

# THE MUSEUM OF ME

ARCHITECTURE & THE PUBLICITY OF THE PRIVATE. BY MITCHELL WAGSTAFF

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# ABSTRACT

Both architecture and privacy express ideals of personal, social, and cultural identity. From the development of virtual social environments has emerged new boundaries between the public and private. Consequently, this progression has shifted the historical normalities of privacy. While architecture appears to develop within its own conditions of creating material expressions, it has yet to show awareness of the reality and developments of our contemporary social environments. This thesis addresses the shifting boundary between public and private through an architectural enquiry. It proposes that the traditional boundary between public and private be re-evaluated in conjunction with contemporary social norms, focusing on the contemporary notion of publicity and control.

This thesis explores the design of a public museum as a manifestation of contemporary society. It establishes an appropriate relationship between public and private situating itself as a mediator. It builds upon the influence of the theoretical and conceptual means through an architectural analysis and experimentation to find one architectural design solution that re-configures the public and private boundary.

The outcome of this research reflects a new boundary between public and private; however it states that its spatial and organisational form needs to engage with contemporary society. It finds that online social environments offer new opportunities useful for the re-configuration of boundaries between public and private. This thesis concludes that the new mediation of virtual environments does not limit architecture, but rather presents a new space that mediates and reflects contemporary social interaction.

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# 1.0 **INTRODUCTION**

The cultural norms of transparency, openness and connectedness are constantly undergoing transformation. It is evident that public identity merges with our private selves on online social networks. Our notion of privacy, arguably even the very sense of privacy, is at the centre of fundamental change that is yet to be realised within the disciplinary act of architecture. Research suggests that architecture revolves around its interaction with society and confirms the notion that the use of built environments is not just a mirror image of society and its social history; rather, it is a medium for the expression of social isolation and spatial separation.<sup>1</sup> This thesis explores the shifting boundaries between public and private space and how it is experienced through built form. The study will identify the mediation between virtual and physical space and redefine the conventional boundaries that are constructed between public and private.

Architecture serves as a physical boundary for visual communication, often with an aesthetic value that expresses differences between the public and private domains. The definitions of boundaries are imperative for the design and inhabitation of architecture. This reflects rational and visible boundaries between public and private conventions of space. The most significant development of this boundary is the contemporary means of interaction on the internet. The internet misconstrues the value and control of privacy in both new

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1 Richard Sennet, *The Fall of Public Man*, Cambridge (New York: Cambridge University Press, 1977). 295.

and provocative ways.<sup>2</sup> It provides a new public space for the exchange and connection between individuals and societies. Neither privacy nor publicity is absent within the discussion of boundaries although online social technology is shifting ones perception of them.<sup>3</sup> The engagement with these online social technologies has become commonplace in contemporary culture. This motivates an enquiry into how online social technologies affect the realities of public and private space. Architecture is static and denies any impetus to shift its boundaries and become more open, transparent and asymmetrical. This reflects an obscure relationship between contemporary culture and the inhabitation of architecture, provoking an investigation into the mediation of boundaries between public and private space.

This thesis explores the reinterpretation of the public and private relationship, challenging the physical boundaries of architectural space. It questions how the design of architecture can engage and challenge the traditional conventions of privacy to communicate contemporary norms towards modern culture. This research aims to expose architecture's ability to be both dynamic and obscure as a form of material and immaterial expression. It aims to confirm a new attitude toward architecture's function as an institution of social control. The way the user engages with boundaries within the virtual and the physical environment will be examined.

Aim

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2 See Patricia Wallace: *The Psychology of the Internet* 28–37 (1999) (examining the ways in which Internet users manage their online personas), Sherry Turkle. *Life on the Screen: Identity in the Age of the Internet* 178 (1995) (discussing the Internet's impact on how people present themselves).

3 Danah Boyd, "Making Sense of Privacy and Publicity," in SXSW Conference (2010).

Research Approach To attain these research objectives, Chapter Two evaluates critiques of privacy with reference to contemporary culture. Firstly it outlines the central relationships between virtual and physical privacy. This centres the research around social normalities – that is, how we interact, behave and how we perceive social boundaries. Chapter Two examines our control and regulation of boundaries, where arguably, this disconnection between architecture and contemporary society is most significant.<sup>4</sup> It argues that through the change in social norms, the boundary between public and private space has inherited new motivations, primarily existing of publicity and exposure of the private. Specifically Chapter Two will argue that architecture can facilitate and engage with the social phenomena of online social environments.

The power of controlling these new boundaries between public and private will be assessed in Chapter Three. This chapter will examine some of the writings of Michel Foucault to critique contemporary power and control. Moreover, it will adopt Foucault's theories to highlight the intersection between virtual control and physical control and inject new social functions into the design of architecture. Foucault's analysis of the '*Panoptic*', designed by philosopher Jeremy Bentham, will be explored to connect social norms with architecture and this is further explained in Chapter Four. The *Panoptic* was designed as a disciplinary theory that can enforce self-regulation through the power and control of observation.<sup>5</sup> As built form insists on spatial and systematic organisation, this chapter will explore the significance of the *Panoptic diagram* on contemporary society. This research analyses recent discourse on the interdisciplinary connection between social behaviour and architecture, as well as emerging trends in research towards diagrammatic methodologies for architecture.

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4 Michel Foucault, *Discipline & Punish: The Birth of the Prison*, Vintage Books, *Discipline and Punish* (New York: Vintage Books, 1995). 1-3.

5 Jeremy Bentham and Miran Bozovic, eds. *The Panopticon Writings* (London New York: Verso, 1995). 148.

Chapter Four develops a contemporary practical and conceptual position in order to explore the boundaries between public and private. It proposes that the *Panoptic diagram* can enforce the power of control as an architectural mechanism. The *diagram* has been widely used as a method for the formation of architecture and a means for critically engaging with the design of boundaries. It constructs a contemporary dialogue between social environments and architecture. This chapter will examine the principles of the *diagram* through the writings of Gilles Deleuze, Michel Foucault and Greg Lynn to provoke a design investigation of boundaries. Furthermore, it will acknowledge the continuous dialogue between public and private through the analysis of two case studies. The importance of the *diagram* is established through a case study of the UN Studio's Möbius house. This section considers the role of the *diagram* as a contemporary experiment and how it adopts the Möbius Band as mediator between two dichotomous conditions: working and living. The first case study, The Yokohama Port Terminal by Foreign Office Architects, considers architectural programme and movement by adapting a similar *diagram* known as the fold. This reflects the continuously shifting dialogue described by Deleuze as being between virtuality and actuality. A response to this section leads to the amalgamation of the Möbius Band and the *fold* both as methods for the design of boundaries, which encourages the role of online social technologies within architecture. This helps to redefine the boundaries between public and private.

Finally, Chapter Five explores the design methods parallel to the architectural project of this thesis, a social institution: the museum. The design project will employ a range of media to extend an understanding of the exploration of boundaries by examining the various features of control within our contemporary environment. The theoretical ideas developed within this thesis will be tested within a design project. They will be extended to inform an architectural response that strengthens the inhabitation and performance of the museum typology. It discusses the insights and limitations of significance to the design process as the theoretical concepts are translated into architecture, thus addressing what opportunities may exist for the reinterpretation of boundaries.

2.0

# CONTEMPORARY PRIVACY



Introduction Privacy and the important role that it plays in establishing boundaries between public and private space has been widely reviewed in literature.<sup>6</sup> This research will assemble and build upon existing literature with regard to contemporary society and how architecture can respond to the blurring of boundaries between public and private space.<sup>7</sup>

The main objective of this chapter is to develop an understanding of the environment inherent with privacy. The subtle ways that individuals and groups regulate and control privacy within these simultaneous environments will be examined. The first section investigates the abstract architectural quality of privacy as it is presented in enclosed, border-defined space. Furthermore, theorists such as Irwin Altman's notion of privacy will be implemented to evaluate spatial configurations to generate an analytical understanding.<sup>8</sup> This indicates the relationship of spaces according to a set or desired degree of privacy. This research will be tested and implemented later in the design stage of this thesis. The conclusions will be used to formulate a justified argument as to how architecture can blur its boundaries and reflect contemporary social environments.

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6 Altman Irwin (ed), *The Environment and Social Behaviour*. CA: Brooks Cole. (Monterey, California 1975) 237.

7 See footnote 8 for examples of noteworthy literature.

8 See Zygmunt Bauman, "Consuming Life," *Journal of Consumer Culture* 1, no. 1 (2001); Edward T Hall, *The Hidden Dimension, Man's Use of Space in Public and Private*, the Bodley Head (London 1969); Julianne Hanson Hiller Bill, *The Social Logic of Space* (Cambridge: Cambridge University Press, 1984); Irwin, *The Environment and Social Behaviour*; Sennet, *The Fall of Public Man*.

Leon Alberti's Virtual Space Theory provides the distinction between two types of space, visible and conceptual. Visible spaces are experienced visually, either by physical or mental observation. Conceptual spaces are metaphorically experienced and are a theoretical occurrence between certain associative boundaries.<sup>9</sup> For example in the contemporary context, it has been suggested that online social environments are defined as a product of interior space in which individuals exchange visual information. These online social sites may have certain visual materialisations in the form of graphics and text. Social sites allow individuals to represent themselves through these graphics as taking a spatial visual form. However, what these definitions fail to show is a physical space. Assigning online social environment sites in terms of space is therefore valid only theoretically not physically. These online social spaces are essentially visible space. It may require the use of visual concepts to define it, but in its core as well as its contents, it is visible.<sup>10</sup>

The Virtual Space Theory defines the visual experience of space as three different variations- physical space, theoretical space and virtual space, where everything one experiences visually can be sought inside of either one of these spaces.<sup>11</sup> Physical space is our immediate built environment where we live. Theoretical space is a term used to refer to what we see in our mind, whether it is a product of imagination that is not observable by others or some form of interior memory.<sup>12</sup> In terms of this thesis, theoretical space is completely private and is opposed to physical

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9 Leon Battista Alberti, "On Painting and on Sculpture," in *The Latin Texts of De Pictura and De Statua* (London: Phaidon, 1972). 1.

10 Ibid. 2.

11 Leon Battista Alberti, "On Painting and on Sculpture," in *The Latin Texts of De Pictura and De Statua* (London: Phaidon, 1972). 2.

12 Ibid.

Figure 1 : M.C.Escher, The Hand with Reflecting Sphere.

From: "Uncanny Geometric Illusion Space,"  
2011, Maurits Cornelis Escher: [http://baisdp-6mjko.blogspot.com/2011\\_03\\_01\\_archive.html](http://baisdp-6mjko.blogspot.com/2011_03_01_archive.html) (accessed 30.10.2011).



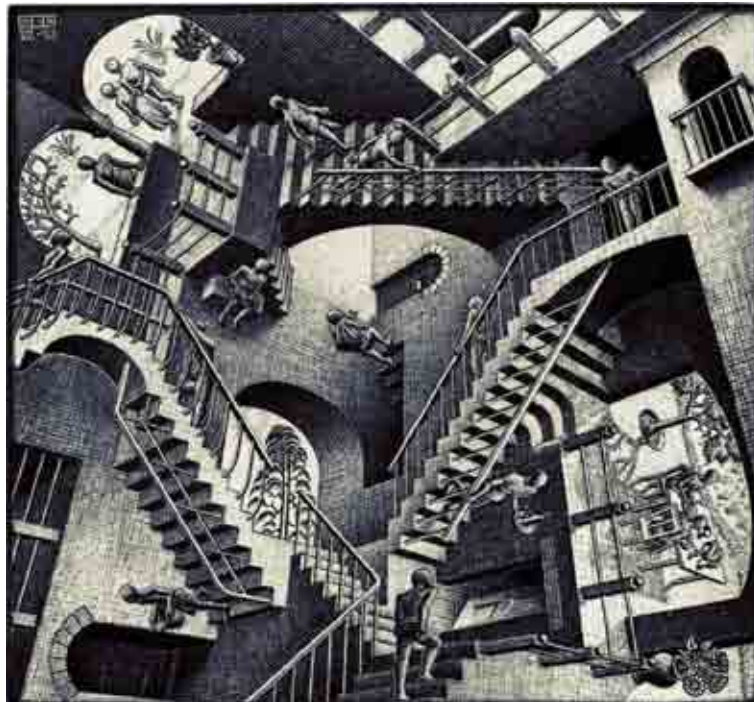


Figure 2 : M.C. Escher, Relativity, 1953

From: "Uncanny Geometric Illusion Space,"  
2011, Maurits Cornelis Escher: [http://baisdp-6mjko.blogspot.com/2011\\_03\\_01\\_archive.html](http://baisdp-6mjko.blogspot.com/2011_03_01_archive.html) (accessed 30.10.2011).

and virtual space. Virtual space is the space we experience visually and it has similar attributes to theoretical space although it contains no physical experience. However, unlike theoretical space its visual experience is produced by a physical device, a window into virtual space.

The Window Metaphor “The Window Metaphor” outlined by architect Leon Battista Alberti portrayed physical paintings as windows, an experience through which we can look at the visible world.<sup>13</sup> “Perspective is nothing else than seeing a place behind a pane of glass, quite transparent, on the surface of which the objects behind the glass are to be drawn.”<sup>14</sup> The Virtual Space Theory suggests that this concept grasps the making of virtual place, except there are no limitations to their technique of perspective. However a visible world is constructed it would provide a virtual place within a virtual space. Alberti explains that the characteristics of places in virtual space are based on the characteristics of physical space, serving as their initial point of reference.<sup>15</sup> An example of such a virtual place would be the drawing of “Relativity” by M.C. Escher. It confronts the laws of our physical world while it remains close enough to the principles inherent in how we interpret the physical world.

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13 Ibid.

14 Ibid.

15 Or Ettlinger, “In Search of Architecture in Virtual Space” (University of Ljubljana, Ljubljana ,2008). 253.

SOCIAL NETWORKING **FACEBOOK**

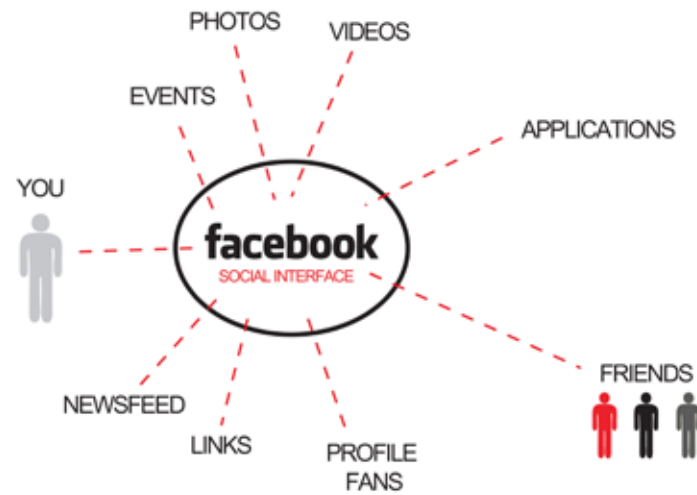


Figure 3: Social Networking Diagram  
Image by Author, 2011

## 2.2 Contemporary Boundaries

In contemporary society the boundary between public and private has been blurred.<sup>16</sup> With the contribution of internet applications that support social relationships and the ever-increasing use of various technologies of self-publication, a large number of the population, specifically the youth, are able to utilise online platforms to upload and distribute personal content, share personal details, photos, videos and relationships with a vast array of friends.<sup>17</sup> This ultimately produces long lasting digital information that remains online in the public eye.

**“As adults, by and large, we think of the home as a very private space ... for young people it’s not a private space. They have no control over who comes in and out of their room, or who comes in and out of their house. As a result, the online world feels more private because it feels like it has more control.”<sup>18</sup>**

On social platforms such as Facebook an enormous quantity of private information is shown to a mass audience over the Internet.<sup>19</sup> It would seem that the desire to put oneself on display is stronger than the fear of being monitored.<sup>20</sup> Online social applications are radically changing not only the way individuals interact with other people, but also one’s view of what is private.<sup>21</sup> This marks a move toward a more interactive, social and collaborative public space, that faces a paradox as it is increasingly coming under surveillance. However, on first impression the concept

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16 Julie E. Cohen, “Privacy, Visibility, Transparency, and Exposure,” *The University of Chicago Law Review* 75, no. 01 (2008). 183.

17 Ibid.

18 Mark Zuckerberg. <http://www.guardian.co.uk/technology/2009/dec/09/interview-microsoft-researcher-danah-boyd> (2009) Accessed 02 March, 2011.

19 Note: For the notion of Facebook as “persuasive technology,” see: <http://www.bjfogg.com/>

20 Clive Thompson, “I’m So Totally, Digitally Close to You : Brave New World of Digital Intimacy,” *The New York Times* 2008. 1-5.

21 Aaron Betsky, “Privacy and Publicity,” 94, no. 11 (2005). 183.

of the publicity of the private seems like an impulsive argument. How can the private space of an individual be threatened by the occurrence of the public? However, all aspects of private spaces are increasingly being both virtually and physically publicised. The forces of autonomous publicity have been widely theorised.<sup>22</sup> The private is now invaded by online social technologies of surveillance that are shifting all aspects of private space.<sup>23</sup> Online social networks such as Facebook exteriorise, reveal and wear away what was personal and innermost for all to see.<sup>24</sup> The private is influenced by online social network technologies of observation that concern nearly all features of social and cultural life. The very sense and importance of the private is changing for habituated users of online social networks. New social tools emerge that alter the boundaries between privacy and publicity that challenge how we achieve privacy and propose new motives to connect within public.

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22 Richard Sennet, *The Fall of Public Man*, Cambridge (New York: Cambridge University Press, 1977) 12.

23 Max van Manen, "The Pedagogy of Momus Technologies: Facebook, Privacy and Online Intimacy" (Alberta: University of Alberta, 2008) 1-4.

24 Ibid.



In addition, social networking sites such as Facebook have become commonplace in today's society. They have developed into a place where you socialise, communicate and exchange information with other individuals. Importantly, the notion of constant connection and communication with others online has been described by Clive Thompson as ambient awareness – “the phenomenon of being aware of other individuals moods and concerns without being physically close.”<sup>25</sup> Social networking technologies are designed with an attractive, and in many respects, alluring invitation to their users.<sup>26</sup> These contemporary Momus technologies allow people to feel connected while separated by space and time.<sup>27</sup> Previously one would keep private handwritten diaries, today this has moved beyond a simple notebook. Individuals in today's society publicise diaries online, for all their friends to read.<sup>28</sup> Has this shift to the public online world changed the way we feel connected? What does it mean to experience a private life that is exposed to the public within our physical environment?<sup>29</sup>

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25 Thompson, “I’m So Totally, Digitally Close to You : Brave New World of Digital Intimacy.” 5.

26 Ibid.

27 Manen, “The Pedagogy of Momus Technologies: Facebook, Privacy and Online Intimacy.” 4.

28 Ibid.

29 In a recent exchange about the virtues of Facebook and public vs private sensibilities one person writes: “I too am one of those people who fall some where in the middle, I do banking, shopping, read the news, email friends around the world and do much of my work on line” The comment I often hear is “Don’t they realise everyone can read the stuff on their wall”, and yet they would never say a thing to the person posting, they just tell the rest of us all the embarrassing details. Retrieved on 2/05/2011: <<http://www.cbc.ca/technology/story/2008/09/04/facebookprivacy.html#socialcomments>>

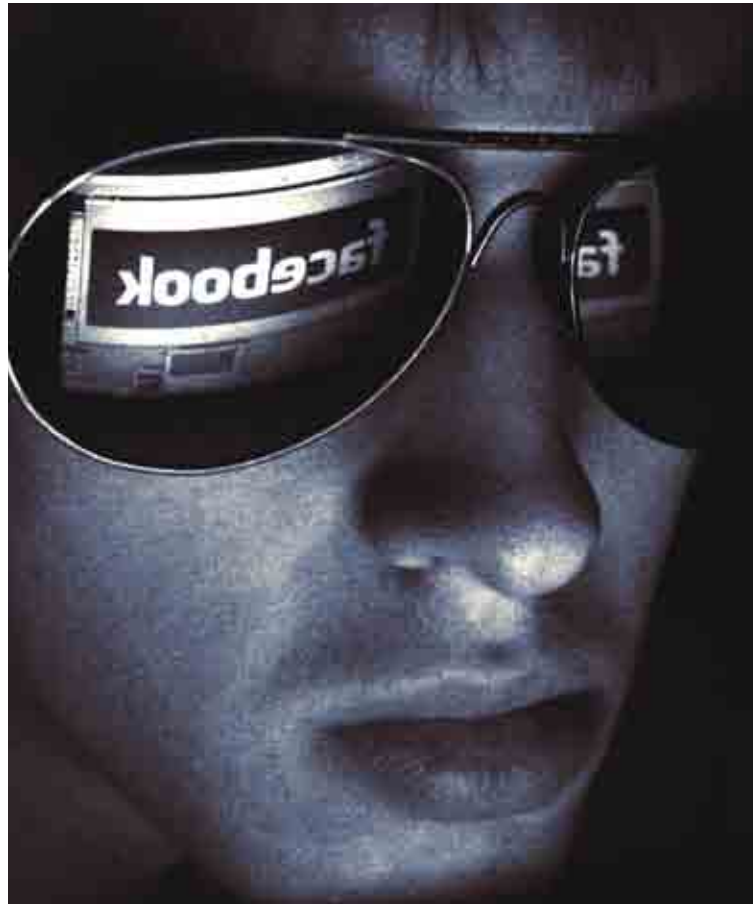


Figure 4: Facebook Visual

From: "Singel-Minded," 2010: <http://www.wired.com/epicenter/2010/11/google-fears-facebook/all/1> (accessed 19.11.2011).

Research suggests that users of online social networks expose their private information and this is well evidenced. Sociologist Zygmunt Bauman argues that this is due to society being more confessional. “Teenagers equipped with portable electronic confessionals are simply apprentices training and trained in the art of living in a confessional society - a society notorious for effacing the boundary which once separated the private from the public, for making it a public virtue and obligation to publicly expose the private.”<sup>30</sup> Online social network technologies are the latest production of mediated publics – social environments where people can congregate publicly through mediating technology.<sup>31</sup> Mediated publics are comparable to physical public space such as parks, malls and cafes, where individuals assemble to connect with society. Public spaces have many purposes in social life. Danah Boyd argues, they allow people to make sense of the social norms that regulate society. They encourage people to express themselves and learn from the reactions of others.<sup>32</sup> Online social environments are a form of public space. While mediated and physical publics play similar roles in society, the mediated publics have one significant factor that is unique. This is an invisible audience - while it is common place to face strangers in public space, the invisible audience facilitates a change in the boundaries between public and private.

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30 Zygmunt Bauman, “Consuming Life,” *Journal of Consumer Culture* 1, no. 1 (2001) 3.

31 Ibid.

32 Danah Boyd, “Social Network Sites: Public, Private, or What?” (Berkeley : University of California-Berkeley, 2007). 2-3.



Figure 5: We Live in Public

From: "We Live in Public," 2010: [http://www.traileraddict.com/content/unknown/we\\_live\\_in\\_public.jpg](http://www.traileraddict.com/content/unknown/we_live_in_public.jpg) (accessed 19.11.2011).

## 2.3 Spatial Privacy

Privacy is a boundary-control apparatus for the regulation of interaction.<sup>33</sup> The evolving form responds to the desired degree of interpersonal detachment required at the particular moment of time in space. This is achieved by evaluating the distinction between desired privacy and achieved privacy - how much contact is desired at the moment in time with the specific other, and the latter, the actual degree of privacy obtained at the time.<sup>34</sup> Privacy has a contrasting force of both connection and separation between individuals. This section establishes the use of boundaries through the privacy regulation of architectural space.

Today's society commands certain levels of personal privacy. Methods for obtaining privacy are represented through various forms between physical access to space and cultural notions of personal space. More often than not, physical privacy is regulated through the boundaries of space. These physical boundaries between individual and society traditionally consist of the systematic organisation of bounded space, where architectural features such as ceilings, walls, doors, steps and floors comprise the principle boundaries to a three-dimensional space, such as rooms. Boundaries can also be recognised by their ability to act as permeable elements and to provide connections between various bounded spaces, such as windows. Furthermore, bounded space serves as a function of organisation, providing shelter and protection. Depending on the culture, formal organisations serve as a hierarchical separator between public and private. Their organisation constitutes an expression of symbolic structures and meaning systems that sometimes find parallels or homologies in other parts of culture.<sup>35</sup>

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33 Edward Hall, *The Hidden Dimension, Man's Use of Space in Public and Private*, the Bodley Head (London, 1969) 121.

34 Ibid.

35 Irwin Altman, *The Environment and Social Behaviour*. 13.

The qualities of physically bounded space serve as a tool for defining one's identity through social behaviour with the built environment. However, as this thesis suggests the form of identity in relation to contemporary culture has been shifted by the temporal and spatial interaction of online social technologies. Boundaries have become more informational rather than physical.<sup>36</sup> Site and territories of space that were once the conditions of identity have transformed from being a traditional static mediation into a temporal autonomous fixation. Therefore, there has been a shift away from the conventional method of social interaction into a more dynamic boundary between public and private and the means for interaction.

**“Privacy is an interpersonal boundary-control process, which paces and regulates interaction with others. Privacy regulation by persons and groups is somewhat like the shifting permeability of a cell membrane”.<sup>37</sup>**

Irwin Altman argues that privacy is a temporal dynamic method of interpersonal boundary control - a process that regulates interactions with others. Individuals change how open or closed they are in response to shifts in their internal states and external conditions.<sup>38</sup> Altman highlights an important aspect of how the built environment considers spatial territoriality through these interpersonal boundaries. Furthermore, he explains how situational desired privacy depends on the success of interpersonal boundary-control processes. The notion of interpersonal

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36 Holger Schnädelbach, “Mixed Reality Architecture: A Dynamic Architectural Topology,” in Mixed Reality Laboratory (Nottingham: University of Nottingham 2007). 202-06.

37 Irwin, The Environment and Social Behaviour. 10-12.

38 Ibid.

boundaries can be implemented within the built environment whereby privacy is granted and can be brought in line with the privacy one desires. Altman states that the desired level of social interaction depends on personal characteristics, social influences, the physical environment and culture.<sup>39</sup> Thus, the desired level of privacy varies among individuals and over time; however the need to control social interaction is universal.

In response, privacy controls provide norms of behaviour for individuals and groups. This can be identified in the built environment through the governing of access to territories, both visually and spatially. Privacy generates a selection between isolation and interaction and can create the bodily perception of being alone. Individuals and societies have been notorious in invading other's privacy. As a result, the built and virtual environments have established methods to protect one's privacy, followed by the establishment of social norms to permit these observational opportunities.<sup>40</sup>

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39 Danah Boyd, "Why Youth (Heart) Social Network Sites: The Role of Networked Publics in Teenage Social Life," MacArthur Foundation Series on Digital Learning Youth, Identity, and Digital Media Volume(2007). 175.

40 Ibid.



Figure 6: We Live in Public Poster

From: "We Live in Public Poster," 2010: [http://www.traileraddict.com/content/unknown/we\\_live\\_in\\_public.jpg](http://www.traileraddict.com/content/unknown/we_live_in_public.jpg) (accessed 19.11.2011).



## 2.4 **Boundaries and the Visual Senses**

It is argued that privacy in individuals is the regulation of self, by creating and controlling interpersonal boundaries.<sup>41</sup> These boundaries are expressed in a complex range of delicately adjusted social behaviours.<sup>42</sup> Such boundaries argued by anthropologist Edward Hall are defined and regulated by the use of the senses. “It is the nature of animals, including man, to exhibit behaviour which we call territoriality. In so doing they use the senses to distinguish between one space or distance one another”.<sup>43</sup> The isolation of territory does not permit any communication with the senses, whether it be vocal, visual or olfactory signs. The physical boundaries of space are an important factor when positioning and regulating the experience of territory and desired privacy. Architecture can play a vital role to regulate the amount of communication that is passed through a space into the surrounding environment. Therefore, spatial boundaries can reveal or conceal certain spaces or combine spaces together. This leads to another parameter of architectural privacy, which emphasises how societies as well as individuals communicate with their surroundings through their senses. “Man’s relationship to his environment is a function of his sensory apparatus plus how this apparatus is conditioned to respond”.<sup>44</sup> The following five methods directly relate and affect how one perceives their surroundings by which one manages privacy: accessibility, visibility, proximity, vocals and olfactory. Spatial boundaries act as supplementary means for regulating the communication of the individual with its environment. The spatial boundaries can mediate either public space or private space depending on the restriction of privacy. Public space in traditional terms applies no constraints with communication, whereas private

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41 Irwin, *The Environment and Social Behaviour*.12-13.

42 Ibid. 6.

43 Hall, *The Hidden Dimension, Man’s Use of Space in Public and Private*, the Bodley Head. 59.

44 Ibid.

space is the opposite and restricts communication. Between these two spaces, various other transitional levels of privacy are present. Hall argues that the above sensory methods affect the way one perceives space and how one regulates privacy.<sup>45</sup> Architectural privacy is constructed within a limited number of the above methods. For example, Eric Sundstrom suggests that “architectural privacy refers to the visual isolation supplied by an environment. A work area completely enclosed by walls with lockable doors embodies a high degree of architectural privacy.”<sup>46</sup>

The boundaries researched are defined by the use of visual senses. Online social environments have become critically important to society as this is where they can interact through visual connection. As Danah Boyd states, they use these tools to see and be seen.<sup>47</sup> This online visual conversation is the predominant means of contemporary spatial regulation. Therefore, as architectural privacy consists of the regulation of visual information, online social networks can change this traditional boundary between public and private. The reason for relating online social environments with built environments has to do with fundamental architectural connections that affect social interaction. In built environments, the boundaries and audiences of a given public are structurally defined. Access to visual information is limited by physics; walls and other obstacles further restrain visibility.<sup>48</sup> More importantly, in the contemporary social environment visual communication can now consist across space and time. The enclosed forces of online social environments are less controlled in relation to the built environment. However, people have

## Contemporary Visuality

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45 Hall, *The Hidden Dimension, Man's Use of Space in Public and Private*, the Bodley Head. 59.

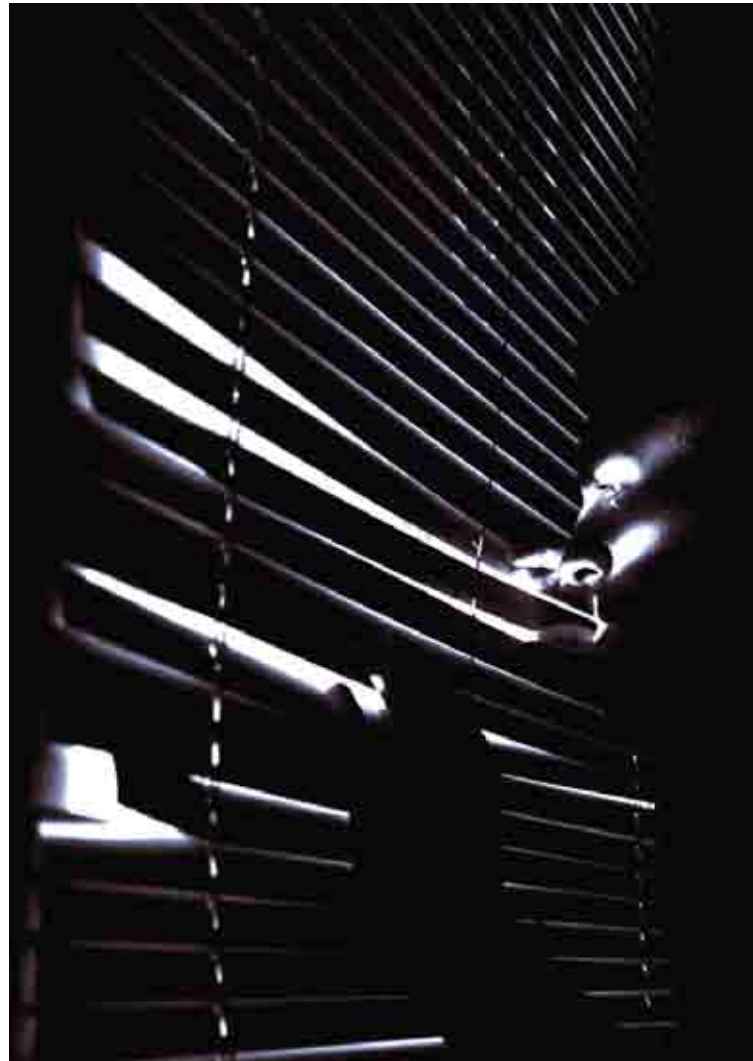
46 Eric Sundstrom et al., 1980, 2.

47 Danah Boyd, “Tweet Tweet Retweet: Conversational Aspects of Retweeting on Twitter,” in *Proceedings of HICSS-43* (2010). 5-8.

48 Danah Boyd, “Why Youth (Heart) Social Network Sites: The Role of Networked Publics in Teenage Social Life,” *MacArthur Foundation Series on Digital Learning – Youth, Identity, and Digital Media* (2007). 8.

Figure 7: Peering

From: "Peering - Artist Trading Card," 2011:  
<http://www.flickr.com/photos/ryan-ber-ry/6119136882/>(accessed 19.11.2011).



become familiar to socialising when they do not know the audience or the context. Interactions in online social environments place emphasis on the visual. They change the concept of ‘how we see, how we are able, allowed, or made to see, and how we see this seeing and the unseen therein’.<sup>49</sup> For some theorists the visual is the most fundamental of the above five methods. Gordon Fyfe and John Law claim that “depiction, picturing and seeing are omnipresent features of the process by which most human beings come to know the world as it really is for them.” Other theorists argue the importance of the visual in contemporary society, tracing what they see as the increasing saturation of modern societies by visual images. Some claim that this process has reached unprecedented levels, where contemporary society now primarily interacts visually.<sup>50</sup> This notion of the increasing importance of the visual to contemporary society has ultimately developed as a predominant sensory means for interaction.

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49 Nicholas Mirzoeff, *The Visual Culture Reader* (London: Routledge, 2002). 1-33.

50 Hal Foster, *Vision and Visuality* (Seattle: Bay Press, 1988). 2.

Conclusion The research literature indicates that contemporary architecture presents new relationships between privacy and its users. Boundaries are increasingly mediated where new forms of social engagement are radically changing. This occurs in the way individuals interact with society and simultaneously within the control of boundaries between public and private. This chapter has highlighted the importance of visibility as a sensory boundary control, providing new means for revealing and concealing. Furthermore, it has stated that the control of boundaries has been altered by the changing normalities of society. Contemporary online environments have generated new methods for connection and isolation between individuals. Accepting this, this research proposes that architecture must engage with these new social norms of behaviour through the regulation and control of boundaries. Further social understanding will direct architecture to understand these new forms of social interaction. The following chapter will explore in detail how architecture can generate power and control of boundaries through observation. It will present a dialogue between the historical diagram of the *Panopticon* and the contemporary online social environments. This will develop an understanding of how the organisation of space facilitates social behaviour in an architectural context.

# 3.0 **POWER AND CONTROL**

Introduction **T**he power of observation is unique and ambiguous. This chapter focuses on the significance of the act of observation and its ability to construct a range of effects on an individual's sense of privacy. The act of observation can create feelings of satisfaction, pleasure, autonomy, negligence, terror and control.<sup>51</sup> Therefore, being an observer can generate the sensation of power, while being observed can generate a sensation of being controlled. The idea that through observation one has the power to control has been widely researched.<sup>52</sup> These fundamental principles of observation are used to enforce control on both individuals and entire societies. This chapter will discuss the organisation of boundaries between public and private through the adoption of the Panopticon. It will provide reference to contemporary social behaviors and establish architecture as a method of control.

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51 Chris Peterson, "Saving Face : The Privacy Architecture of Facebook," University of Massachusetts-Amherst (2009). 13-14.

52 Foucault, *Discipline & Punish: The Birth of the Prison*. 1-3.

Jeremy Bentham's *Panopticon* demonstrates the principle of the power of observation to control. The *Panopticon* is an extreme case study for social organisation. Throughout the architectural discourse, Bentham made it possible for one single authority to carry out absolute observation of all conduct. This allowed for the organisation of a system that consisted of logical order, efficiency and control.<sup>53</sup> The *Panopticon* is a device which Bentham illustrated as "the great innovation needed for easy and effective exercise and control."<sup>54</sup> In essence, it is a theorised architectural apparatus. The building is described by Bentham as consisting of an outer ring, divided into cells that traverse the width of the ring, and a centre tower with windows looking onto the inside of the ring building. Each cell consists of a window facing the exterior to allow daylight to enter and another window to the interior facing the tower for one way observation.<sup>55</sup> Its function requires that an observer be placed in the tower and prisoners be sited in the cells. The environment of the building separates, restricts and most importantly exteriorises each inmate to the public gaze, therefore demonstrating control.<sup>56</sup> The *Panopticon* and its mechanic model of one centralised power has been adopted as an architectural model for not only prisons but hospitals, schools and universities since its design in 1789.<sup>57</sup>

53 Katrin Kashadt, ed. Jeremy Bentham: The Panopticon or Inspection House (Karlsruhe Germany: Centre for Art and Media, 2002). 114-119.

54 Ibid.

55 Ibid.

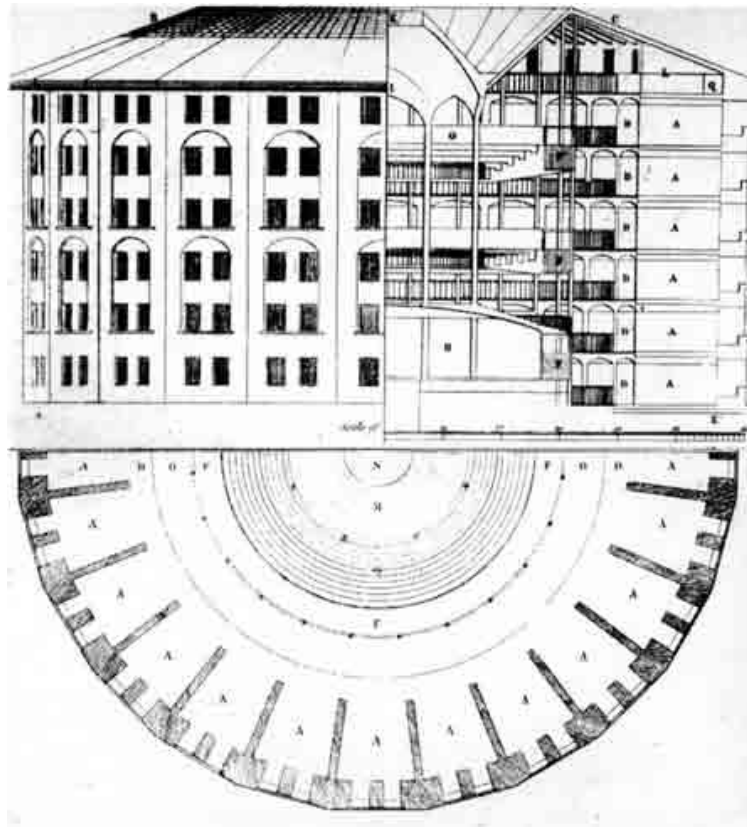
56 The Gaze is a psychoanalytical term brought into popular usage by Jacques Lacan to describe the anxious state that comes with the awareness that one can be viewed. See. Jacques Lacan. Seminar Eleven: The Four Fundamental Concepts of Psychoanalysis. (NY & London 1978)

57 Bentham and Bozovic, eds., The Panopticon Writings. 142.



Figure 8: The Panopticon

From: Plan of the Panopticon, 1843, The works of Jeremy Bentham vol. IV, 172-3.



Michel Foucault discusses the *Panopticon* in “Discipline and Punishment: The Birth of the Prison,” as the subject of contemporary discussion on control. Foucault argued that Bentham had authorised and structuralised the extension of power and control through observation and portrayed the theory as a significant junction in the history of human consciousness. This significant transformation came with the organisation of new systems to control society. Foucault made it clear that the human subject became an object of surveillance under institutional control.<sup>58</sup> He further states that social organisations such as the home, the school, the hospital and the prison developed into enclosed and controlling elements of society, where each individual was sculpted into the mechanism of the *Panoptic* machine.<sup>59</sup> This society was described as the ‘Disciplinary Society’, yet Foucault argued that this was not the final step of the controlled society.<sup>60</sup> Much more subtle and sophisticated devices for control had surpassed this subject of disciplinary power and control of society. Yet the concept of the *Panopticon* had not been lost; it had become both more powerful and even factual. Gilles Deleuze elaborates on Foucault’s position on societies of control, observing that the new mechanisms of control are the functions of a new society, the ‘Control Society’, which is a descendant of the ‘Disciplinary Society’.<sup>61</sup> According to Deleuze, the ‘Control Society’ is defined by the decay of controlling establishments associated with the ‘Disciplinary Society’ and the increasingly omniscient environment of the new machines of control.

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58 Foucault, *Discipline & Punish: The Birth of the Prison*. 3.

59 Ibid.

60 Neil Leach, ed. *Rethinking Architecture: A Reader in Cultural Theory* (New York: 1997). 356-367.

61 Gilles Deleuze and Sean Hand, eds., *Foucault* (London: Continuum International Publishing Group, 1986). 309-313.

Figure 9: The Panopticon Prison

From: "Presidio Modelo prison in Cuba," 2005  
,<http://en.wikipedia.org/wiki/File:Presidio-modelo2.JPG>, (accessed 30.11.2011).



The same all-seeing omnipresent environment as the *Panopticon* can be identified within contemporary social networks through their ability to exteriorise and observe their users. Similarly to the *Panopticon*, contemporary online environments provide the opportunity to be controlled by an array of known and unknown authorities. This control society argued by Deleuze helps define the erosion of the public and private boundary. Both the public and private realms play a vital role in defining the nature of life in the disciplinary society. In light of this, Charles Goodsell concludes that public space is described as the intellectual sphere of public action that is vital to the success of democracy.<sup>62</sup>

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62 Charles Goodsell, *The Concept of Public Space and Its Democratic Manifestations*, 33 vols., vol. 04, *The American Review of Public Administration* (2003). 362.



Richard Sennett argues that public life and public space have stood for certain notions of respect where public acceptance is created by the interaction of strangers.<sup>63</sup> Contrary to the public space, the private space is one where one person, organisation, or other entity is given control. The owner of the private space is given the ability to restrict, observe and control all aspects of that space. Within that space the inhabitants are free to conduct themselves without the scrutiny of observers. Where publicity is described as prerequisite for democracy, privacy is similarly a fundamental element of public autonomy. As previously discussed, the public and private exist in polarity; the two dichotomous realms must exist and relate to each other in order for an autonomous and free society to exist. It is through the increasing power of observation within online social technologies that these distinctions are being removed and the realms of public and private are converging into a new space.<sup>64</sup> A space that is neither public nor private serves to develop the method of control. The actions and activities in a public space may be observed and analysed by any individual. In this case, it is the social technology of observation and invasive virtuality that enhances what one is capable of observing. New online social technologies in observation and invasive virtuality allow the Contemporary *Panopticon* to achieve its ambition as omniscient. This online social technology highlights what we identify, where we can identify it and how instantaneous it will be. As in its name, the online social technology can be universal – existing in both recognised and unidentified situations in both the public and private territories. The vast capacities of invasive virtuality alter our notions of space. Online social technology permits people to communicate through boundaries. This changes our perception of privacy as well as the nature of the boundaries themselves.<sup>65</sup>

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63 Sennet, *The Fall of Public Man*. 295.

64 Stephen Collins, “Subverting the Panopticon: Privacy in the Public Realm” (University of Tennessee, 2005). 3.

65 Ibid. 5.

**This is a modern Panopticon, wherein the cell of privacy is open to an impersonal gaze, and the sense that someone is always watching, potentially at least, is part of the structure of feeling of modern life.<sup>66</sup>**

The *Panoptic* machine of Bentham is static, a material enclosed space into which people enter and depart. As a concept the point is not whether society functions like Bentham's theoretical prison, rather how power attempts to be *Panoptic* regardless of real barriers, confrontations and resistances.<sup>67</sup> However, Foucault's argument is that *Panopticism* is itself mobile, able to produce the effects of inclusion wherever individuals may be found. Bentham's *Panoptic* architecture is ambiguous in this regard. There is nothing about enclosed space that requires its formation to be defined in terms of a material structure. For Foucault, inclusion is structured around a property of the consciousness not a concrete spatial arrangement. These material boundaries and limits are dominated by cultural conversations that reform the home, the workplace, the school and the mall, even as the distinctions between these spaces are eroded. Walls were once the boundaries that defined the public and private spheres; today these boundaries have been dissolved. The boundaries have changed so that alternative spaces provide limitations such as in the car, at one's desk or watching one's television. At these moments, our gaze is turned inward to reflect on and to isolate oneself within the absence of walls. All that Panopticism arguably requires of us is division and separation, the marking of our trajectory from one spatial and cultural zone to the next.<sup>68</sup>

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66 James Carey, "Communication, Culture, and Technology: An Internet Interview with James W. Carey," *Journal of Communication Inquiry* 22, no. 2 (1998). 129.

67 Mark Winokur, "The Ambiguous *Panopticon*: Foucault and the Codes of Cyberspace," *CT Theory* (2003). 3-5.

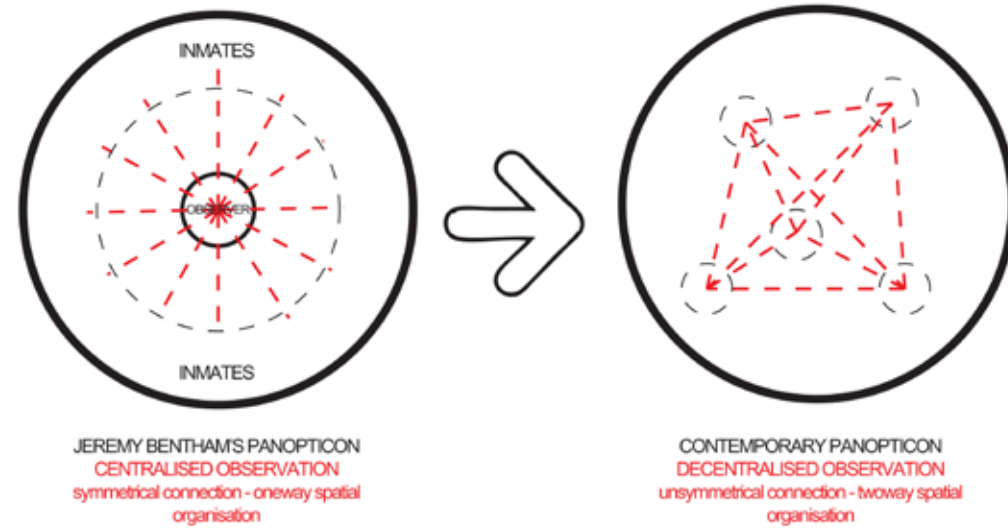
68 Mark Winokur, "The Ambiguous *Panopticon*: Foucault and the Codes of Cyberspace," *CT Theory* (2003). 3-5.

The power of observation is that online social technologies themselves tend to be unnoticeable. The contemporary *Panoptic* can be seen through the miniaturising of sensors, cameras and the disguise of the computer as a household appliance, which make these powers invisible.<sup>69</sup> Increased connectivity allows people to act within the public arena from otherwise private spaces, to expose the intimacies of their private lives on virtual reality. This facilitates one's personal secrets to be exposed through a connection to virtual personalities which are invented through Facebook. These consequential effects are complicated to understand under the conventional models of control and privacy. It is no longer probable to research the relationships between public and private, nor the controlling organisations in the same situation that we have in the past. This thesis alters the linear relationship with a metaphor suggesting that publicity has invaded privacy in every possible situation and vice versa. Furthermore, the online social technologies, invasive virtualities and observation challenge the model that we control both physical and virtual environments and our boundaries within it. Like the prisoners within the *Panopticon*, we are inhabitants of a cautiously observed and vastly controlled environment.



Figure 10: Contemporary Panopticon  
Diagram  
Image by Author, 2011

## SOCIAL NETWORKING FORM **CONTEMPORARY PANOPTIC**



The relationship between the *Panopticon* and our contemporary social environment has been identified. It traces the dialogue of Michel Foucault in his text “Discipline and Punishment: The Birth of the Prison” to develop an understanding of the *Panopticon* Theory. This exploration exposes the use of control as an active force in controlling society. The *Panopticon* is new to the formation of contemporary architecture. No longer defined purely by its static formation, the Contemporary Panopticon exists spontaneously and is mobilised through our contemporary social environment.

The Contemporary *Panopticon's* capacity to demonstrate the power and control through observation extends between society and contemporary architecture where it has the potential to exist simultaneously between realms of both public and private. The contemporary *Panoptic* is mobilised; it has the ability to act regardless of boundaries. It provides architecture with the ability to extend beyond a static inhabitation by provoking mobility and permeability, engaging with the confrontation between social environment and the built environment. As a mediator, the dynamic dialogue resonates between public and private through the power and control of observation. It has the greatest potential to intensify our inhabitation of the built environment. The design component of this thesis will preserve the intention of the *Panopticon* from its *diagram*.

The following chapter will extend the theoretical ideas synonymous with the *diagram* to the physical environment of architecture's built form. Chapter Three has emphasised the design of a Contemporary *Panoptic*, as an expressive means of provoking a dialogue of interaction and de-stabilising the inhabitant of the architecture. Chapter Four will further explore the Contemporary *Panoptic* diagram to underline a design method for exploring the boundaries between contemporary online social environments and architecture. This will then present the means for designing new boundaries between public and private.

4.0

# **ARCHITECTURE AS MEDIATOR**

## Introduction

Architecture has been used to express, shape and mediate the norms and regulations of social interaction. Bill Hillier and Julienne Hanson argue that architecture plays an active role in the way one interacts socially within society.<sup>70</sup> Architecture is influenced by the technologies of social communication, changing the way individuals interact socially within space. Phillip Steadman outlines the parallel development of social communication technologies and the spatial organisation of urban spaces. The new architectural form facilitated by social communication technologies allows spontaneous access to non-adjacent parts of the urban landscape. As architectural theorist Paul Virilio points out, the distinction between near and far becomes irrelevant here; the spaces 'travelled across' are lost and become invisible.<sup>71</sup> This results in an architecture that has become more despatialised, unpredictable and focused on social rather than physical experience. In such a context, this research will investigate how these virtual social technologies can be used to control social interaction in architecture, mediating the way users regulate privacy. As many aspects of our contemporary lives are in constant motion, this chapter will adopt the *diagram* as an instrument for designing an architecture that engages with these new boundaries and relationships. Case studies relevant to the design of architecture based upon the main philosophy of the *diagram* will be presented as a design method for the organisation and regulation of boundaries and space.

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70 Bill Hillier and Julienne Hanson, "The Social Logic of Space," Bartlett School of Architecture and Planning(1984). 5.

71 Schnädelbach, "Mixed Reality Architecture: A Dynamic Architectural Topology." 2.

Jeremy Bentham uses a circular architecture when designing a prison, which would allow perpetual observation of the prisoners. The continuation of constant observation and the notion of such scrutiny serve to control its inhabitants. As previously demonstrated the *Panopticon* diagram is employed as a metaphor for the social conditions in society as a whole due to intrusions of privacy by contemporary online social environments. In “Discipline and Punish”, Foucault describes the major effect of the *Panopticon*: to induce in the inmate a state of conscious and permanent visibility that assures the automatic functioning of power.<sup>72</sup> Diagrams such as those used in the *Panopticon* offer theoretical forms built upon the spatial typologies. They offer the ability to replace relations of words and concepts with tools such as lines, shapes and spatial organisations. The spatial typology of a *diagram* suggests a sense of rationality and meaning within its composition. Thus, *diagrams* display a functional relationship between terms: this path can be followed in this way.<sup>73</sup> The overall organisation of the *diagram* proposes a series of options and boundaries, allowing the user to think through a *diagram* to build theoretical expressions.

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72 Foucault, *Discipline & Punish: The Birth of the Prison*. 1-4.

73 Mark Jackson, “Diagram of the Fold: The Actuality of Virtual Architecture” (Auckland University of Technology). 13.

The objective of the *diagram* was to render its actual exercise redundant and independent of the person who exercises it. The *Panopticon* “automatises and disindividualises power,” a “marvellous machine produces homogeneous effects of power.”<sup>74</sup> Thus, for Foucault, the *Panopticon* functions as a situation of power – a model of functioning. It must not be understood as a fantasy building, but as a *diagram* of a mechanism of power reduced to its ideal form, a form of technology that must be separate from any definite use.<sup>75</sup> “It is a type of location of bodies in space, of distribution of individuals in relation to one another, of hierarchical organization, of disposition of centres and channels of power, of definition of the instruments and modes of intervention of power, which can be implemented in hospitals, workshops, schools, prisons.”<sup>76</sup> For Foucault, the Panoptic *diagram* is the general principle of a new system whose objective is to discipline.

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74 Mark Jackson, “Diagram of the Fold: The Actuality of Virtual Architecture” (Auckland University of Technology). 17.

75 Ibid.

76 Ibid.

Gilles Deleuze aligns his own language with Foucault's, while bringing Foucault more in line with his own metaphysical project and production of concepts. According to Deleuze, "A *diagram* is a map, or rather several superimposed maps."<sup>77</sup> He calls the "*diagram* or abstract machine the map of relations between forces, a map of destiny, or intensity, which acts as a non-unifying immanent cause which is coextensive with the whole social field. The abstract machine is the cause of the concrete assemblages that execute its relations; and these relations take place 'not above' but within the very tissue of the assemblages they produce."<sup>78</sup> Deleuze argued that contemporary society is moving from an organisation of observation and discipline to one of observation and control, which he termed "societies of control."<sup>79</sup>

**Disciplinary societies operate by organizing major sites of confinement. Individuals are always going from one closed site to another, each with its own laws: first of all the family, then school ("you're not at home, you know"), then the barracks ("you're not at school, you know"), then the factory, hospital from time to time, maybe prison, the model site of confinement.<sup>80</sup>**

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77 Deleuze and Hand, eds., Foucault. 44.

78 Ibid.

79 Gilles Deleuze, Postscript on the Societies of Control. In *Negotiations*. (New York: Columbia University Press, 1995). 177.

80 Gilles Deleuze, "The Fold-Leibniz and the Baroque: The Pleats of Matter," *Architectural Design Profile 102: Folding in Architecture*, no. 18 (1993). 249.



Figure 11: The Panopticon Library

From: "Scott Library York University," 2010  
,<http://waph.tumblr.com/post/1711786844/fuckyeahtoronto-scott-library-york-university>  
(accessed 02.11.2011).



Contemporary theoretical work in the discipline of architecture has a particular focus on aspects of social technologies as these begin to redefine our notions of spatiality, habitation and form. The notion of the fold has been adopted almost entirely at the level of form and diagrammatic manipulation. Form here has two meanings — the organisation of matter into visibilities and the finalisation of functions into statements.<sup>81</sup> When Deleuze discusses the fold as that which mediates between virtuality and actuality, he uses the term as a *diagram*, in the sense mentioned above. It is not the organisation of matter into some visible form, nor the finalisation of matter into function; rather it is the virtual relationships of power.<sup>82</sup>

Greg Lynn contributes further to the discussion of the *diagram* with the exploration of the fold in his manifesto “Folding in Architecture”. The *diagram* of the fold emerged as an architectural discourse aspiring to become the new architecture of the Twentieth Century.<sup>83</sup> Lynn draws on philosophical theories from the work of Deleuze, employing the *diagram* of the fold as a theoretical tool to analyse contemporary movements. The fold is used as a *diagram* and is employed as an architectural response to the complex and disparate cultural and social contexts. Moreover, it became a method for intensive integration of difference within a diverse yet continuous system.<sup>84</sup> Attributes of the fold provide new propositions in architecture. Specific to this research, the re-definition of boundaries becomes an important *diagram* in their interlacement.

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81 Gilles Deleuze and Sean Hand, eds., *Foucault* (London: Continuum International Publishing Group, 1986). 38.

82 Ibid.

83 Greg Lynn, *Folding in Architecture*, ed. Willey-Academy (Los Angeles 2004). 33.

84 Ibid.

The concept in discussion is the notion put forth by Deleuze, the concept of the fold. The fold is identified not as a mechanical machine, but as a philosophy of becoming, of diversity, of a separation while maintaining a connection.<sup>85</sup>

**“The fold is never established as a solitary experience, but rather it is perceived as an entity of numerous folds. Even its contrasting effect unfolding is not to be understood as the opposite of the fold, but rather it follows the fold to a subsequent fold. It is in itself a multiple of the fold. Deleuze further defines the fold not as one of a dimensional change but one that can function as a degree of expansion and differentiation.”<sup>86</sup>**

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85 Deleuze, “The Fold-Leibniz and the Baroque: The Pleats of Matter.” 19.

86 Ibid.

**“Folding-unfolding no longer simply means tension-release, contraction-dilation, but enveloping developing, involution-evolution... The simplest way of stating the point is by saying that to unfold is to increase, to grow; whereas to fold is to diminish, to reduce, to withdraw into the recesses of a world.”<sup>87</sup>**

Figure 12: Border Conditions

From: "Border Conditions," 2011 ,<http://improved.ro/blog/2011/07/fold/>(accessed 27.09.2011).



**“Space folds, bends and warps around itself and into itself into a topological revelry. We now no longer differentiate space with fixed, impossible boundaries: we have renounced the mathematical constructs of lines and planes as being limitations which we now no longer need to perceive the world. The demarcation mechanism is now based on differences of intensities, on gradient fields merging one into each other.”<sup>88</sup>**

In terms of the role of architecture, this can be perceived as a sequence of possible actions, identified as separations. Movement or modifications where there are no rigid orientation points evoke differing identities. This sets forth relations not based on traditional architectural attempts towards resolution through order and repetition of the same, but relationships based on uncertainties and differences. Folding is a diagrammatic means of introducing another concept of space and time within the landscape of conventional ‘spatial boundaries’. Spatiality is ‘becoming’ with no external measures or ends within a complex repetition. For example, the difficult relation of ideas can develop new ways of seeing the relationship of architecture to environment, building to society. The fold challenges questions of public and private boundaries, no longer creating a separation of public and private but one where a continuous and reversible dialogue can occur.<sup>89</sup> A folding across lines creates uncertainty between boundaries, instead of defined boundaries of separation. These uncertainties enable a variety of folding and unfolding to develop.

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88 Manuel DeLanda, ‘DeLanda Destratified’ interview by Erik Davis in *Mondo* 2000, No 8, Winter 1992, pp. 44-48

89 John Rajchman, *Constructions* (MIT press, 1998). 12.

“The fold is the general topology of thought... ‘inside’ space is topologically in contact with the ‘outside’ space... and brings the two into confrontation at the limit of the living present.”<sup>90</sup> The flow from outside to inside, across different scales and independent of distance, is not fixed but rather in constant exchange.<sup>91</sup> Thus, a building is not one space and one site but many spaces folded into many sites. Architecture is conceived where there is a folding of space into other spaces, a multiplicity where everything is always read and re-read but it is never seen in its entirety. “It is not the line that is between two points, but the point that is at the intersection of several lines.”<sup>92</sup> Several folds create a blurring of inside and outside, solid and void, and space-to-space thresholds reconceptualising traditional architectural notions of connections and separations.

It is important when considering the *diagram* of the fold in an architectural context, that it encompasses a continuously changing entirety. It is not a matter of separate folded ‘parts’ within the ‘whole’, but the ‘whole’ which has been complicated with the many ‘parts’.<sup>93</sup> The folding of space can be understood by the regularity of private online messaging inside a public environment. Typically, private communication in the public environment encourages the search for isolation to obtain temporal privacy. This involves a division of space, but also a blurring of boundaries between public and private space. The continuity of these situations is revealed in the twist of physical enclosure and in the diffusion of surfaces. In that way the concept of temporal boundaries is interpreted and explored in the design section of this thesis by a material and physical quality.

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90 Deleuze and Hand, eds., Foucault. 118-119.

91 Ibid.

92 Gilles Deleuze and Martin Joughin, *Pourparlers* Paris: Minuit (Columbia 1990). 219.

93 Rajchman, *Constructions*. 22.



Figure 13: Expressive topography.

From: Moussavi and Zaera-Polo. 2002.  
The Yokohama Project: Foreign Office  
Architects. p.176.



Figure 14: Inaccessible view point.

From: Moussavi and Zaera-Polo. 2002.  
The Yokohama Project: Foreign Office  
Architects. p.305.



## 4.2 **Yokohama Port Terminal The Blurring of Boundaries**

The *diagram* is illustrated through the design of boundaries in the Yokohama Port Terminal by Foreign Office Architects (FOA). By abandoning the typology of the terminal, they visualised their building as an extension of the surrounding urban environment. As the architects point out, “the building was designed as an interface between two social machines: the public urban spaces and the passengers’ movement in the terminal.”<sup>94</sup> Therefore, the space becomes fluid, continuous and multidirectional. The demands of the programme are organised in 3D strips, which fold to create voids for different activities. Through movement in space, the relationship between the building and ground is constantly in flux and their boundaries are blurred. The blur reflects the shifting boundary between two conditions. In the context of this research, the boundary between public and private has been blurred. The urban park on the roof enters the terminal spaces thus breaking the boundary between interior and exterior. Ground and structure make an inseparable unity. To achieve this built folded form, FOA employed ship building techniques to produce building sections. From concept to construction, the Yokohama Port Terminal illustrates that the *diagram* coupled with digital technology and production can result in a new architecture in one of the most important built examples to date.

**The aim is to achieve a mediation of a differential nature: a machine of integration that allows us to move imperceptibly through different states, turning states into different degrees of intensity, countering the effects of rigid segmentation usually produced by social mechanisms – especially those dedicated to maintaining borders. The proposed building will reduce the energy required to pass between the states, articulating in a differential mode the various segments of the programme throughout a continuously varied form: from local citizens to foreign visitor, from voyeur to exhibitionist, from performer to spectator.<sup>95</sup>**

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95 Foreign Office Architects, “Yokohama Port Terminal,” in Lotus (2001). 68.

Figure 15: Spline.

From: Moussavi and Zaera-Polo. 2002.  
The Yokohama Project: Foreign Office  
Architects. p.184-185.



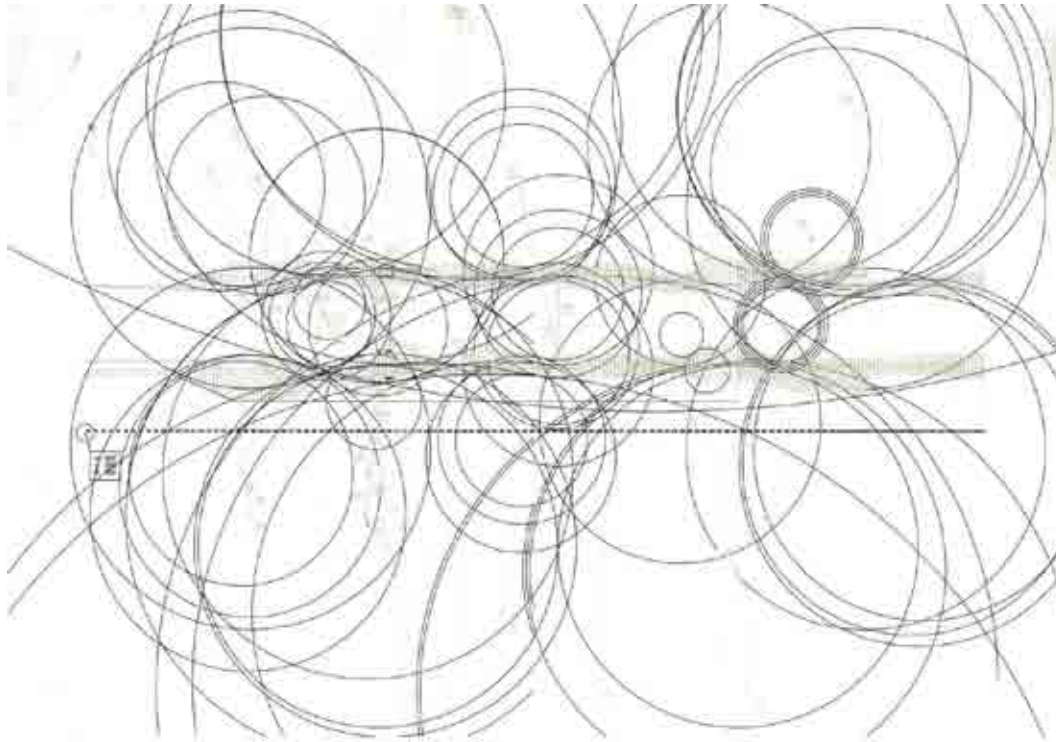


Figure 16:Diagrammatic Circulation Loops.

From: Moussavi and Zaera-Polo. 2002.  
The Yokohama Project: Foreign Office  
Architects. p.92

The body is engaged in a network of active forces that activate movement and challenge the body – the body is now mutually dependent on the architecture. The *diagram* is actively engineered at architecture's horizontal plane, as the relationship between public and private is explored with three-dimensional strips. Synonymous with the discussion of the *diagram*, FOA state that “the terminals function will not be to simply organise flows, but also to construct a field of urban intensity through the enhancement of multiple paths and directions.”<sup>96</sup> As a response to the writing of Deleuze and an application of the theory of the *diagram* and the fold, a new structure of social relationship emerges, challenging the connections and boundaries of interior and exterior through movement. The architects describe their method and its formal outcome as follows:

**...the project is produced as an extension of the urban ground, constructed as a systematic transformation of the lines of the circulation diagram into a folded and bifurcated surface. They continue: the folded ground is configured as a void space where the distribution of loads is not solved through orthogonal elements but distributed rather through the diagonal surfaces of the structure.<sup>97</sup>**

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96      Ibid.

97      Millard, “Design by Numbers.” (2008), <http://www.designbuildnetwork.com/features/feature1559/>(accessed 13 December, 2010). 82.

The entire concept of the architecture, as embedded in the *diagram*, defies the linear organisation of the terminal – the *diagram* of no return. This is represented through the means of movement, whatever direction the terminal is experienced, the overall experience will be a continuous forward movement. The project departs as an entity of spatial organisation rather than a formal or representational quality. The physical concreteness of the project emerges progressively as the *diagram* becomes engaged with a certain material.<sup>98</sup> Its deployment evolves the no-return *diagram* into a three-dimensional *diagram*.<sup>99</sup> Conventional architectural methods are usually associated with indeterminate relationships between *diagrams* and drawings; in traditional methods, these relations are regulated by the conventions of the discipline. However, the Yokohama Terminal deploys the *diagram* only after it has absorbed all the conventional and functional information. The following case study will present a similar diagram; however, it will present a metaphorical approach to the design of boundaries rather than a materialistic experiment.

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98 Note: In Yokohama, the material is the ground.

99 Architects, “Yokohama Port Terminal.” 68.



**R**esponding to the fluctuating patterns of modern life, the Möbius House is a confrontational formal and spatial experiment. The Möbius House provides an example of how architecture can place emphasis on boundaries and the way that it can solve contemporary problems. This enables a deeper understanding of the relationship between public and private in terms of control through the *diagram*. The Möbius House is a reflection of contemporary life and changing domesticity – giving rise to different and more diffuse ways of living and working.<sup>100</sup> Architects Van Berkel and Bos initiate this sense of the ‘radical’. This is emphasised through the requirements of the clients – a young couple. Their domestic and working lives are ‘mapped out’ through the use of a *diagram* and formalised in a fold of concrete and glass. The organising principle for this alternative private residence is the continually repeating Möbius Band. The familiar twisted figure-of-eight whose one continuous side appears to be two sides is appropriated by Van Berkel and Bos. They provide it as a theoretical outline to convey how two people can live together yet apart, meeting at certain points that become shared spaces. Although not a revelatory practice in itself (as most buildings go through some form of initial diagrammatic design phase), Van Berkel and Bos increasingly use the *diagram* as a means of exploring and developing alternative typologies.

## **The Möbius House as a Case Study** 4.3

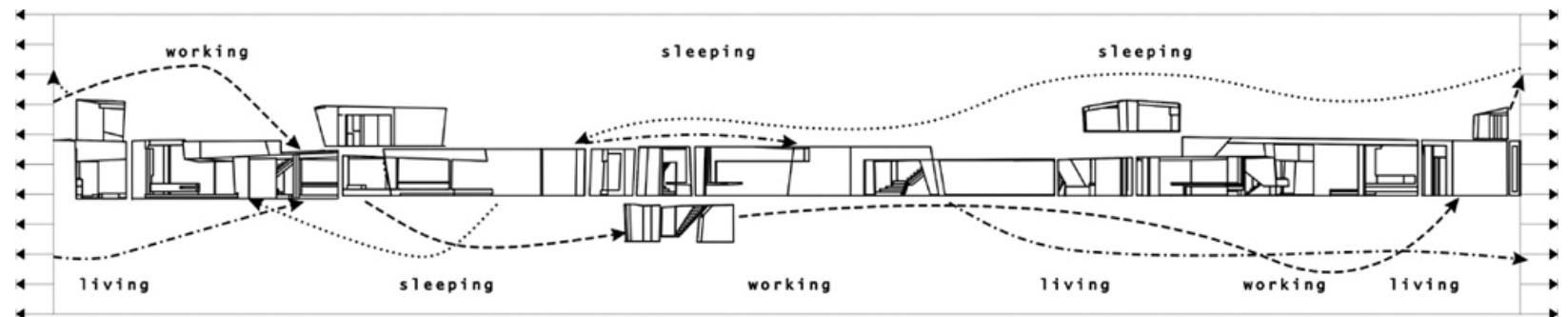
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100 Rodrigo García Alvarado, “Projected Space: Characterizing the Cybrid Architecture” (Universidad del Bío-Bío, 2000). 286.



Figure 17: Möbius House Diagram

From: "Möbius House," 1993, <http://www.un-studio.com/projects/mobius-house> (accessed 25.06.2011).



The clients, a husband and wife, requested a house that responded to both their contemporary working and living conditions. Their request was for complete isolation from each other, while maintaining spontaneous connections. The primary circulation of the house is based upon the Möbius Band, where two separate trajectories become intertwined. This unravelling and then convergence of space allows the house to provide an understanding of the *mobuis* through its diagram. Metaphorically, the *mobuis* band is interpreted into the architecture as a dialogue between contemporary ideas and the realities of the domestic program.

**“The mathematical model of the Mobius is not literally transferred to the building, but is conceptualised or thematised and can be found in architectural ingredients, such as the light and staircases and the way in which people move through the house. So, while the Mobius diagram introduces aspects of duration and trajectory, the diagram is worked into the building in a mutated way”.<sup>101</sup>**

Jeremy Till argues that, “Architecture attempts in its conceptual genesis to freeze time, to hold onto that perfected moment of the completion of the building for as long as possible before and after the event.”<sup>102</sup> This conversation with movement through the Möbius Band is directly linked to time. The continuous flow from a domestic activity to work provides the Möbius Band as the perfect diagram. Therefore the program becomes about how two individuals move through their twenty-four hour day cycle.

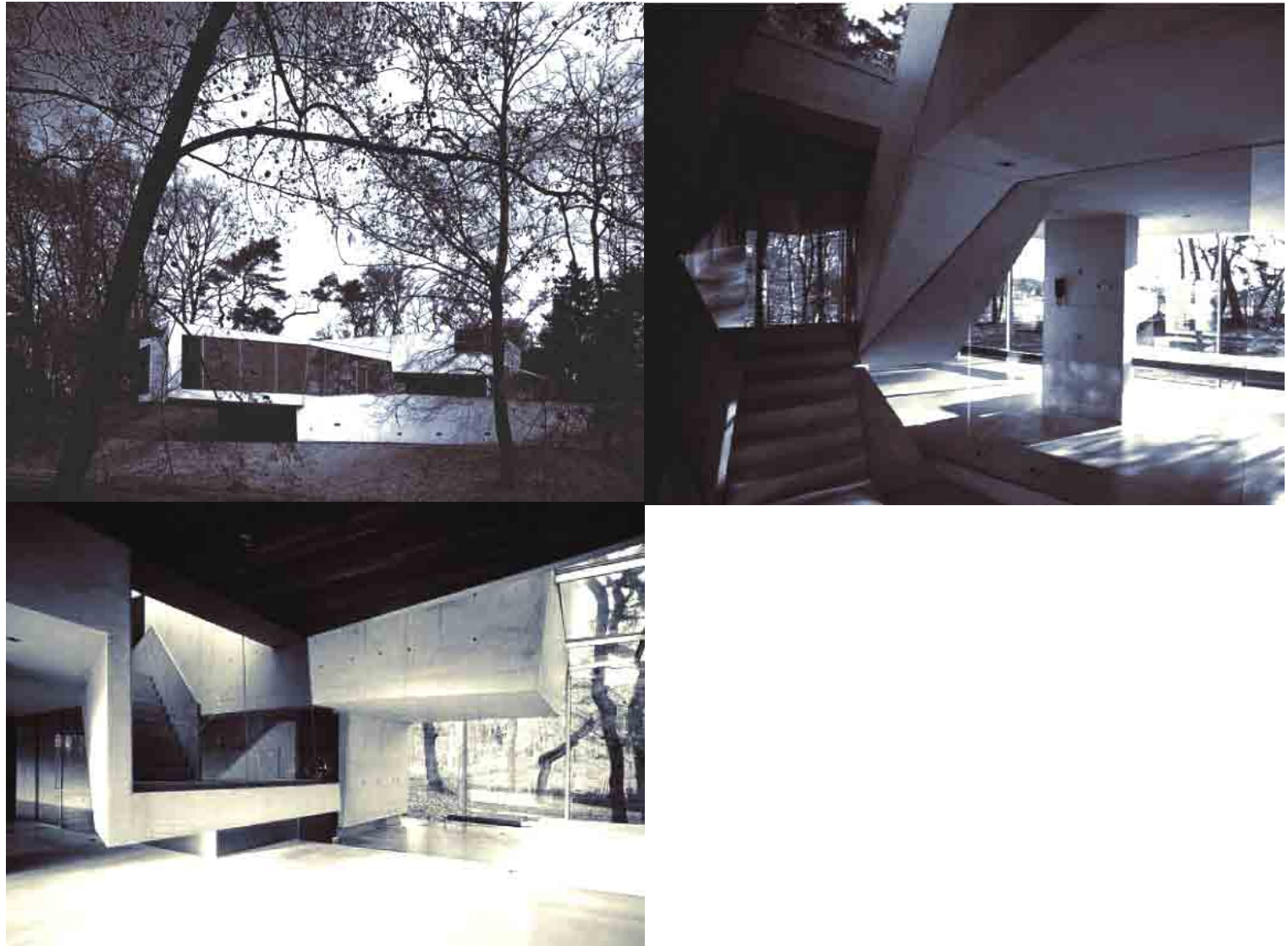
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101 Jacobo Krauel, “Experimental Architecture: Houses”( New York: Universe Publishing 2004). 132.

102 Jeremy Till, “Space Time and Landscape”, Architectural Design 66 (Nov.-Dec.1996). 9.

Figure 18: Möbius House

From: "Möbius House," <http://www.unstudio.com/projects/mobius-house> (accessed 25.06.2011).



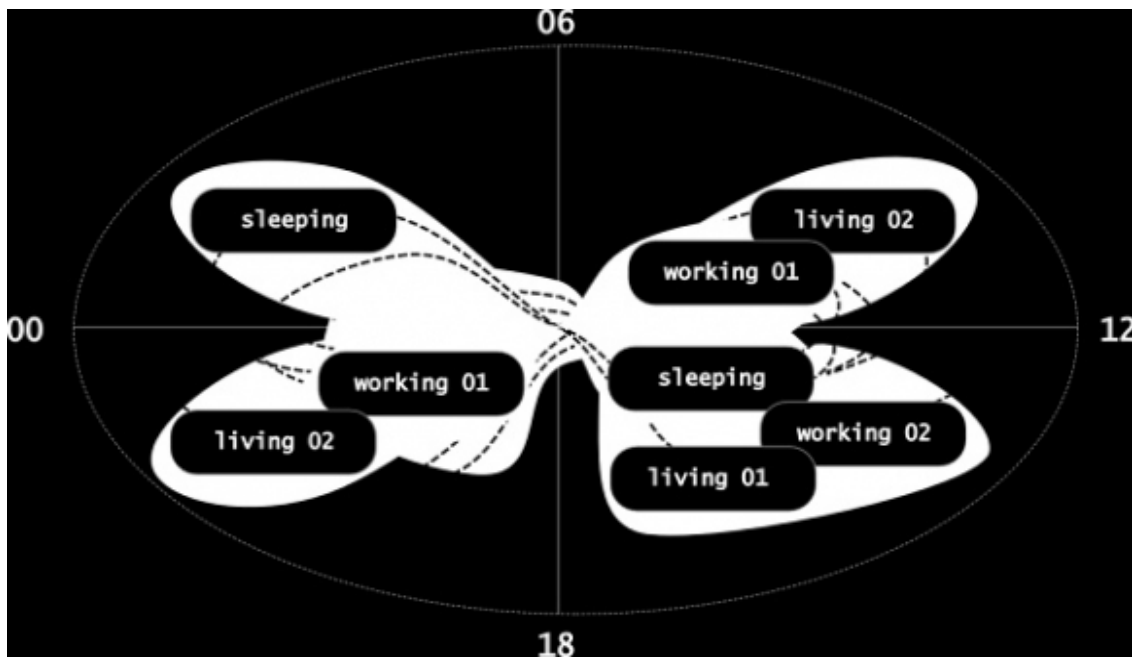


Figure 19: The Möbius Diagram

From: "Möbius House," <http://www.unstudio.com/projects/mobius-house> (accessed 25.06.2011).

The Möbius Band suggests a plan that interlaces the different movements and activities of the family. Moreover, it offers movement between forms of continuity and cross-references, between open and closed spaces, which interweaves the different functions organised by the Möbius Band. This notion of interlacement can offer an experimental approach for the design of contemporary boundaries. Specifically to this research the Möbius Band as a *diagram* and a form reflects the changing relationship between public and private through the continuity of revealing and concealing information. This will be further investigated through the experimentation section of this thesis.

**“I discovered that the Möbius was typical of a new system where the organisation could turn itself back onto itself, and that the system would have no dead ends, like in a grid system. It would create a new form of coherence beyond the collage.”<sup>103</sup>**

The Möbius Band has various qualities that can be explored in terms of architectural form, surface, and space. As a *diagram* it speaks of various things, for instance, ideas of surface, interiority and exteriority, space, time and infinitude.<sup>104</sup> The Möbius Band is a useful example to explain the change in relationship between two conditions. As the Möbius Band challenges the boundaries, it can be used to reflect the shift in public and private argued in this thesis. This section investigates the basic form of the Möbius Band and its properties of continuous flux between public and private. It grounds itself in relation to the previous case studies where architecture has adapted the *diagram* to explore boundaries. Furthermore, the Möbius Band will provoke a new connection between how users regulate and control boundaries between public and private, which will be investigated throughout the design stage of this thesis.

## **The Design 4.4 of the Möbius Band**

Architecture provides the ideal situation for the Möbius Band to be utilised. Spatial and formally the Möbius Band

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103 Millard, “Design by Numbers.” (2008), <http://www.designbuildnetwork.com/features/feature1559/>(accessed 13 December, 2010). 82.

104 Jolly Thulaseedas and Robert J Krawczyk, (College of Architecture Illinois 2010). 1-6.

Figure 20: The Möbius Band

From: "The Möbius Band", 2010, <http://fff-found.com/image/61211890fa5cd2d171961fb2785da8921bb742fb>(accessed 27.09.2011).



can apply itself as an effective tool for design. Through the Möbius Band's infinite and continuous properties, the movement and sense of twisting can be generated through form and space. The most important property for the design experimentation of this thesis is its concept of transformation – the interior becoming exterior and vice versa. The Möbius Band is a surface with only one side and only one boundary component and is therefore the ideal formal and spatial experiment to test the new forms of social interaction. Considering these properties of interior and exterior, the Möbius Band can provide a continuous social environment, confronting the social dynamics of contemporary social environments, ultimately blurring the boundary between public and private.



The Möbius Band is employed in conjunction with the *Panoptic diagram* in the design stage of this thesis. As a *diagram* or mechanism of power the Möbius reproduces a contemporary *Panoptic* control, constantly shifting the power of observation between the public and the private. It provides a language that is neither public nor private. In direct relationship with online social environments, power exists anywhere. Therefore, the Möbius Band exteriorises the private, constantly changing the power of observation. In relation to contemporary social norms, the exteriorisation of the user has become the norm, where privacy is no longer about concealing information but revealing private information to an observational society. The Möbius Band becomes an architectural mediator, where the mediating ingredient of the Möbius *diagram* derives not from the strategies that inform the *diagram*, but from its material configuration. The Möbius *diagram* in conjunction with the *Panoptic* is not a metaphor or paradigm, but an 'abstract machine'.

The employment of the *diagram* as an instrument for designing an architecture that engages with contemporary social relationships has been analysed in this chapter. Coupled with the spatial concepts of the *diagram* and the fold, and the potential for new social interaction in an architectural context, there is a developed architectural manifestation of the many philosophies of Deleuze essential to this thesis. A dynamic architecture where space becomes an infinite 'product' and flux of possibilities, processes and virtually could unfold itself across a diverse architecture landscape with no definable boundaries, rather, an evolving continuum. An architecture emerges whereby virtue of social development, continuously refolds spaces and spatial thresholds. It is "a progressive and regressive undulating re-articulation and re-definition of inhabitable space, responding and evolving more fluidly to the body and its folded actuality."<sup>105</sup> It therefore redefines and challenges architectural relationships of building to site, public to private, interior to exterior, and body to space.

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105 Architects, "Yokohama Port Terminal." 14.

Conclusion In conclusion, the case studies explore the alternative means for designing new social and architectural relationships. The abstract use of both the Möbius Band and the Fold *diagrams* provokes a conceptual blurring of boundaries through circulation, spatial organisation and movement. With the aim of exploring new boundaries, the design component of this thesis will test the Möbius Band and the Fold as a 3-dimensional *diagram*, and a typology for new social behaviours and relationships between public and private. In relation to the *Panopticon*, the erosion of distinction between public and private highlighted above provides the Möbius Band as a perfect *diagram* of power and control. Through the visual exposure of space and as an organisation of observation, the Möbius *diagram* will blur the boundary between public and private, validating architecture's ability to be both materially and immaterially dynamic in response to contemporary society.

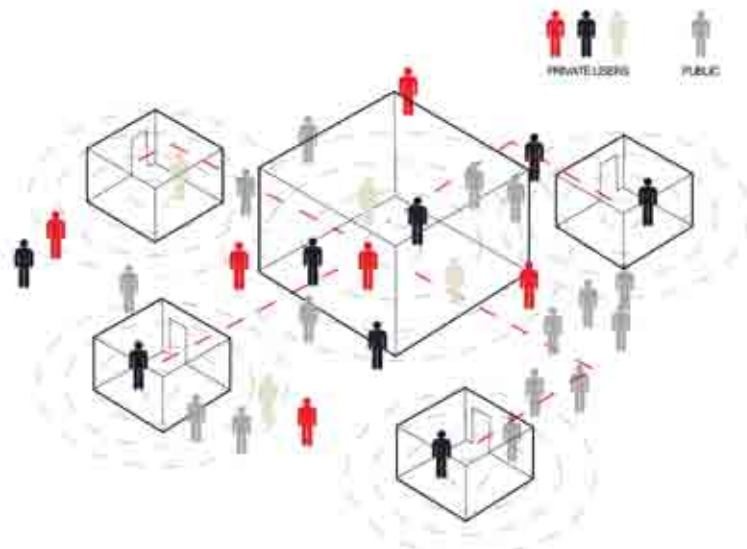
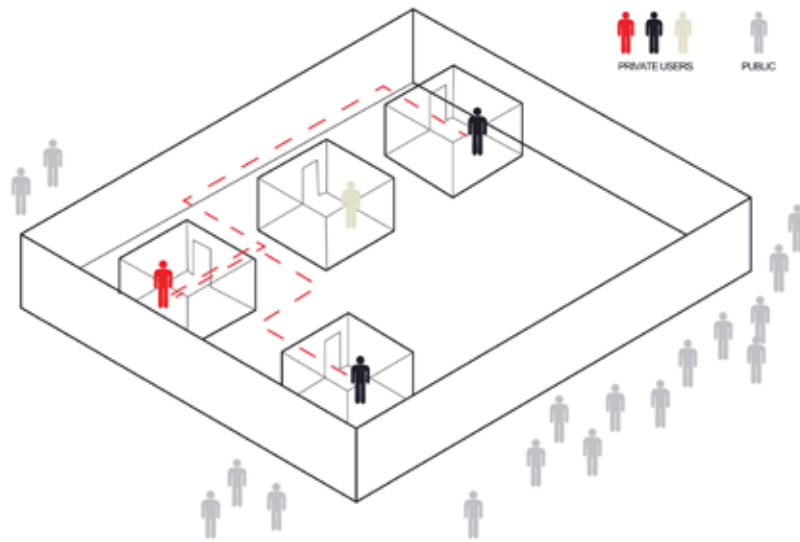
# 5.0 **ROLE OF DESIGN**

**“It is more than a boundary between two states, such as the real and the virtual; or two spheres, such as the local and the global; or two conditions, such as the public and the private.” [Interface architecture is also the “mediation, the translation, the interaction between]”<sup>106</sup>**

The design process tests the concepts and theories explored through this research. The sensory and visual control of spatial boundaries and the regulation and control of visual information has been discussed. Through siting a project within a physical context, this concept will be explored with reference to the blurring of boundaries between two zones of public and private, where possibilities of the ‘continuous’ exist. The traditional form and organisation of these boundaries will be tested by generating an architecture that genuinely reflects and houses contemporary society. It provides autonomous and unsystematic observation and control of an increasingly conflicting *Panoptic* society. The *Panoptic* and the role of observation in contemporary society is explored through the organisation of observation where no one in the building has a privileged, all-seeing vantage point. It is focused on decentralised vantage that is continuously unfolding. This architecture is a unique combination between form and content and this applies to a performative experience. Through the following design component, the spatial organisations of a traditional museum typology will be re-designed. This will be achieved by the redevelopment of boundaries between public and private. The spatial boundaries will be explored through movement, drawing and wrapping the individual’s space under, over and through the changing public space, both guiding their passage

through the complex organisation and housing a range of various functions. Concepts of continuity will function as a mediator between boundaries of public and private through its spatial organisation, designing towards a building that is capable of upsetting the relationship between the museum and the visitor as a stable consumer of visual information. Furthermore, it will immerse and change the visitor within the qualities of a contemporary *Panoptic*, where the experience becomes primitive and haptic.







**“The outside is not a fixed limit but a moving matter animated by peristaltic movements, folds and foldings that together make up an inside, they are not something other than the outside, but precisely the inside of the outside.”<sup>107</sup>**

## 5.1 Experimentation

Initially, the design process invested in the research and documentation of the boundary between public and private space. A number of diagrammatic models and sketches were expressed as a translation of this blurred boundary. The *diagrams* acknowledged the potential to integrate contemporary social environments into architecture. By doing this the architecture takes on a physical translation of how these new social environments can affect the design of space and ultimately reflect an interface between public and private. The *diagrams* were able to incorporate multiple systems, such as the flow of people, programmatic and spatial considerations, environmental factors, material characteristics and structural systems. Extending from these initial *diagrams*, the design process represents the qualities inherent to social engagement and contemporary social behaviour. Through the performative qualities of the *diagram*, a performance driven architecture unfolds, where all aspects of site and programme are incorporated, rather than ignoring the site and seeking to repeat a typical museum prototype. The *diagram* is used as a prototype that adjusts itself to the specific parameter and is used as a design tool that evolves throughout this research. In the search for a performance-driven architecture that can encourage new modes of social interaction and behaviour, the use of the *diagram* and the physical modelling has proved successful within the design process of the architecture.

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107 Deleuze and Hand, eds., Foucault. 96-97.

Attempting to spatialise the conceptualised *diagrams*, the investigation developed into a physical medium of maquettes. The Möbius Band is employed as a three-dimensional *diagram* to reflect the continuous fluctuation between public and private space and the dynamic qualities of its surface. Taking on the *diagram* of the Möbius, the maquettes serve as formal generators of space where surface is visually experienced as a mode for concealing and revealing. The surface folds, twists and unfolds as the idea of continuity formulates itself as an instable spatial device. This reflects the despatialised social interaction of contemporary society argued above by Paul Virilio.



Figure 23: Folded Maquettes  
Image by Author. 2011

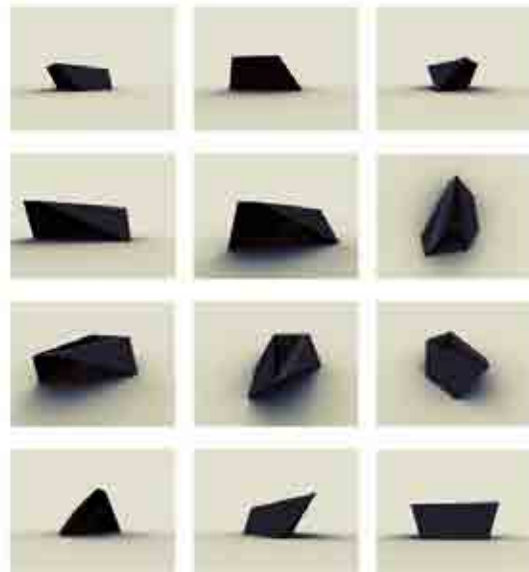


Figure 24: Folded Möbius  
From: <http://jakovich.net/pixelnest/> (accessed 27.06.2011).



Figure 25: Möbius Circulation Diagram  
Image by Author. 2011



Figure 26: Möbius Band - On site  
Image by Author. 2011



Figure 27: Möbius Band - On site  
Image by Author. 2011

This exploration is extended through models expressed on site. The process connects one single strip of cardboard together on the site to explore the formal relationship between the Möbius maquette and the site. Starting with a single strip of card, with two respective sides, the exaggeration of folding and then twisting the card allowed the form to be connected, creating a surface that linked both planes. Drawing on one side of the plane while leaving the other blank showed the ultimate continuity that is possible through the diagrammatic aspect of the Möbius Band. While each side maintains its own properties, they now are connected and linked into a new continuous image. The Möbius Band was inspired by the previously discussed “Möbius House” by UN Studio. In the house, they took the same approach to the Möbius Band by looking at it through its *diagram*. In the house, they brought together two environments by conducting event-time studies of a normal day in the family’s life, and where possible connections could occur. It was a significant project which successfully developed the idea of performative architecture.

The conceptual ideas explored through the *diagram* were similarly expressed through the manipulation of pattern. A sequence of photographs captured and expressed the context of the chosen site in relation to its environment. These images were then simplified, highlighting the permeability of the Wellington Waterfront site. Extending from these images, two machined rectangle pieces of plastic were overlapped and when shifted from one another it created a much more dramatic moiré pattern.

Figure 28: Environment - On site Imagery  
Image by Author, 2011



Figure 29: Moiré Pattern - Simplification of On-site Imagery  
Image by Author, 2011





Figure 30: Physcial Moiré Pattern Models  
Image by Author. 2011



This experiment brought out the idea of two separate entities coming together to form a new surface. It ties into folded architecture and performative space through its mediation between two situations. Bringing the moiré into the architectural realm, it could be used or seen when placing several programmes together, intertwined, or overlapped and seeing what new event, space, or interaction can occur from various combinations. This moiré pattern, although subtle in form, expresses the dynamic qualities that resonate between our contemporary public and private environments - a simple gesture producing an evocative event.

The chosen site for this significant project is located within the waterfront area in Wellington, New Zealand. It is **Site: Kumutoto 5.2**  
also where the Wellington recreational district begins and where the central shipping and transportation artery **Wellington**  
was once located, giving the site historical significance. The research challenges the dormant site to reconnect **Waterfront**  
and reactivate what was once a highly populated area and a central hub of public activity. The site's location  
serves as a threshold between two distinctly contrasting zones of density and use, commercial and leisure, and  
most importantly public and private. The potential to explore the interaction between these two conditions evokes  
a new purpose and connection between the architecture and its users. Furthermore, the site is located on the  
edge of the Wellington Waterfront as the endpoint to the central axis that starts with New Zealand's Parliamentary  
Building, The Beehive. It also is the starting point for the North Island to South Island water crossing by ferry. It  
ties in with a series of piers that follow the landscape jutting out into the water. The built volume is interwoven with  
the ground, producing connections on many levels. The building expands the traditional concept of archive and  
historical relevance, all senses are included in the perception of the informational, spatial and haptic experience.  
This creates a journey through exhibitions that allow visitors of demographics to get closer to exploring the identity  
of contemporary society in a personal way.



Figure 31: Pipitea Wharf

From: Pipitea Wharf, Wellington, 1933. Sourced from the National Library of New Zealand (12.9.2011).



Figure 32: Site - Lynx Ferry Terminal

From: The Lynx Ferry Terminal, Wellington, 2001. Sourced from the National Library of New Zealand (12.9.2011).



Figure 33: Site Imagery  
Image by Author. 2011

Historically the site has been shaped to conform to transportation and importation of trade. Historic analysis confirms that the site was once the grounds for the influx of international and domestic travellers arriving by ferry. Despite the once apparent dominance of transportation, it is today an integral pedestrian path that connects the Wellington waterfront to the CBD. The Wellington City Council has acknowledged the site as a potential development and proposed a vision for the site, interacting with the surrounding open space and featuring unique retail and food and beverage outlets.

Figure 34: Windrose Diagram  
Image by Author. 2011



**T**he design process explored the conceptual maquettes yet when introduced into the site, the building failed to recognise the position defined by this thesis. The preliminary building expressed the Möbius formalities but failed to engage with the spatial translation of revealing and concealing the interior information. For various reasons it continued to conform to a traditional, static and linear form.

## **Initial 5.3 Reflection**

The chosen site of the design response possesses a range of challenges that restricted the initial design exploration. The preliminary design proposed a building that failed to explore its relationship to the ground plane which had a range of implications for the building. The building became restrained, neglecting the condition of the social and physical environment. It appeared to cut off at ground plane, resulting in an unresolved connection with the Wellington waterfront and its people.

Figure 35: Preliminary Sketches  
Image by Author. 2011

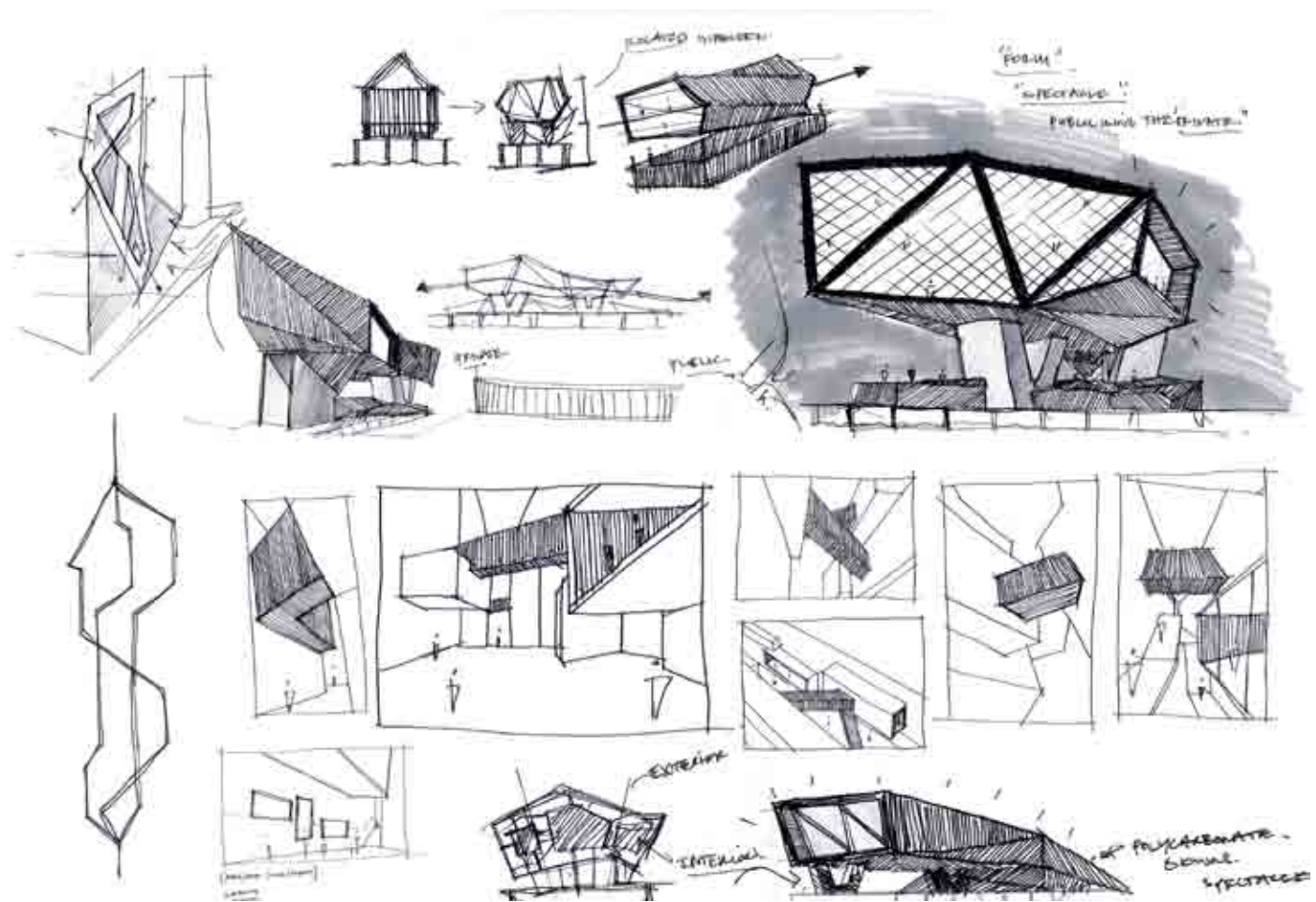




Figure 36: Preliminary Design - South  
Exterior Perspective  
Image by Author. 2011



Figure 37: Preliminary Design - North  
Exterior Perspective  
Image by Author. 2011



Figure 38: Preliminary Design - Courtyard  
Image by Author. 2011



The diagrammatic forms that were designed to encourage continuity and interaction were isolated from the programme of the building. The design initially failed to integrate not only the transition between public and private but also the various functions inherent with a museum prototype. There was the opportunity to dissolve the inconsistency between these two conditions and to develop a common language through the exploration of the fold, ultimately amplifying the museum's ambience and perception.

Figure 39: Preliminary Design - Photo Space  
Image by Author. 2011



Figure 40 Preliminary Design - Video Room  
Image by Author. 2011



Although the initial design response expressed the Möbius Band as a mediator between public and private, it failed to engage the experience of a museum typology. The building emerged as autonomous and was disjointed from the architectural programme. The spatial quality of the building neglected the changing social means for interaction and exposure. The functional conditions of social engagement should provoke the manipulation of architecture's boundary in a productive and expressive form. The built form should strengthen new relationships synonymous with the experience of online social environments. Furthermore, it should encourage an array of socially orientated programmes that strengthen the contemporary built environment. The following section will expand and confront the issues highlighted in this section through a developed design solution – The Museum of Me.

Figure 41: Preliminary Design - Reflection Room  
Image by Author. 2011



Figure 42: Preliminary Design - North Corner  
Image by Author. 2011



Figure 43: Preliminary Design - Cantilevered Spaces  
Image by Author. 2011



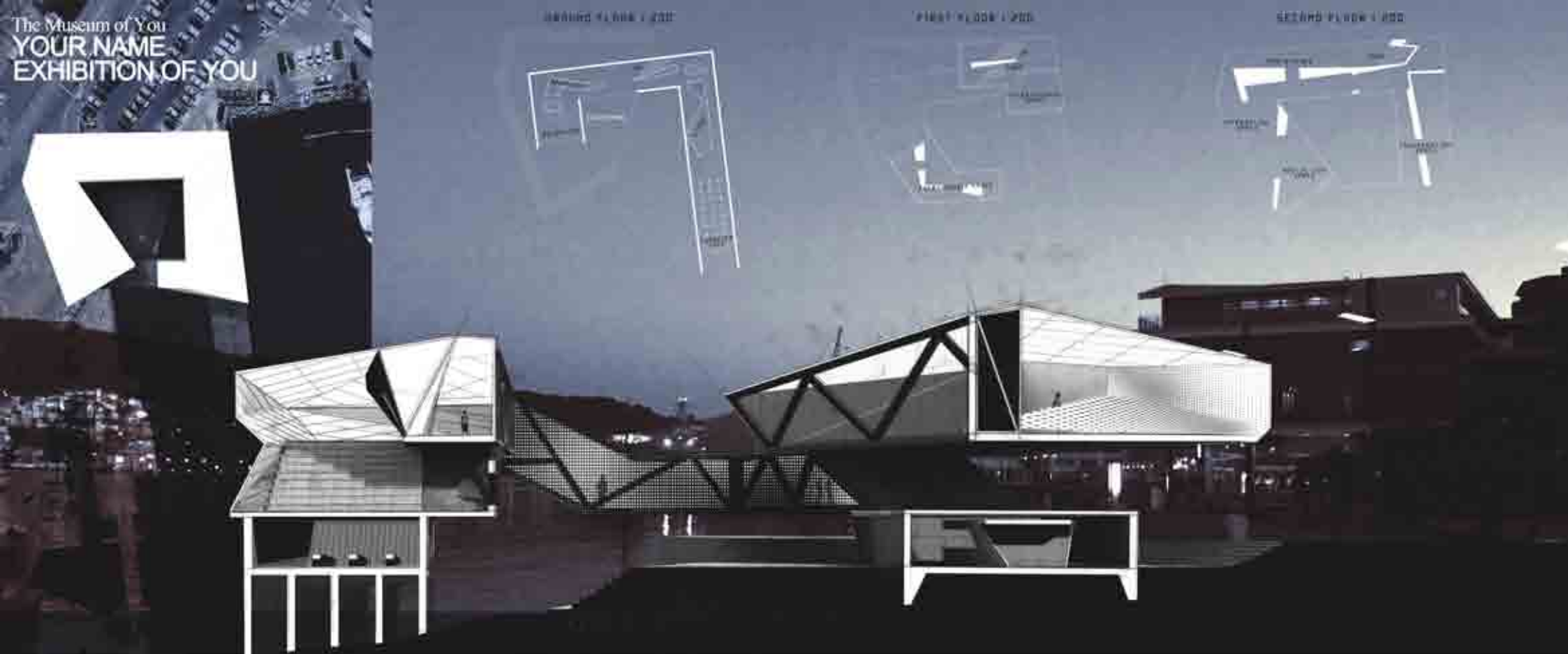


Figure 44: Developed Design  
Presentation Panel One  
Image by Author. 2011

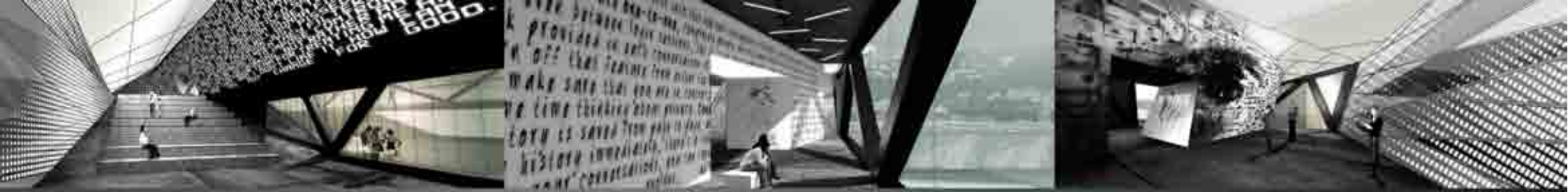


Figure 45: Developed Design  
Presentation Panel Two  
Image by Author, 2011

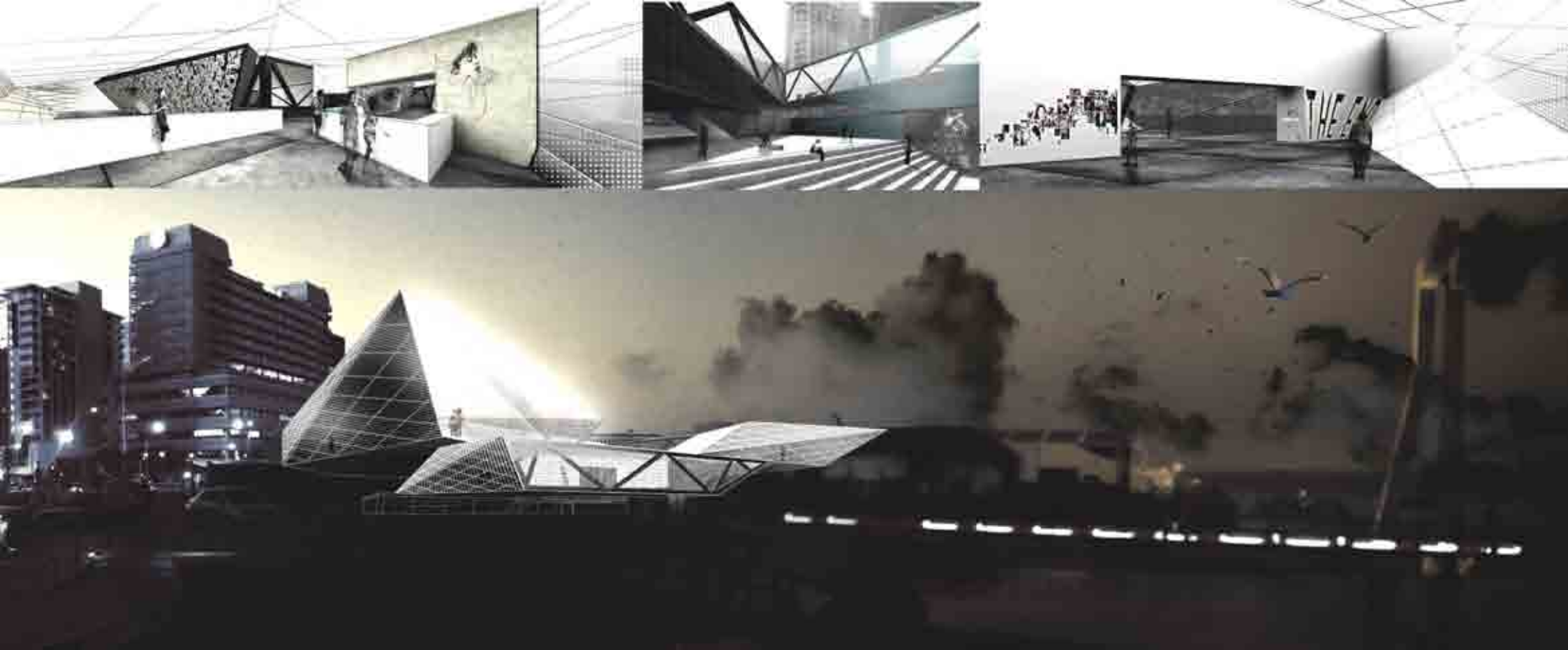


Figure 46: Developed Design  
Presentation Panel Three  
Image by Author, 2011





# THE MUSEUM OF ME



The Publicity of the Private



#### 5.4 **Developed Design Solution**

Following the previous investigation The Museum of Me is a developed project, which emphasises the conjunction of interaction and observation, challenging conventional boundaries between public and private. It reflects new relationships between contemporary social environments and architecture developed in this thesis. The building responds to the new social environment by expressing a dynamic relationship between public and private. It alternates between a state of radical interiority providing a reclusive withdrawal that gives away no sense of being observed, and a state of controlled exhibitionism that publicly exposes its interiors. The Museum of Me is a social organisation developed to control its inhabitants through the manipulation of boundaries. Like Jeremy Bentham's *Panopticon*, the individuals are publically exposed as a norm of contemporary society. Through the use of the Möbius band the architecture takes on a contemporary *Panopticon*, constantly shifting the sense of control. The environment is unstable – on the one hand it protects the private and on the other it exposes it.

The public and private realms of the building are separated so that the base of the building is devoted to public premises, internal courtyards, common-use spaces and the upper volume is devoted to the contemporary museum experience. In response to the initial design investigation the ground-level public space is incorporated into the existing context with a series of surfaces and spaces folded out of an extruded platform of artificial landscape. A central public courtyard centralises the site. The courtyard mediates the private and semi-public dimension and provides activities focused around leisure, recreation and creativity and are flexible in order to adapt to the specific needs of its users.

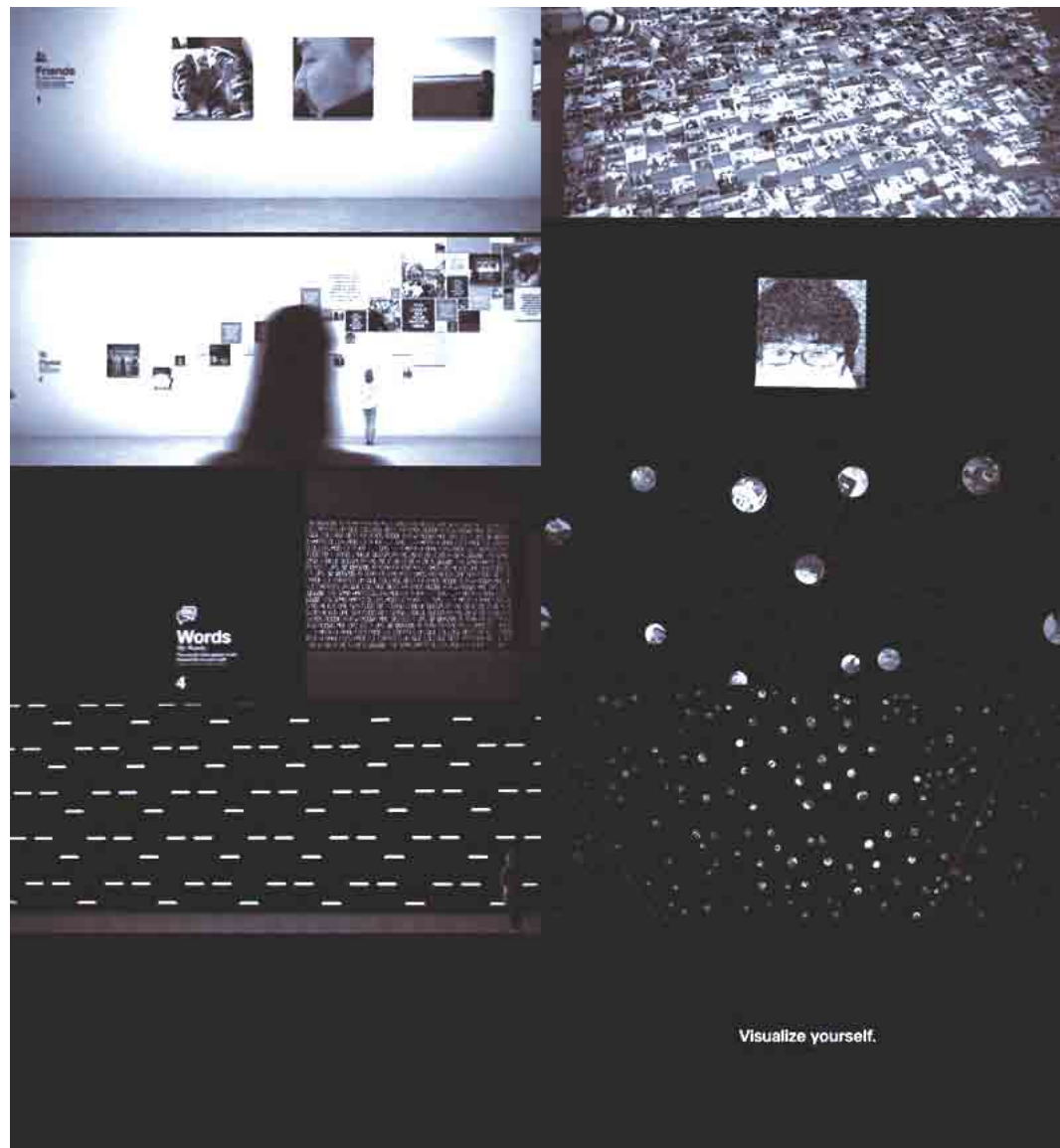


Figure 47: Visualise Yourself

From: "Visualise yourself", 2010, <http://www.intel.com/museumofme/r/> (accessed 09.11.2011).

Programme    Synonymous to this research the museum provides the ideal programme to reflect contemporary society. As Tony Bennet comments, the museum, in providing a new setting for works of culture, also functioned as a technological environment which allowed cultural artefacts to be refashioned in ways that would facilitate their deployment for new purposes as art of governmental programmes aimed at reshaping general norms of social behaviour.<sup>108</sup> Furthermore, Bennet argues that museums are an apparatus of power. Like the *Panopticon*, museums can exemplify what can be looked at, the paintings, the objects, the items in the shop.<sup>109</sup> Through the museum programme notions of visibility can illustrate the act of being seen. Therefore, The Museum of Me makes visual experience accessible to the public by expanding the desire to exhibit oneself and create a new audience. It adjusts the traditional role of the museum programme as containers for the display of art to a reflection of contemporary society; The Museum of Me becomes a programme that connects its inhabitants visually through the organisation and publicity of their private information. The programme pulls information from their online social environment to create a museum of one's virtual identity. Photos, videos and friends are presented as pieces of art to attract interaction into the museum. Public and circulation areas are infused with personal information, defining programme areas for users to observe and congregate - a new type of social environment emerges. The proposed museum suggests an architecture that is both immediate and diverse, one that crafts spaces for both private and public exchanges, provoking a new mediation between public and private.

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108      Tony Bennet, *The Birth of the Museum: History, Theory, Politics* (London: Routledge, 1995). 6.

109      *Ibid.*

Conceptually, The Museum of Me is the resulting form and process of mediation and tension between two systems Form of geometry, one projective (reality) and the other artificial (virtuality). Through an overlapping system of spatial and geometric progression, growth and interference, the spatial roles of public and private, interior and exterior, museum and landscape are intimately connected, yet they are also left curiously open-ended and indeterminate much like the Möbius Band. Overall, the museum operates within the prescribed social and environmental boundaries of the site to produce an experience-oriented museum. Furthermore, the building is suspended between isolation where The Museum of Me breeds familiarity while suggesting the unexpected, mediating between the changing boundary of public and private.



Figure 48: Program & Circulation Diagram  
Image by Author. 2011

Figure 49: Exploded Axonometric  
Image by Author. 2011

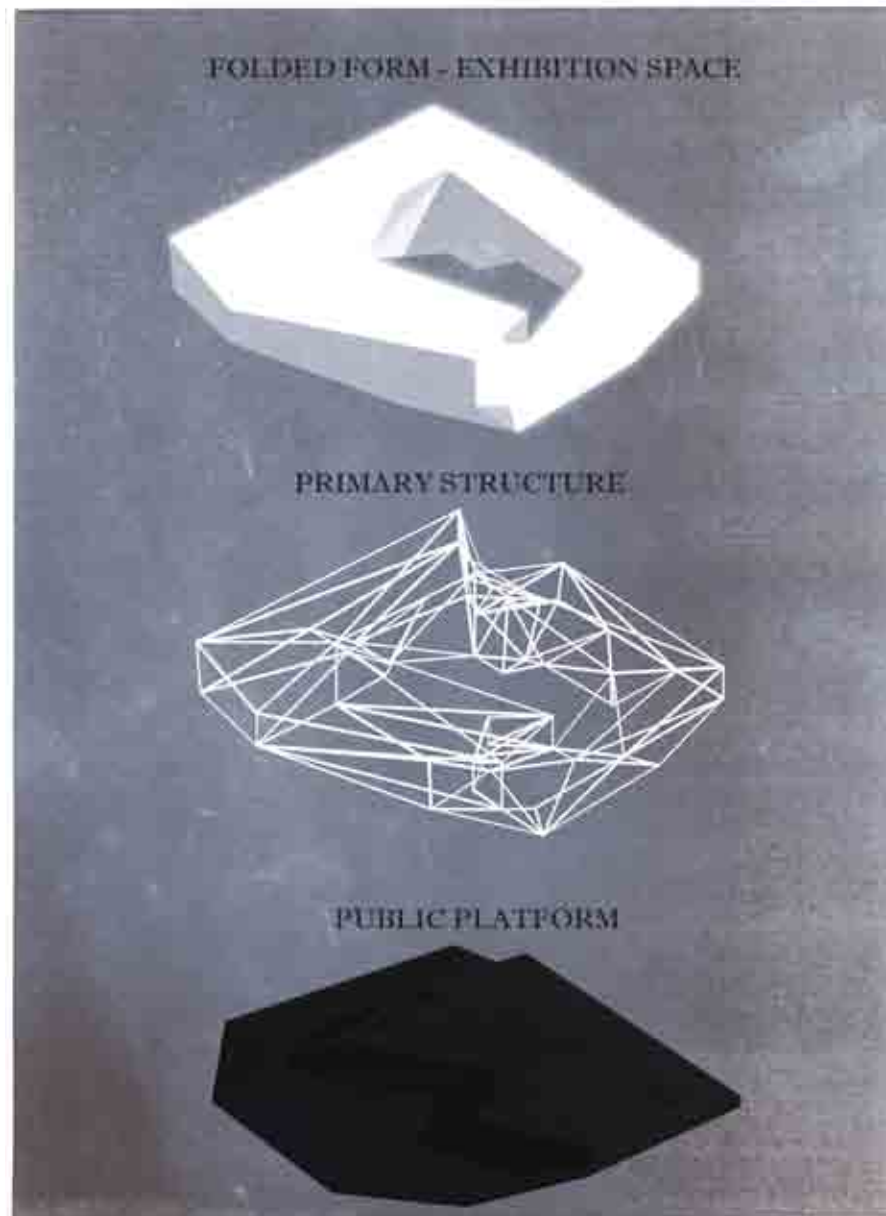




Figure 50: Sectional Model  
Image by Author. 2011

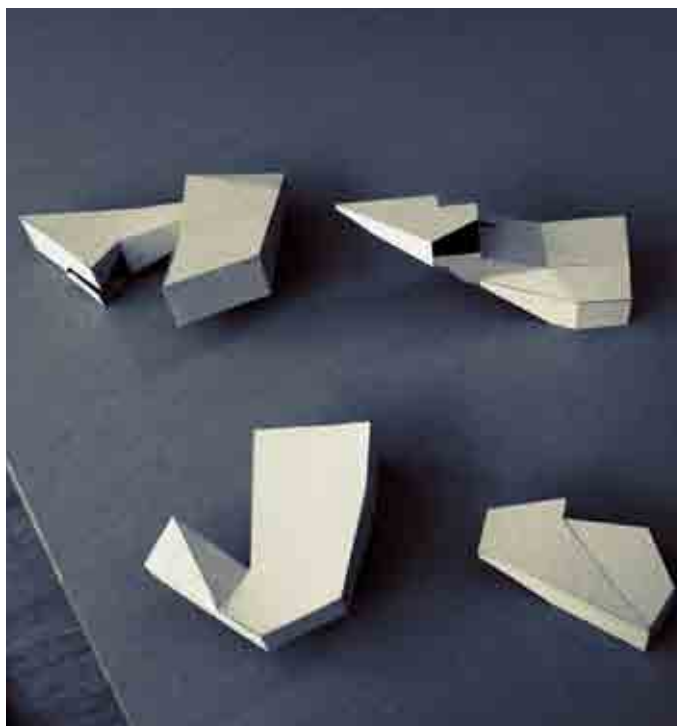


Figure 51: Formal Models  
Image by Author. 2011



Figure 52: Exterior Perspective Entrance  
Image by Author. 2011



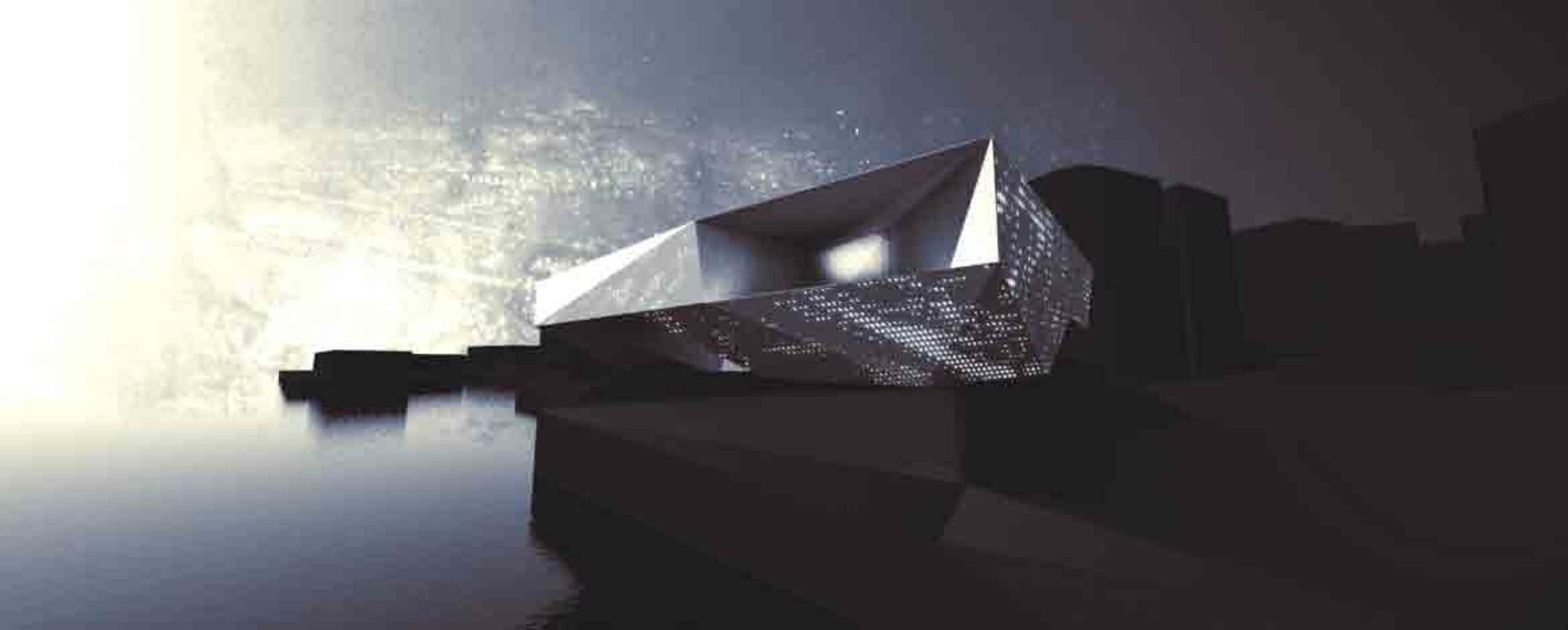


Figure 53: Exterior Perspective North view  
Image by Author. 2011



Space The museum's spaces preserve the objective of the *Panopticon* and the Möbius from its *diagram*, restoring force to the social gaze and descending the axis of the ensemble to its decentralised folded space. It allows an integrated perceptive experience, articulating the architectural space from transparency and fluidity. The axis achieves a contemporary reinterpretation of the *Panopticon*, organising the tower's function spatially to a folded experience. The employment of this decentralised form is to engage with the virtual conditions of online social environments, where society engages in a *Panopticon* form of observational interaction, blurring the boundaries between public and private.

Figure 54: Exterior Perspective South view  
Image by Author. 2011

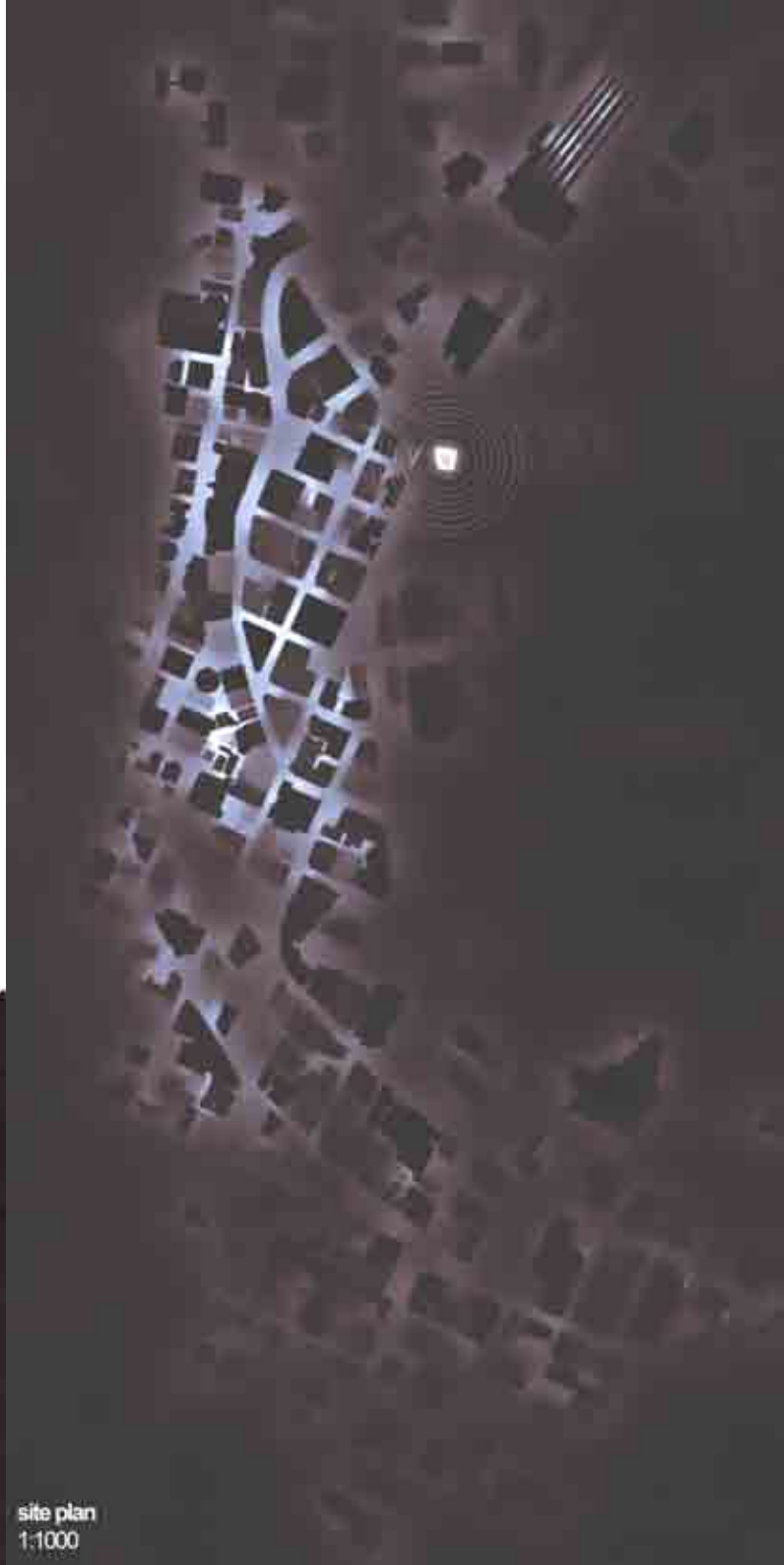
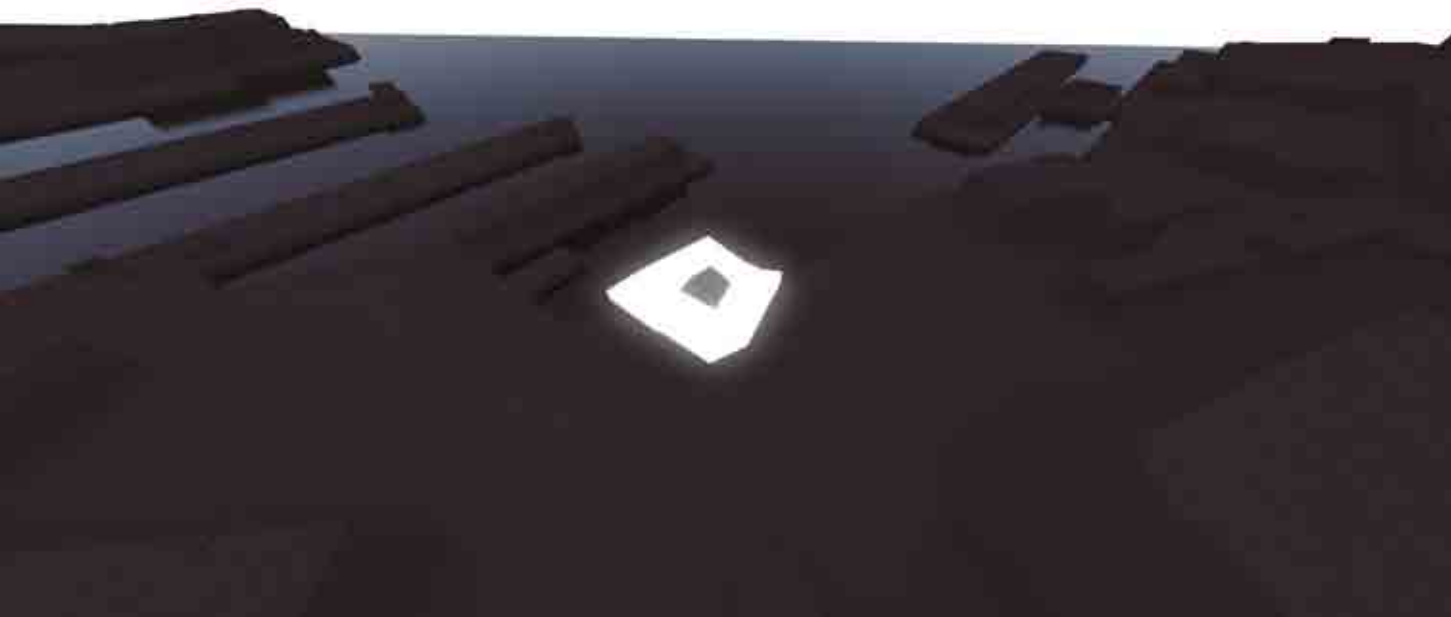
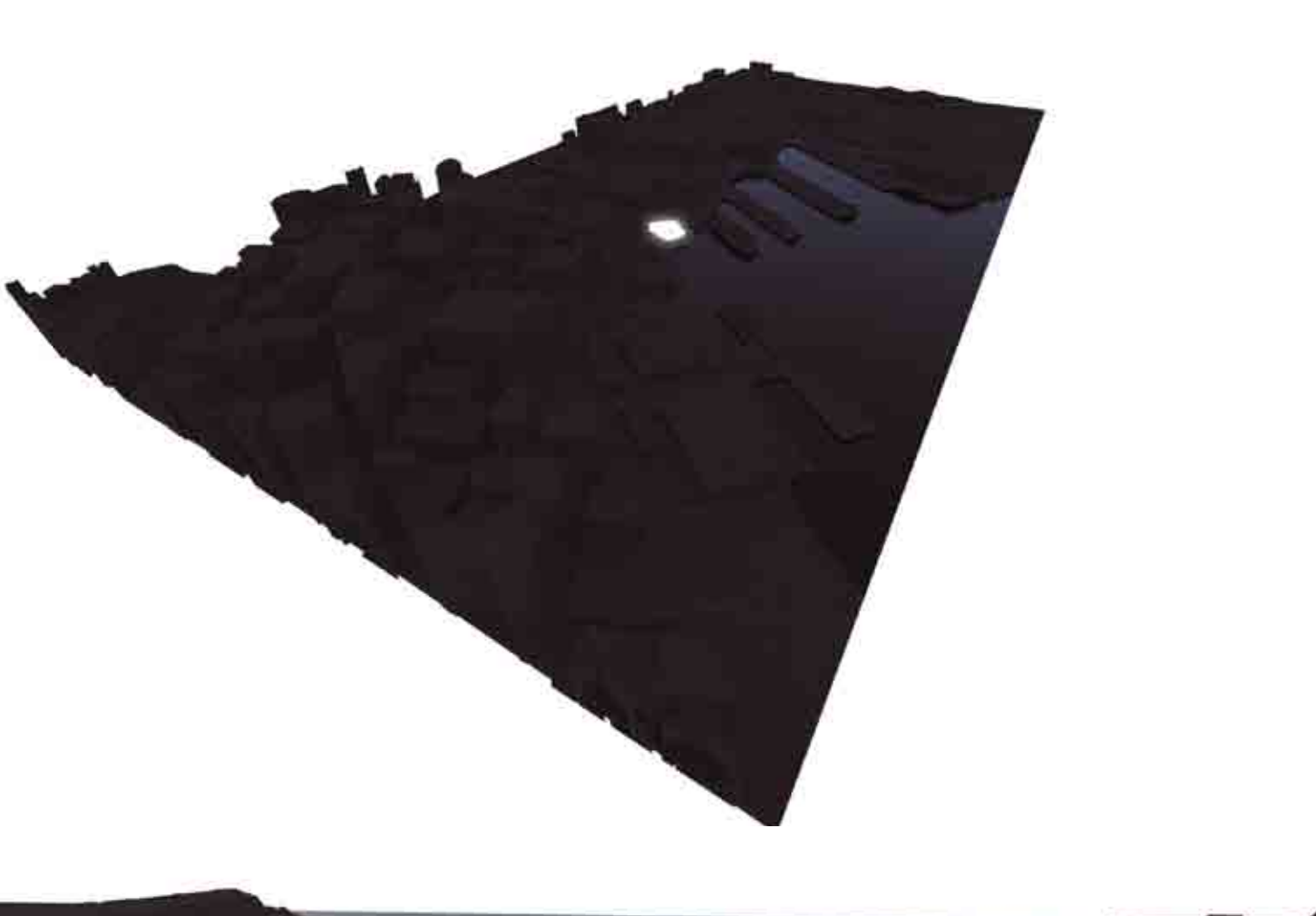
Figure 55: Site Plan  
Image by Author. 2011

Figure 56: Floor Plan  
Image by Author. 2011



The Museum of Me unfolds into several sinuous paths, creating a system for interwoven circulation, privacy and observation. From this flows the organisation of the building massed as two connected volumes. Within the landscape, flowing through and underneath, leading to the piers, the volumes themselves hover as cantilevers over the harbour. The fluid experience of passing through the landscape continues inside, where all zones are generous and interconnected. Inside, the use of ramps enables visitors to continuously move up to the top level and out onto the roof balcony of the building. Each balcony consists of varying degrees of connection and publicity with the surrounding context.





site plan  
1:1000





Figure 62: Reception/Public Space  
Image by Author. 2011



Figure 63: Private Conversation Space  
Image by Author. 2011

Figure 64: Public Interactive Space  
Image by Author. 2011



Figure 65: Private Location Space  
Image by Author. 2011



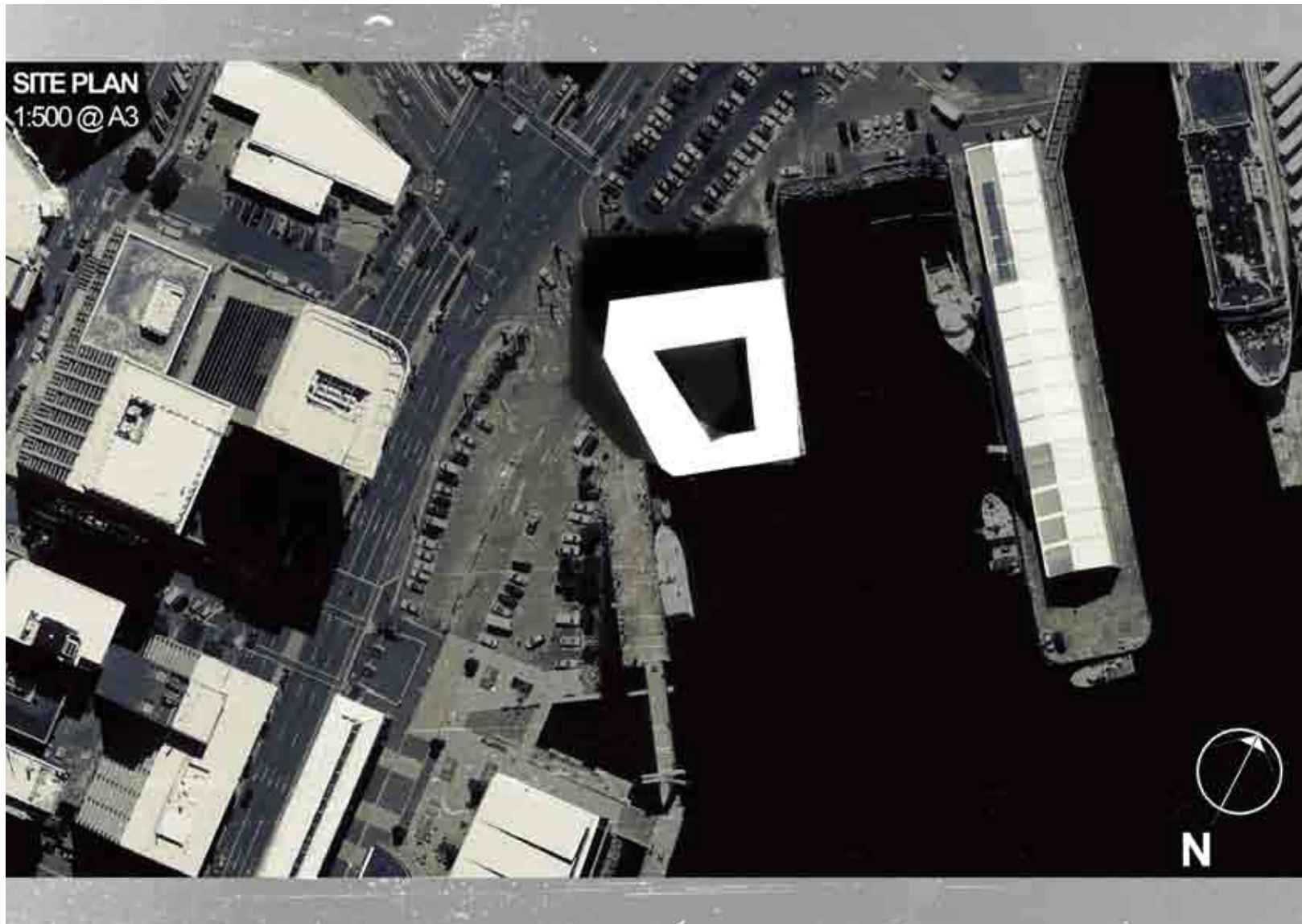
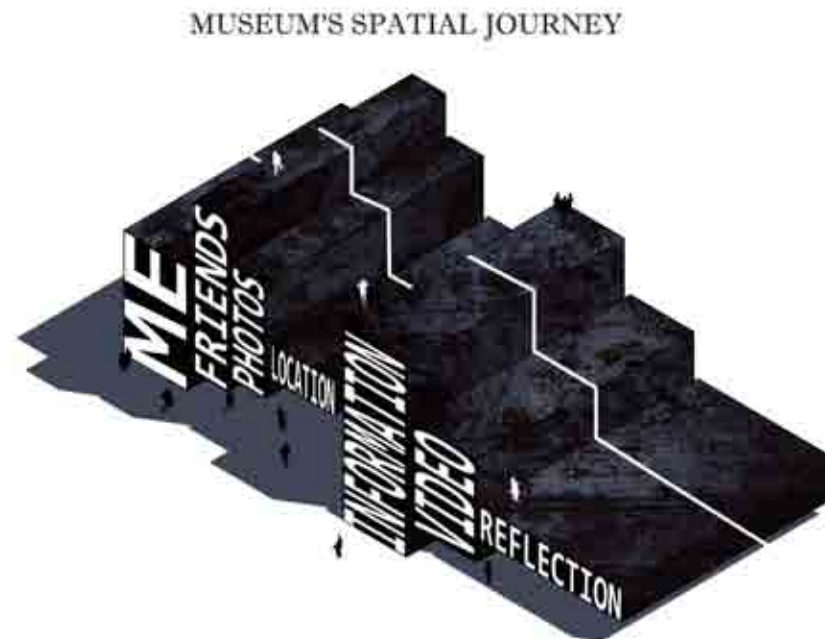


Figure 66: Context Site Plan  
Image by Author. 2011



In the context of the site's condition of over-exposure and public visibility, the radical interiority of the building folds inwardly all views. The internal functions of the museum are organised as a Möbius Band wrapped around the public path. Movement between the folded spaces become a series of connections, both with the architecture and the individual. The blurred perceptual boundary between building and environment is the facade system designed for the skin of the structure of the building. A system of moiré patterned perforated panels emerge as a tectonic detail and spatial device to amalgamate the contrasting parts and elevations of the building. They act as a technique to emphasise and amplify the temporal, effects of social interaction, privacy, and building to produce both literal and phenomenological transparency.

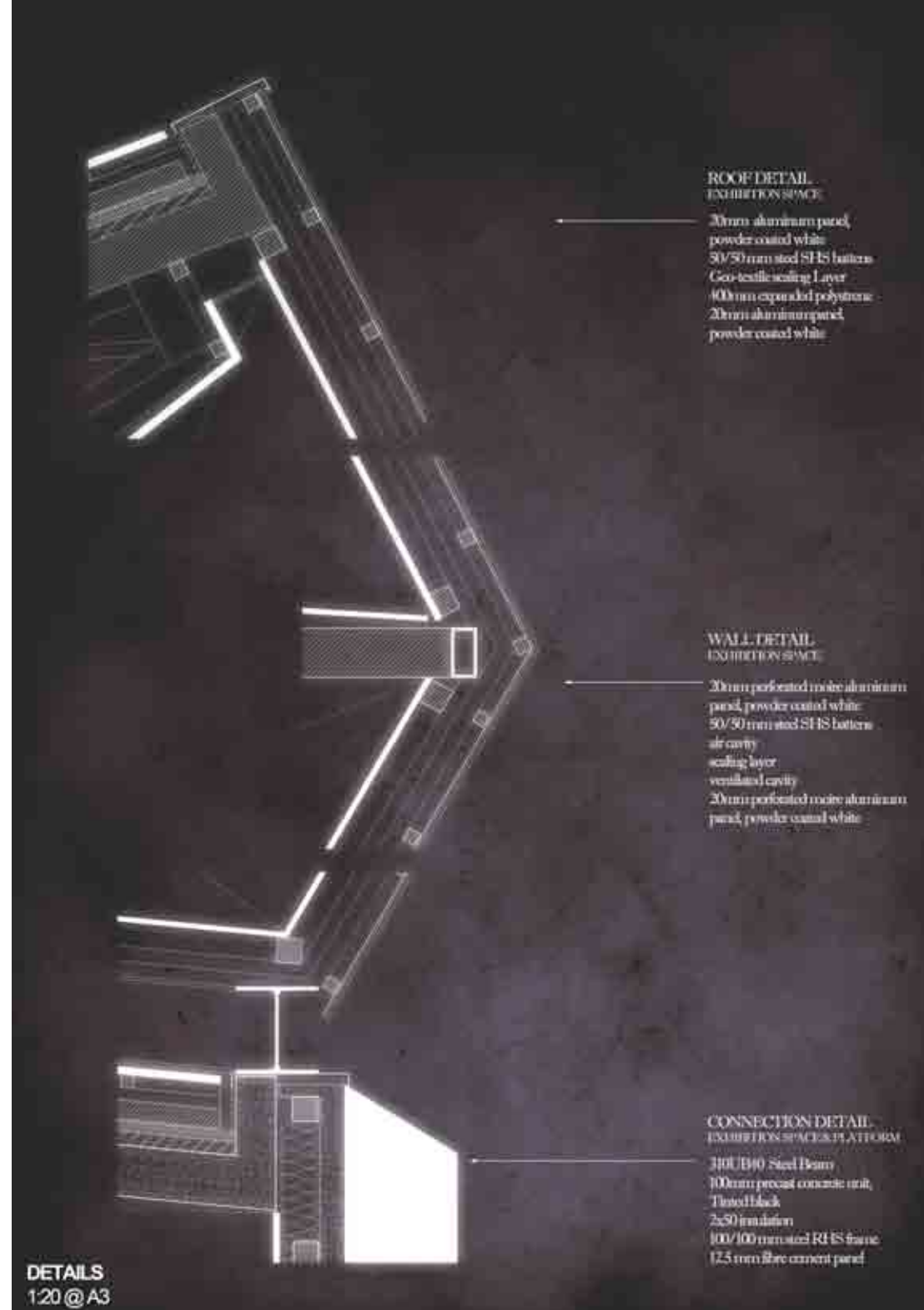
Figure 67: Spatial Journey  
Image by Author. 2011



Folding space into space, the architecture draws landscapes into buildings, streets into facades, inside to outside. Transformative tectonics set spaces, planes and bodies into unforeseen relationships that challenge conventional topographies and spatial codes of a museum building. The structure follows this concept of a transformative building. A metal structure encloses the building, arranged in components as a machine that modulates with the interface between public and private. In addition, internalisation of exterior space expands the programme horizontally and creates the low building profile. The architecture responds to its context with a heavy protective public platform contrasted by the above white formal expression. Below the white mass, the building employs concrete as a heavy, rigid and static manmade material. The concrete mass expresses the stringent surfaces that adhere to the horizontal and vertical axes of the surrounding buildings. This volume accommodates the rigid functional requirements essential to a museum. The concrete mass below is firmly tied to the ground as the heavy mass is excavated into the earth and sitting on a large footing familiar to conventional building techniques. This mass depicts the condition opposed within this thesis and allows the design of a fluid surface to depart as a contrasting architectural element.

## Structure and Materiality

Figure 68: Detail - Exteriorisation Facade  
(Blurred boundary between public and private)  
Image by Author, 2011





**Sectional Perspective**  
1:200 @ A3 Scale

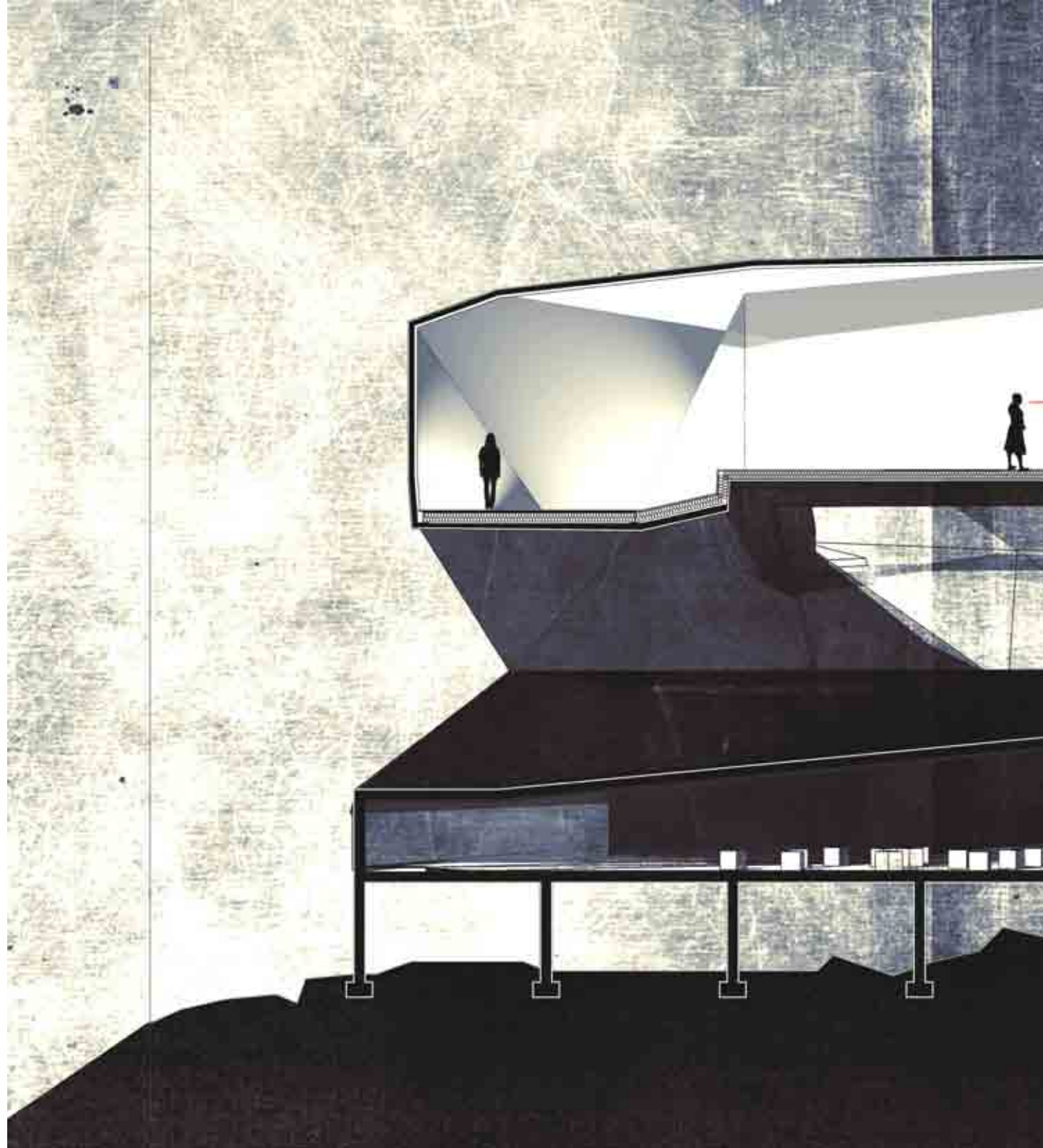


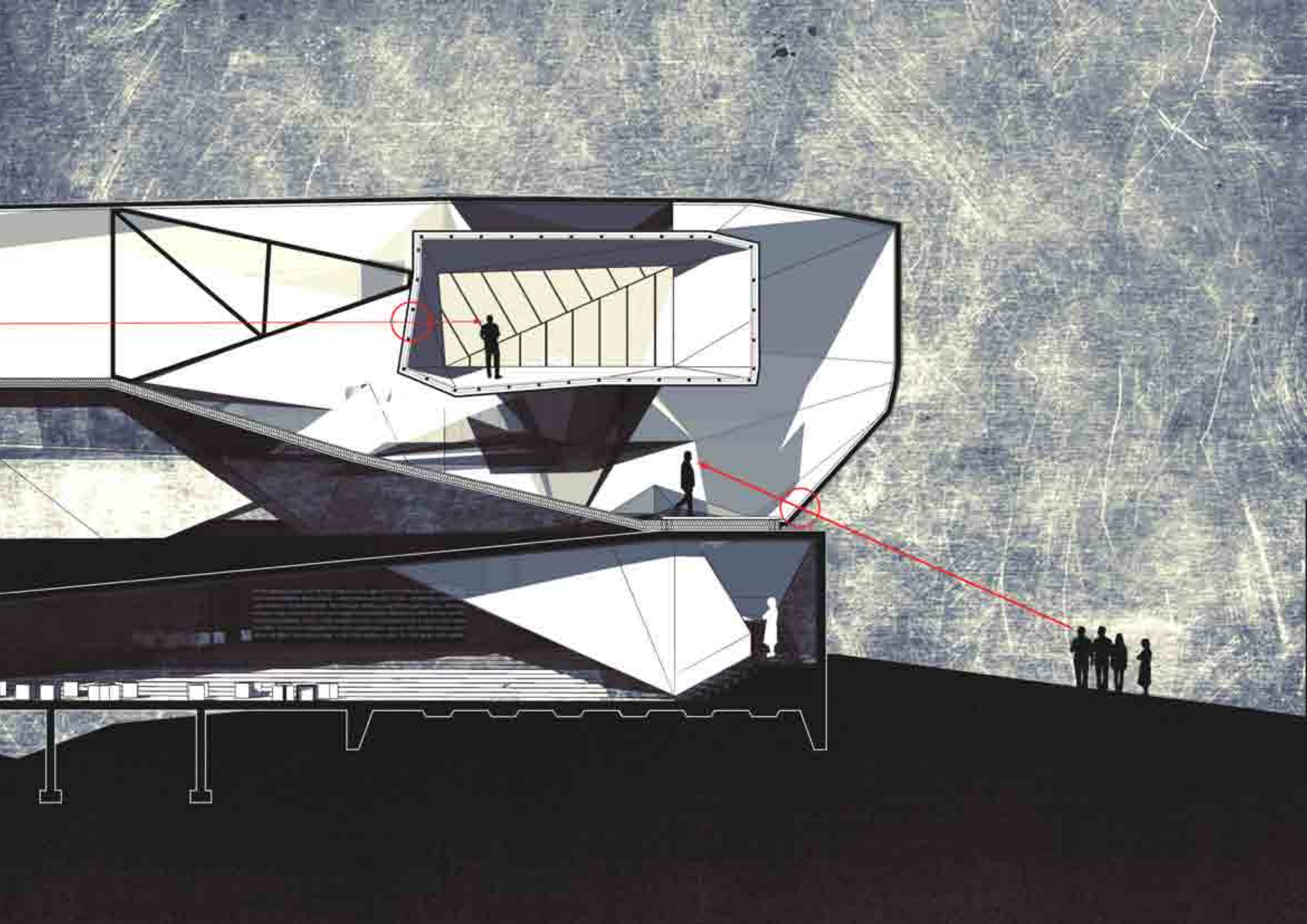
The public facades are load bearing reinforced concrete walls with modest membrane outlining public and private spaces. The courtyard and exterior walls of the above museum space are skinned in a perforated permeable screen system with generous windows providing visual connectivity, thermal comfort, ventilation and effective daylighting for the interior spaces. The facade mediates the interaction between public and private as a continuously changing relationship. Through its materiality, the building again manifests itself as an extension of the ground with its floors and interior walls made from concrete; black pigment is used as expression of contrast to the above museum space.

Figure 69: Section A  
Image by Author. 2011



Figure 70: Section B  
Image by Author, 2011





Now conceived as an architectural interface, the boundaries between public and private are blurred, successfully interacting with the connectivity between the two contrasting conditions. The dynamic form of the constructed landscape that has emerged in the final design exploration has developed not only as a reaction to this thesis, but also as a proposition in architecture. Even though the design could develop further, it exemplifies the position synonymous within this thesis. The boundary between public and private space is represented as a developing threshold generating an expressive architectural response. Central to the inhabitation of a museum, the communication between interior and exterior provokes a new dialogue of interaction between inhabitant and the control of information. The design process developed within this thesis is not specific to a museum; it has the potential to stimulate an array of socially orientated programmes that inhabit the built environment.

## Conclusion

This thesis has developed a contemporary position of the blurring of boundaries. However, one could argue that the architecture is very clearly designed to enclose specific spaces, therefore opposing its blurring between public and private. This exploration of boundaries could have been developed further through the design potential of the façade. The face of the building was envisioned to provide mediation between the sharing of private information and the exteriorisation to the public environment. Originally the design set out to develop a museum that reflected this contemporary condition of publicising the private. Alternatively, the design took a more spatial approach, abandoning the potential for a more dynamic boundary between public and private.



Figure 71: North & East Elevations  
Image by Author, 2011

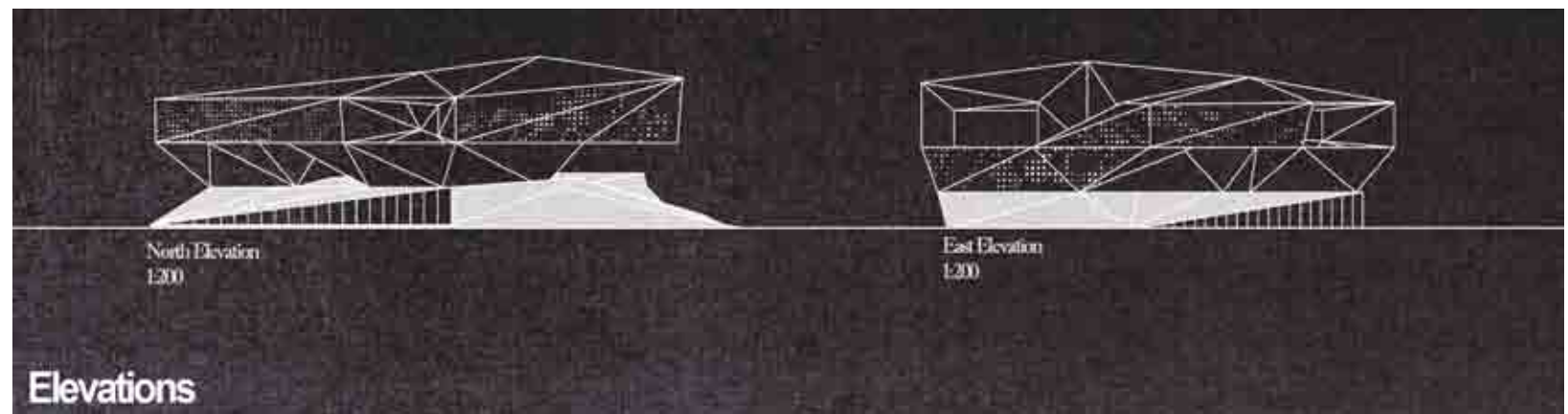
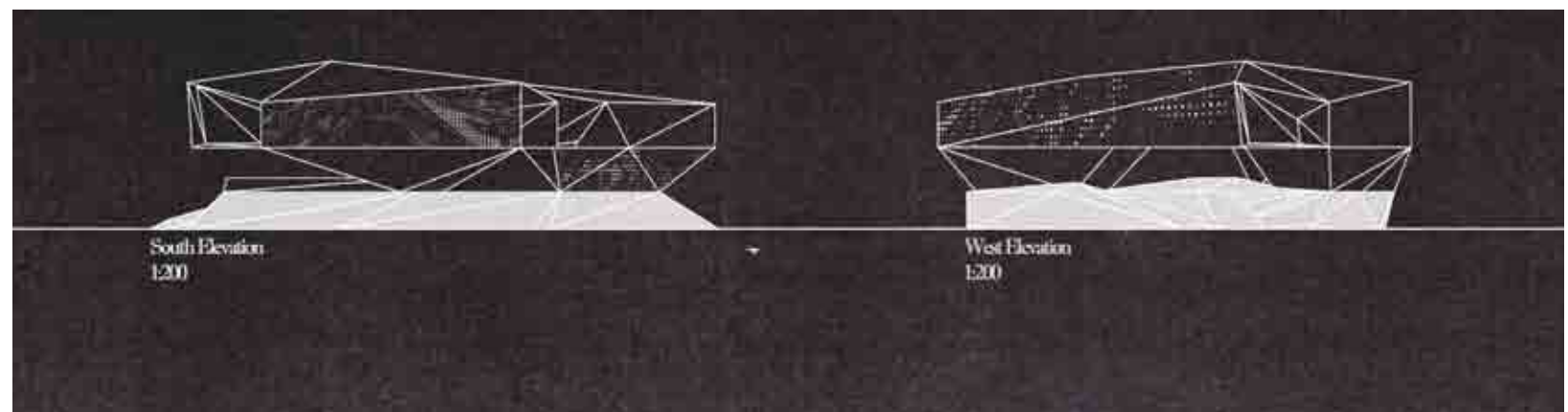


Figure 7: South & West Elevations  
Image by Author, 2011



6.0

# **DISCUSSION AND CONCLUSION**

## 6.1 Discussion

Architecture the way we know it has changed. The influence that contemporary social environments has on architecture is significant and cannot be ignored. By studying the relationships between architecture, society, technology and contemporary social environments this research has united various factors in a diagrammatic way. What is significant about this research is that it has revealed the untapped potential of online social environments and their effects on architecture. This was developed and evidenced through the design of “The Museum of Me”. During the design process the boundaries between public and private were expanded and then simplified into one dynamic mediation. Through the use of the Möbius Band, the *fold*, and the *Panopticon* as a *diagram* a new perception of boundaries is conceptualised, resulting in an architecture that communicates a contemporary relationship between public and private. In addition, questions of control and visual publicity have been raised as crucial aspects in the desires and aspirations for architecture to be an expressive interface.

Furthermore, it has been identified that architecture reacts to the shifting control of privacy. Architecture now has the ability to redefine its boundaries between public and private through the design response. The foundations of this analysis are the notions of architecture and online social environments, specifically the instability of contemporary privacy and changing social norms and behaviours. This research argues for a restructure of architectural boundaries and this can be achieved through a design investigation.

The awareness of changing social norms and its effect on the experience and design of architecture has driven this research. It contributes to the larger body of knowledge concerning social environments and the relationship between architecture and privacy. By researching social behaviour in the context of social networking, an understanding of contemporary interaction is expanded. As a result, architecture is more dynamic in its connections with contemporary society. It must be acknowledged that while architecture can be designed to engage with this contemporary phenomenon of online social environments, the concept of privacy remains diverse as it varies among societies, cultures and most importantly individuals.

The research and design offers a solution to the changing nature of architecture and the shifting relationship it has between the public and private sphere. It addresses the interface between virtual and the material space with a specific focus on the notion of privatisation and publicity. Whereas much research resides from contemporary attitudes and behaviours, this research focuses on architecture's potential to enhance the social environment within the design stages of architecture.



**N**o longer is the boundary between public and private clearly defined – a significant shift has occurred. This **Conclusion 6.2** change facilitates a new way to theorise the public and private division as continuum rather than a dichotomy within architecture. The way we think about public and private space reflects contemporary social life in a unique way, the opposite of what most perceive as a polemic divide. The public and private distinction is one of the fundamental categories of contemporary social life. Historically, the two functioned as a dichotomous pair in both theory and practice. Contemporary normalities of social interaction and behaviour reflect a shift in the way boundaries are controlled and regulated. Architecture has failed to embrace the changing notions of privacy. However, the sense of privacy has previously been restricted to its relationship with public and private. As discussed, architecture has yet to show any awareness of the developments of the contemporary social environment. It has accepted a static language between the public and the private. This no longer engages with the emerging social norms of exposure, transparency and connectivity. The desire to expose the private has become increasingly prominent as well as the fear of being observed. Therefore, the motives for privacy have become more about publicity. This proposes new links between architecture and society. This has provoked an exploration into how architecture can engage with the social phenomena of online social environments and reflect new forms of control. This research has found that architecture offers an opportunity to redefine the boundary between public and private, creating a new typology that responds to changing social behaviours.

This research has highlighted the theme of privacy and in response, architecture has provided material and immaterial boundaries between public and private. A building is considered to be a physical manifestation of separation and connection between the individual and society. Considering this, the boundary between public and private is controlled through the use of visual senses and the organisation of space. Spatial privacy provides physical boundaries that serve to define social behaviour. In relation to contemporary online social technologies, boundaries have become temporal. Privacy provides the control of visual and spatial access; therefore, the organisation and control of space have become influenced by the connection and publicity of society. In response, this thesis engaged with these new social norms of behaviour through the regulation and control of boundaries. This was evidenced further through the design process of 'The Museum of Me'.

A Contemporary  
Panopticon

The *Panopticon* and the power of observation are two central concepts of this research. A discourse is presented between the *Panopticon* and the contemporary social environment. This relationship exposes the use of observation as an active force for controlling boundaries. Moreover, it highlights changing social behaviour and how this can be explored through built form. This led to an investigation into the construction and organisation of boundaries through the use of the Möbius Band and the *diagram*. The *diagram* offers contemporary norms of observation into an architecture of continuous control, where boundaries between public and private are controlled and automated by its Möbius Band organisation. The concept in discussion presents a contemporary dialogue between the increasing power of observation within online social technologies and the shifting boundary between public and private space. The *diagram* is further explored through the notion of the fold. The fold is never established as

a solitary experience. It is simultaneously separated while maintaining a connection. The *diagram* of the fold connects public and private space through its constant exchange. It provides a contemporary concept that is independent of differentiation between public or private and provides a dialogue between the two. To provoke this new connection within architecture, the Möbius Band is employed as a *diagram* of contemporary power. Through its properties of interior and exterior instability, it acts as a mediator between contemporary public and private space. The Möbius Band provides a continuous social environment where the notion of observation is mobile and the feeling of being controlled is spatialised. The Möbius Band is an architectural mediator through its configuration of the *diagram*. The Möbius *diagram* in conjunction with the *Panoptic* is not a metaphor, but a mechanism for controlling contemporary boundaries.

The design is a response to the shifting boundary between public and private, facilitating new forms of connection with society. The Museum of Me is driven by control of both spatial and visual boundaries. This provides new networks of power through the form of the endlessly twisted Möbius Band. This position is made possible by the function of Panoptic through which the inhabitants are distributed along a determined model. The inhabitant becomes a carefully monitored creation within The Museum of Me. Furthermore; it focuses on observation as a method for obtaining new social behaviours. This is where the *diagrams* of the Möbius Band and the fold assert their relevance. The *diagram* provides a solution for designing contemporary boundaries. For it is through the *diagram* that The Museum of Me can mediate itself between public and private. The solution is a public building of private information. It reflects the contemporary social environment, exposing the private. It acknowledges the changing norms of connection and publicity – treating the public building as a mediator between being observed

The Design



and observing private information. The communication between interior and exterior provokes a new dialogue of connection between inhabitant and the observation of information. This was explored in the experimentation and organisation of space through the *diagram* of the Möbius Band. The design study developed is not explicit to a museum - it has the potential to stimulate a collection of socially organised architecture.

Architecture can redefine its boundaries between public and private space. The changing social environment offers new opportunities to redefine boundaries that were once constructed to separate and restrict relationships. The result is a public environment unlike anything we have experienced before, one that exists outside the conventional norms of society. It is a new type of social space driven by exposure of the private, not by concealment. It is a social mediator rather than a static building. Its social function reconnects architecture with contemporary social behaviour – allowing new forms of connection and separation. The Museum of Me is a place of continuous spatial dialogue, publicised and privatised moments that reconnect it and its users to contemporary society.

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