyond without revealing much about it. The interior spaces are loosely separated into pockets by orientation of partitions and shelving.

The escape achieved by the intervention is ephemeral and symbolic where the close proximity that is maintained to the surrounding space reduces the amount of withdrawal that can be felt. However the small amount of pause, a step sideways, is still an effective instance and serves as a small obscuring gesture to regain self orientation and control. The amount of withdrawal provided in the shelter scale is more substantial as it presents a doubly physical detachment; first in the vertical movement and second in the withdrawing of the access stair

	Controllability of environment	Crowding and overexposure	Definition of thresholds	Extent of escape or withdrawal	Obtrusive elements, power, and territory
Intervention Scale	Limited, passive, participatory.	Individual orientated space, primary territory spillage, visually obscured.	Loosely defined, materiality, concave form, semi enclosure.	Ephemeral, symbolic, small gesture.	Visually obscured, withdrawn from, distraction offered.
Shelter Scale	Manipulation of withdrawal and exposure, control of entry.	Literal claim of territory, vertical removal from ground.	Medium definition, incremental approach.	Removal from plane of interaction, temporary self containment.	Visually obscured, confrontation of traditional mode of power.
Construction Scale	Manipulation of exposure, information of external networks.	Site withdrawn, interior space further completely enclosed and separated.	Suggestively defined entry, interior strongly separated.	Removal from main public space and further withdraw.	Removed from proximity, peripheral territory claimed for self.
	Emotional space and supportive objects	Space as container	Disruption to surroundings	Safety	
Intervention Scale	Small gesture of intent, individual scale of interaction, material grounding.	Inscribed space contained and subject to surroundings but interior space held separate.	Small footprint, parallel to adjacent flow of circulation.	Some permeability maintained, illumination of interior and immediate surroundings.	
Shelter Scale	Loose detachment, new reference point, material grounding, physical link to environment.	Separation of inscribed space, detached from external reference points.	Elevated space reduces footprint, thoroughfare beneath shelter, contributes bike parks.	Time delayed opening mechanism with override and cool down period, illumination of underside.	
Construction Scale	Enveloping form, materiality, scale, outlet provided via programme.	Withdrawable and reconfigurable, regulated self contained space.	Use of marginal space limits impact, effects some uses of adjacent buildings.	Illumination of underside, regulated entry, keyed operation to lock building when not in use.	

Fig. 6.1a - Breakdown of the three design scales and their outcomes 119

to give a self contained space of escape, even if temporary. The structure scale design again provides a more complete withdrawal in its removal from the main public arena and its full enclosure in a differentiated space.

Obstructive elements in the environment are closely linked to the perception of external forces and influence of territory, as such the first design scale offers an obscuring screen to withdraw from their visual presence as well as providing a layer of distraction via the LED arrays. The second scale of the shelter similarly works to obscure visual contact but also confronts the traditional symbolic power and influence gained from elevation by rising upwards towards the source of this passive power. The designed buildings respond to this instead by withdrawing from direct proximity and by piggybacking in an almost parasitic fashion onto parts of existing buildings and spaces which have a level of implied passive ownership over them.

An emotional response is achieved by working to restore supportive elements in the environment. The intervention

design addresses emotional space by way of the gesture of temporarily refusing to participate in the subservience of its surroundings space, reinforced by the individual scale and warm natural material selection. The vertical shelter takes the individual to a new reference point, thereby loosely detaching their emotional presence in the surrounding space and allowing for a reflection on the previous state. The materials present here again are chosen to facilitate a sense of grounding, the physical manipulation of the shutters and the physical modification of the access stair as well bring a more direct relation to the space and the structure. The designed buildings use a similar material palette to the previous scales and further provide an outlet via its programme of repository, review, discussion, and proximity to shared similarly felt ideas.

From the perspective of the container, the intervention is a loosely defined space, contained within the greater system while its contents are held separate. The shelter is a more prominently defined enclosure, forming a more complete container, held above the surrounding ground plane it at once separated but also draws attention. The construction

is a withdrawable, reconfigurable, and regulated clearly differentiated and self contained space, making use of leftover corners to create a new type of container.

In terms of impact on surroundings the intervention maintains a small footprint and is orientated parallel to adjacent circulation, reducing its physical obstruction of the surrounding space. The shelter design while larger in scale has a small footprint on the ground plane as most of the structure is elevated, this allows thoroughfare beneath the shelter, the tall nature of the form however does hinder some sight lines and draws attention to it. The bike parking racks incorporated into the side of the shelter contribute to its usability outside of its immediate programme. The buildings in the two lanes are subject to less pedestrian traffic in their surroundings and as such have a smaller impact even though they are significantly larger in size. Utilising marginal sections of space the disruption on their surroundings is minimised, however the adjacent buildings are slightly compromised when their views outwards are obstructed.

Defining additional pockets of semi enclosed space within the public sphere initially goes against safety principles, however by retaining a level of permeability and incorporating night time and low light condition lighting into the designs helps avoid invisibility of its occupants. While still obscured, the presence of any occupant of the intervention design will be illuminated in low light, similarly the underside of the shelter form is illuminated and access to the elevated platforms withdrawn to dissuade misuse. The override on the time release for the access stair in the shelter scale coupled with a “cool down” period before next operation help to avoid anyone becoming trapped within and any single individual to take advantage of the withdrawing stair to inhabit the structure for extended periods. The two buildings similarly incorporate lighting into their underside and a keyed operation for the access stair so as to be able to seal the buildings overnight.

From these developments the findings that stand out the most are the use of physically operated mechanisms for manipulation of the environments in order to create a more personal relationship between individual and building, the

differentiation of space through contrasting material palettes, and the use of obscuring gestures in restoring a sense of control over one's participation in external systems.

The simple application of crank operated shutters allows the occupant to directly manipulate aspects of the building and their environment, taking control of the levels of exposure and enclosure in a manner that is direct and physical in contrast to the prevalent ubiquitous digital modes of surveillance. The physical manipulation abates any feelings of potential intervention by a third party in these basic operations, reducing the presence of perceived threat, while connecting the individual to their surroundings directly and personally.

The use of contrasting palettes to delineate the exterior and the interior or one threshold and another is subtle yet effective. The use of warm natural materials such as timber also promotes a feeling of grounding in the individual as opposed to the impersonal feel of artificially manufactured materials such as glass and steel, bearing resemblance to the impersonal approach of surveillance. Grounding helps restore a state of

wellbeing in individuals and reduces the anxieties that may be felt towards the surrounding space and its inherent issues.

Obscuring gestures similarly restore the feeling of control to the individual, whether a small gesture of taking up a position partially withdrawn from its surroundings or a physical removal from immediate interaction, a gesture is the embodiment of intent and reaction. The reaction towards surroundings anxieties and pressures is an act of change, modifying the relationship between oneself and the other, altering the existing state to one that is on some level more preferable. Such an action is perhaps the most effective in a reaction to the issues that arise from total surveillance society, hence architectural elements that reinforce or create opportunity for this embody a spatial response to the modified nature of space created therein.

6.2. Limitations of Research

In evaluation of the research there are certain factors that may have been improved upon had a different approach been taken; primarily the choice of site, the lack of strict quantification of conditions, and the physically based approach to design response.

The choice of Wellington City CBD as a site was perhaps not the best option for while it has been easy to access and evaluate there are other sites more distant that could perhaps have provided a better starting point in responding to the issues of a society of total surveillance. Alternate choices may have included Auckland City CBD, reasonably accessible but larger in size and higher in density it could have presented a greater pool of specific siting and more varied conditions throughout, or most appropriate an international location with an already heavily established CCTV system. Having an existing, already very present, surveillance network could have helped create a more specific response as opposed to one based on a perpetuated hypothetical scenario as such, the

accessibility of such a site however would have been a major drawback to continued analyses.

A more scientifically minded rigidly quantified approach to site analysis, emotional responses, and design could have provided better supporting arguments to any findings and developments. Working with specific reactions to specific conditions would help design more effective changes to illicit a desired effect. Such an approach would however require a much deeper understanding of psychology and be further complicated by individual variations of response. A setting that causes anxiety in one individual may instead illicit a positive response in another based on a number of factors such as their personal background, age, gender, political inclinations, financial state etc.

The physical, spatially based approach to design development has meant that certain aspects of a total surveillance network have not been readily addressed in my research; mainly the monitoring of digital space and Vidler's (1999) remark "... in what way might space ... set up a mild

resistance to its virtual surveillance?” The ubiquitous nature of modern surveillance modes is difficult to address from a spatial standpoint alone. At various points during my research I have considered incorporating such things as proxies to conceal an individual digital signature and signal jammers to block incoming and outgoing signals but I have not found a convincing method to make that part of a spatial design and as such this direction has remained relatively unexplored in the final documentation.

6.3. Potential Further Research

Further directions for this research could concern a recombination of physical scales and territory in an attempt to find the most effective combinations.

Comparisons to other similar sites or to sites with a lesser density could help establish whether the design response is more or less adaptive to different environments and whether it is still relevant in less densely populated areas.

A more in depth analysis of materials and their effects in combination with varying scales on a feeling of grounding would also broaden the resulting implications.

It has also been suggested that a more abstract approach to design that is less bound to matters of safety and practicality may yield more interesting results.

To reference Vidler’s (1999) remark on setting up a mild resistance to the virtual surveillance of space again, a similar

project instead with a domestic focus could attempt to address the permeation of the public into the private at its most severe manifestation.

Conversely, design to reinforce the surveillance of space while remaining mindful of the most negative of its impacts could lead to a more accessible public perception of ubiquitous surveillance.

Appendices

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