

# The Traumatic Landscape: the photograph as temporal contagion

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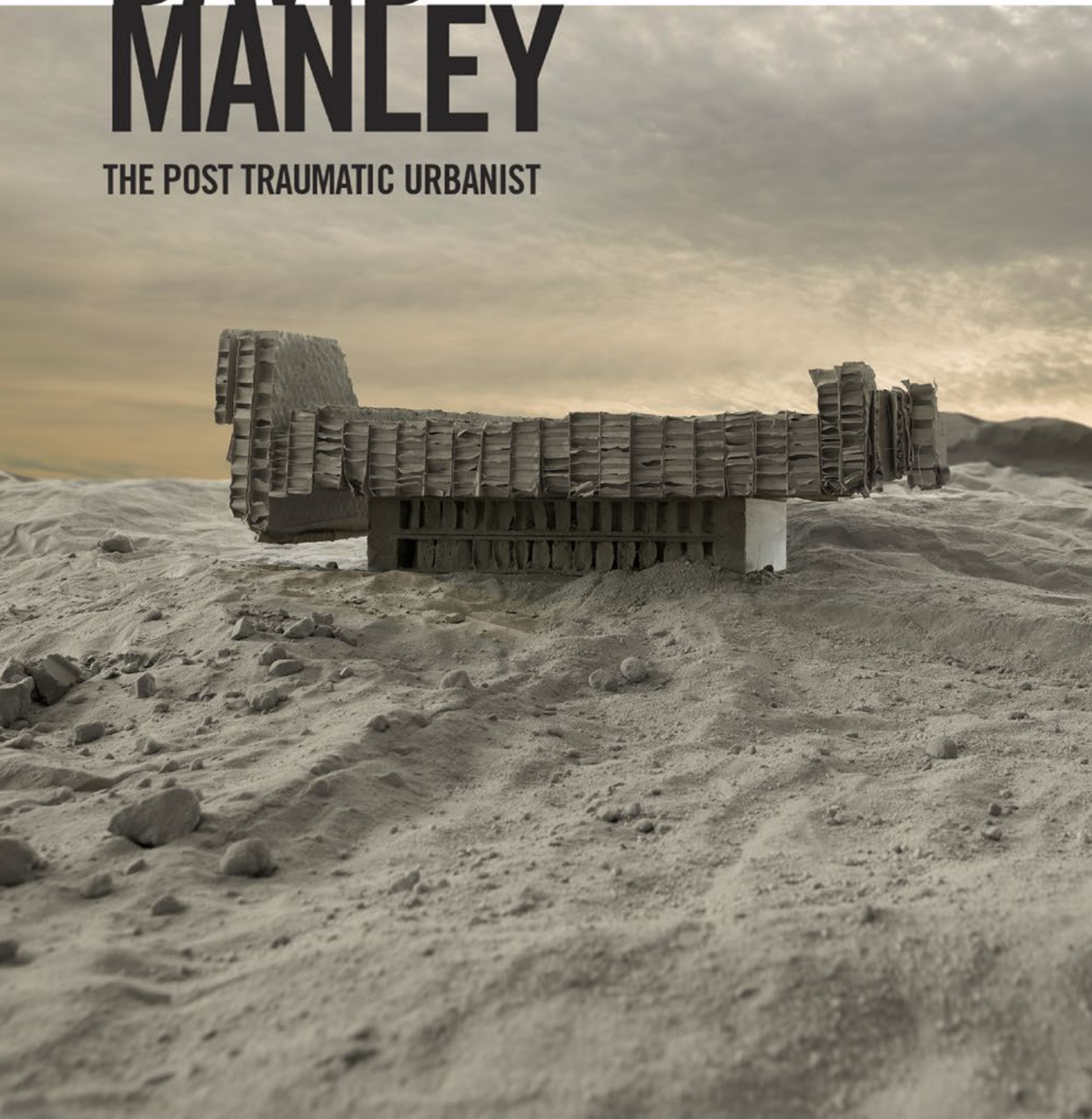
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# DAVID MANLEY

THE POST TRAUMATIC URBANIST



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Using photography as the primary domain and conduit for the investigation and incorporating architecture as a visual and speculative reference-point, this research project interrogates the affective imprint and anxiety of the image and its temporal implications through the creation and representation of architectural models and dioramas that convey a residue of trauma. Sites of visual investigation include: aerial photography's links to selected historical events such as the Allied bombing campaign of German cities during World War II; the accidental imaging of Zyklon-B gas vents by the US Air Force at Auschwitz-Birkenau concentration camp in August, 1945 (these images will be discussed within the context of analogue imaging thresholds and their political links to contemporary imaging resolutions) and the destruction of the Twin Towers in New York in September 2001. The above events have been specifically chosen as they help to unpack and demonstrate the interplay between trauma, photography and temporal perception. Through the production of models, dioramas, digital images and video installation, the practice work visualises a series of speculative psychological trauma-scapes linked to these events, which demonstrate a diagnosis of media image saturation that Paul Virilio argued has its own level of violence. On a personal level my visual practice is a re-staging and response to the trauma associated with this violence and operates as a form of *decelerative* therapy, a counterpoint to the pervasive nature of modern day image culture.

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*IN MEMORY OF  
LIEUTENANT COLONEL  
ROSS DANIEL MANLEY  
1931 - 2018*

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I would like to convey my warm appreciation  
to the following people for their invaluable contribution  
and support in the development of this project.

Associate Professor Phillip George  
Cameron Petrie

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## Abstract

Using photography as the primary domain for the investigation and incorporating architecture as a visual and speculative reference-point, this research project interrogates the affective imprint and anxiety of the image and its temporal implications through the creation and representation of architectural models and dioramas that convey a residue of trauma. Sites of visual investigation include: aerial photography's links to selected historical events such as the Allied bombing campaign of German cities during World War II; the accidental imaging of Zyklon-B gas vents by the US Air Force at Auschwitz-Birkenau concentration camp in August, 1945 (these images will be discussed within the context of analogue imaging thresholds and their political links to contemporary imaging resolutions) and the destruction of the Twin Towers in New York in September 2001. The above events have been specifically chosen as they help to unpack and demonstrate the interplay between trauma, photography and temporal perception. Through the production of models, dioramas, digital images and video installation, the practice work visualises a series of speculative psychological trauma-scapes linked to these events, which demonstrate a diagnosis of media image saturation that Paul Virilio argued has its own level of violence. On a personal level my visual practice is a re-staging and response to the trauma associated with this violence and operates as a form of *decelerative* therapy, a counterpoint to the pervasive nature of modern day image culture.

## Foreword

For over two decades I have worked as a trauma and crisis intervention clinician in the public health care system. This research project is a result of a range of personal and professional influences. I have therefore attempted to incorporate aspects of my professional experience as well as some of the psychological and clinical literature that is concerned with trauma and the perception of temporal disturbances within my practised-based research. My professional background has had a significant impact on my artistic practice in a number of ways. Initially, my practice developed through the photographic documentation of the architecture of psychiatric hospitals, which then led to research into the psychological effects of institutional isolation and post-traumatic stress disorder (PTSD). I have always considered my clinical work within a much broader context of media culture and its inherent influence on the individual at a psychological level. This PhD thesis and creative research extends this approach and situates my practice within my own encounters with the traumatic. As an artist, researcher and crisis intervention clinician I am uniquely placed to offer insight into *The Traumatic Landscape: the photograph as temporal contagion*.

During sessions when patients describe an experience of past trauma they often refer to a sense of detemporalisation in the way in which time unfolded during the event. It is not uncommon for these patients to describe a sense that time seemed to slow down and fragment during a traumatic occurrence. Many describe their memory of trauma as if it were a decontextualized aberrance in their lives, much like suddenly watching or being involved in a movie. Here I would like to acknowledge the ethical implications and confidentiality of raising such sessions and my respect for this aspect of my clinical work. Suffice to say that such accounts are confidential and I do not profess to base my research around such conver-

sations. These experiences have however encouraged me to think more broadly about trauma, our perception of time and the implications the media, and in particular the influence photography, has on all of the above. When teaching photography to undergraduate students I always stress the importance of the indexical relationship of the medium with time. As Susan Sontag points out, “Photographs state the innocence, the vulnerability of lives heading toward their own destruction and this link between photography and death haunts all photos of people.”<sup>1</sup>

Bound up with our understanding of psychological health is our ability to situate narrative in time. When this narrative is disrupted by trauma, *narrative memory* is often unable to be processed and stored in the usual way. Memories of the event tend to “resist assimilation” into the narrative arc of our lives, something due in part to the brain’s inability to deal with the traumatic stimulus as it occurs.<sup>2</sup> There is an overload of information and memory is not processed in the usual way, distorting our perception of the event where memory fragments and the temporal narrative is disrupted.<sup>3</sup> The traumatic event is then relived through a variety of maladaptive coping strategies that manifest as PTSD.<sup>4</sup> The definition of trauma within the context of my research project specifically relates to psychological trauma associated with the inherent violence and exposure to the saturating doses and accelerating image speeds of modern visual culture.

It is important here to recognise the serious effects inherent in the scope of the much broader use of the term trauma on the individual, their loved ones and society. I acknowledge these experiences, but an examination of the debilitating effects of trauma at an individual level – along with its clinical diagnosis and treatment – are not within the scope of this project. Rather, the research attempts to link the violence of modernity, i.e. the disruptive capacity of technology and its inherent traumatic imprint, with disturbances in the temporal rhythm

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<sup>1</sup> Susan Sontag, *On Photography* (London: Penguin Books, 2002), 70.

<sup>2</sup> Paul Antze and Michael Lambek (eds.), *Tense Past Cultural Essays in Memory and Trauma* (New York: Routledge, 1996), 160.

<sup>3</sup> Paul Crosthwaite, “A Secret Code of Pain and Memory”: *War Trauma and Narrative Organisation in the Fiction of J.G. Ballard*, 2005, The Terminal Collection, accessed 17 February 2020, [https://www.jgballard.ca/criticism/jgb\\_secret-code.html](https://www.jgballard.ca/criticism/jgb_secret-code.html).

<sup>4</sup> Elizabeth A. Brett and Robert Ostroff, ‘Imagery and Post Traumatic Stress Disorder: An Overview,’ *American Journal of Psychiatry* 142:4 (April 1985): 417 – 424.

of our lives as something commensurate with the experience of trauma. As the late Paul Virilio (1932 – 2018) so poignantly reminded us within the context of a tele-visual culture, “To have reached the light barrier, to have reached the speed of light is a historical event which throws history into disarray and jumbles up the relation of the living being towards the world.”<sup>5</sup> Perhaps this disruption in our personal and cultural narrative is, in and of itself, a traumatic experience that generates a new set of implications for our perceptual navigation of the world? The writings of Virilio have been used within both the textual and practice work components of the research extensively, as he was a key theorist in the field inspiring not only my own theoretical arguments, but also the visual development of my art practice.

I have structured the writing in a way that links a variety of loosely connected and seemingly unrelated events in order to draw attention to the complex interplay of media and our experience of the world. The historical and contemporary survey of the issues, theory and discourse is deliberately broad because of the influence photography has at a socio-cultural and political level. Such influence is ingrained and diffuse because of its ubiquity. This non-linear approach to the historical narrative in relation to the development of imaging technologies is intended to highlight the complex nature and disruptive relationship we have with the medium. The practice and textual work are developed through a temporal thematic that is considered from a theoretical stance that relies heavily on the notion that modernity, its speed and acceleration, has its own level of subjective violence associated with it. I will argue that this violence has a significant imprint on the individual that manifests as traumatic stress and is something that encroaches on our temporal experience of the world. Part of what I hope to convey through the research is a sense of the disorientation and entropy of contemporary life by connecting trauma and photography and demonstrating its role as the great

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<sup>5</sup> Paul Virilio, ‘Speed and Information: Cyberspace Alarm,’ ctheory.net (1995): 1, accessed 18 February 2020, <http://www.ctheory.net/articles.aspx?id=72>.

temporal disrupter. Because this is a practice-based research project the textual component of the work does not dwell too heavily in the empirical clinical evidence associated with the causes, treatment and pathophysiology of PTSD. A discussion around media image theory in relation to trauma in the context of past and recent events is intended to build a contextual framework for the visual practice that informs and places it within contemporary photographic discourse.

My role as a mental health clinician is to alleviate the suffering of others experiencing a range of psychological maladies, yet I am part of a much broader institutional culture that incorporates systemic violence into the management and treatment of those accessing health care services. The conflicted nature of my work creates its own ambivalence towards my vocation and professional life yet interestingly, and somewhat paradoxically, this conflict is actually the main driver of my creative practice, which in turn has reaffirmed the importance of my professional work. My research has presented an opportunity for me to reflect more deeply on how my years of experience working as a trauma clinician, which in turn has influenced my art practice and in particular the development of the *Post Traumatic Urbanist* series. These psychological trauma-scapes evolved during the course of the project and I have come to realise how the process of their development operates for me as a distillation and treatment that helps to unpack my own lived experience of the vicarious trauma I have encountered during my career and in a broader context my exposure to the media and world events in general. The conceptual development and physical production of the work allows for a therapeutic space that operates for me as a type of buffer, an opportunity to decompress and centre my own psychological health through the process of creativity. As an artist using photography, researcher, and crisis intervention clinician I am uniquely placed to offer insight into *The Traumatic Landscape: the photograph as temporal contagion*.



## A Brief Literature Review

A list of the core group of important thinkers, researchers, artists and architects called upon to substantiate my position, some more substantially in-depth than others, is included below with a brief description of the ideas discussed.

Paul Virilio, *Open Sky*, 1984 – image speed

Nicholas Mirzoeff, *An Introduction to Visual Culture*, 1999 – image shapes perception

Alexander Kluge, *“Unheimlichkeit der Zeit,”* 1977 – social complexity

W.G. Sebald, *On the Natural History of Destruction*, 1999 – historic, trauma and distance

John Armitage, *Virilio Now*, 2011 – Virilio Studies

Ulrich Baer, *Spectral Evidence*, 2002 – trauma, disruption, photography

Jennifer Good, *Photography and September 11th*, 2015 – image spectacle

Jean Baudrillard, *The Gulf War Did Not Take Place*, 1991 – virtual war

Jean-Martin Charcot, *L'hystérie: Textes choisis*, 1998 – cataleptic patients - 1876-1880

Zygmunt Bauman, *Modernity and Ambivalence*, 1991 – ambivalence as a by product of modernity

Eyal Weizman, *Violence at the Threshold of Detectability*, 2010 – image resolution, censorship.

Slavoj Žižek, *Violence*, 2009 – structural analysis of violence

Nadir Lahiji, *Architecture and Violence*, 2011 – architecture, violence, autoimmunity crisis

J.G. Ballard, *The Atrocity Exhibition*, 1969 – media, psychology

Adam Sharr, *Burning Bruder Klaus*, 2011 – slow architecture

### **Artists & Architects**

Jack Goldstein, *Untitled*, 1983

Matthew Day Jackson, *August 6th 1945*, 2009

Jake and Dinos Chapman, *The Sum of All Evil*, 2012 – 2013

Richard Mosse, *Incoming*, 2017

Krzysztof Wodiczko, *Bunker Hill Monument by Night*, 1998

Ian Strange, *Corrinne Terrace*, 2013

Magdalena Jetelová, *Atlantic Wall*, 1995

Godfrey Reggio, *Naqoyqatsi, Life as War*, 2002

Peter Zumthor, *Bruder Klaus Chapel*, 2007

## Introduction

The September 11th 2001 terrorist attacks became a post-traumatic icon that introduced the new millennium to an event that is worth extended critical research.

In Chapter 1 the research traces the development of aerial photography and the new perspective of vision this technology helped to create through state and military scrutiny as well as commercial opportunities. The notion that photography has evolved in line with human conflict is explored while introducing Paul Virilio's assertions that the image is heavily implicated in the mediation of war, as he outlined in his 1984 book *War and Cinema The Logistics of Perception*. A discussion regarding Alexander Kluge's 1977 theory, as argued in the work *Neue Geschichten: Hefte 1-18: Unheimlichkeit der Zeit*, that humanity moves towards ever-increasing complexities that propel us into conflict thus creating the prerequisites for social organisation will support and strengthen these concerns. These ideas are then developed within an historical investigation of the Allied bombing campaign of German cities during World War II. This discussion is undertaken through consideration of W.G. Sebald's literary work *On the Natural History of Destruction*, 1999, that explores the links between trauma and cultural amnesia. The notion that post-traumatic stress may operate at a societal level is considered while exploring the relationship between image and memory in the processing of trauma on a mass scale. A discussion in regards to aerial photography's unique perspective will challenge traditional ideas that such imagery discourages empathy through its distancing effect.

In Chapter 2 the psychological processing of trauma and its potential to disrupt the diachronic scaffolding of our lives is explored within the context of a vision and image culture and the irrational violence of modernity. This analysis is undertaken through a consideration of Nicholas Mirzoeff's 1999 theory, outlined in his book *An Introduction to Visual Culture*, that the

image shapes our perceptions of the world and the thesis Paul Virilio outlined in his 1997 work *Open Sky*, that image speeds and acceleration have an imbued objective violence attached to them. Within this context a new “chronoscopic”<sup>6</sup> time has developed which is characterised as a time of the instantaneous and immediate. A case is put forward that the disruptive capacity of the new photographic technology, its speed and accelerative pace acts to disrupt our perceptions of time and this has comparisons to the temporal dissonance experienced by those suffering from post-traumatic stress disorder (PTSD).

In Chapter 3 initial practice works are considered through concept and process development. These works attempt to conjure the impact zones of violence by exploring temporal shifts and the development of what I will refer to as speculative psychological trauma-scapes, a visual thematic that is central to the practice research. This traumatic affect has been established and refined throughout the course of the project, with particular consideration paid to the knowledge gap that exists between theoretical analyses and the construction of imagery that links architecture with violence and, to date, has yet to be theorised through a visual art practice.

Chapter 4 presents a more detailed account of how trauma may interfere with temporal perception and the disruptive potential of photography is explored through the work of Ulrich Bear and an account of Jean-Martin Charcot’s 19th century photographs of cataleptic patients, which helps to illustrate the above ideas. A discussion around how the image was implicated in the September 11th terrorist attack places these concerns within a context of contemporary visual culture. The experience of trauma is discussed through the symptom of the intrusive image. Here, comparisons are drawn between the mechanism of a camera and the mind under stress. A discussion on Zygmunt Bauman’s notions on the *Ambivalence of Modernity*, 1991, is also considered in order to strengthen these links and draw the concepts together.

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<sup>6</sup> Paul Virilio, *Open Sky* (London: Verso, 1997), 136.

In Chapter 5 a discussion regarding the imaging capabilities of remote and proximal sensing is considered and introduces architecture as a visual staging ground and indicator of trauma. These ideas are drawn out through a consideration of Eyal Weizman's essay on photographic imaging thresholds and their control as a form of censorship. A discussion regarding a restricted humanity that may develop when remote and proximal images of war crimes and human rights violations are considered on their own will highlight the importance of how we read such imagery within a contemporary paradigm of image saturation delivered from a variety of visual perspectives. Architecture is used as a conduit to situate some of these ideas as it can function as evidence and indicator of human conflict and war.

Chapter 6 develops these ideas and situates architecture as a potential visual signifier and staging ground for trauma. This is undertaken through a consideration of Slavoj Žižek's structural analysis of violence. The idea that architecture maintains its own objective and symbolic violence through its prominence and its relationship with current neoliberal systems is explored and linked to the pervasive nature of image-based culture. The attacks on New York's Twin Towers are considered as this event encapsulated the way in which the power of the image was used against the West. The destruction of the buildings exposed a fundamental weakness in the neoliberal order as the terrorists not only hijacked the planes that destroyed the buildings but also the power of the image spectacle that helped to create their mystique. These concerns will be supported by Virilio's assertions, specifically in respect to the immediacy of vision that he argued reduces our perception of the physical world into an instantaneous array of tele-visual fragments that encourages a perpetual state of anxiety.

Architecture is used as a conduit to situate some of these ideas, as paradoxically it continues to be seen as a stable

reference point that is continually challenged by images of war and destruction. In light of this, and incorporating Nadir Lahiji's 2011 concerns, outlined in his essay that architecture must be defended from what he describes as an "autoimmunity" crisis through its current complicity with a culture of speed, an argument will be developed that situates architecture within a more purist context that may help to liberate it in an existential sense from a culture of speed. These ideas have helped to inform the practice-based research through a thematic re-staging of trauma and the development of architectural structures made of cardboard and cement that demonstrate a clinical diagnosis and treatment that responds to the speed and violence of modern life. In light of these findings, the civilian is considered as a new quasi-combatant within the post 9/11 World where the anxiety of terrorism and the contemporary paradigm of war is played out through the media and within public spaces once considered safe. This new era of social anxiety has been driven primarily through events that are experienced and digested as a result of our engagement with the image where the notion of trauma has now become mainstream especially since the events of September 11th. We now see that the complex implications of trauma's psychological, social and political impact have found their way into a much broader societal discourse. Therapeutic epistemologies concerned with the treatment of trauma continue to grow at an unprecedented rate and the study and treatment of PTSD has become a major health concern and is something no longer considered within the sole domains of childhood sexual abuse and the returned war veteran. A more recent understanding of trauma implicates a painful reality that stems from modernity's technological development and our interaction with it. The destruction of the World Trade Centre unleashed a growing theoretical and cultural discourse around trauma and its language that had been developing for some time.

The notion of the *Post-Traumatic Urbanist* (see fig. 1) is developed throughout this thesis within the visual thematic of the work. A variety of contemporary artists are considered throughout this thesis in order to situate my own practice work within a current visual arts context, including Jack Goldstein whose work traversed psychological landscapes, or what Joy Garnett and John Armitage refer to as the “apocalyptic sublime.”<sup>7</sup> Consideration will also be paid to the work of Mathew Day Jackson. Much of Jackson’s practice interrogates the military industrial complex and the use of photographic images as war propaganda. His sculptural representations and images of destroyed cities explore how photography can represent a subject in order to create distance between the spectator and an event that, paradoxically, may encourage a more empathic response towards depictions of trauma. A discussion of Jake and Dino Chapman’s work *Fucking Hell*, 2012 – 2013, is also undertaken. Jake Chapman argues that their apocalyptic dioramas of ‘ultra-violence’ respond in part to our need for high levels of stimulation through imagery of atrocity as this may present an opportunity to place more value on our own lives through the lived trauma of others.<sup>8</sup>

Lastly, in Chapter 8, I will discuss the potential of architecture to operate as a counterpoint or antidote to the traumatic imprint of modernity. The final component of the practice work imagery further develops a decelerative thematic through a consideration of the literary work of Adam Sharr. Architects and artists such as Peter Zumthor and James Turrell are considered in light of these ideas through works such as the Bruder Klaus Field Chapel, 2007, and *Roden Crater*, 2003, respectively that operate as pockets of resistance in a landscape of speed. What is of central importance here is the way in which particular structures disrupt this velocity through design and construction. Here architecture is reclaimed as a potential counterbalance to Virilio’s concerns in relation to the ocular trappings of daily life where the image defines a culture of the speed.

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<sup>7</sup> John Armitage (ed.), *Virilio Now Current Perspectives in Virilio Studies* (Cambridge: Polity Press, 2011), 201.

<sup>8</sup> Jake Chapman, *Fucking Hell If Hitler Had Been a Hippie How Happy Would We Be*, exhibition at White Cube Gallery, London, 20 May – 11 July 2008.



Figure 1. David Manley, *Post-Traumatic Urbanist #14*, 2017, archival photographic print, 250mm x 250mm.



## Chapter 1. Below from Above

It is from the air that trauma is conspired, delivered, etched into the unconscious; subjectively, and then objectively observed. This chapter traces the historical development of aerial photography through its use in peace and wartime. A new vision from above is considered through a discussion of the genre's association with power and surveillance. The allied bombing campaign of German cities during World War II is considered as an initial staging ground for the traumatic. The historical interpretation of the dehumanising effects of this type of photography are considered and challenged through a discussion that focuses on the opportunities that aerial images may afford for developing empathy towards the suffering of others.

As Sebald wrote:

Is the destruction not, rather, irrefutable proof that the catastrophes which develop, so to speak, in our hands and seem to break out suddenly are a kind of experiment, anticipating the point at which we shall drop out of what we have thought for so long to be our autonomous history and back into the history of nature.<sup>9</sup>

Humanity's technological conquest of the vertical world through aviation has encouraged a myriad of imaging opportunities, ranging from remote sensing via orbiting satellites to proximal surveillance by any number of low and high-tech apparatus and machines, from kites to drones mounted with on board camera systems. Historically control of the air relied heavily on technologies that could master this vision in order to gain strategic advantage over potential adversaries setting the context in which the use of aerial photography evolved.<sup>10</sup>

In Western societies, and before the advent of photography, cartographic renditions of the world from above helped to provide a conceptual preface for the expansion of colonial territory beyond the confines of continental Europe and the

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<sup>9</sup> W.G. Sebald, *On the Natural History of Destruction* (New York: The Modern Library, 2004), 66.

<sup>10</sup> Paula Amad, 'From God's-eye to Camera-eye: Aerial Photography's Post-humanist and Neo-humanist Visions of the World,' *History of Photography* 36 (2012): 66-86.

Americas. The pre-modern perspective of the earth centred on a fantastical view from above within a utopian and other-worldly context. These ways of conceptualising the landscape from an aerial perspective may help to explain some of the tension that was created between representations of the world from above weighed by both positive and negative connotations that challenged the norms of spatial perception at the time. This new vision offered a more detailed understanding of the terrestrial world, which could then be used for military and commercial purposes.<sup>11</sup>

The first photographic process in the form of daguerreotypes became available in 1839 and it wasn't long before photographers began to use the camera to document the landscape from above. The French balloonist and photojournalist Gaspard Felix Tournachon, managed to take a photographic image of the French Village of Petit-Becetre from a balloon tethered 80 metres above the ground in 1858. He was the first to image the world photographically from this perspective. In 1906 George R. Lawrence also used a balloon and a camera to document the destruction of the San Francisco earthquake in April of that year.<sup>12</sup> Other photographers, such as Eadweard Muybridge, developed panoramic photomontages of San Francisco from the tower of the Mark Hopkins mansion between 1877 and 1878, which was the highest point of the city at the time. In 1903, a small breast-mounted camera was designed and strapped to a carrier pigeon by Julius Neubranner for the Bavarian Pigeon Corp and was used for military reconnaissance purposes, albeit with varying degrees of success. Cameras were also mounted onto kites and rocket powered devices or anything else that could fly. A passenger of Wilbur Wright who was commissioned by the Italian government to take images of military installations over Italy in 1909 captured the first motion pictures from an aircraft. Crucially, during World War I aerial photography was used as a surveillance and reconnaissance tool in order to determine military strate-

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<sup>11</sup> Amad, 'From God's-eye to Camera-eye,' 69.

<sup>12</sup> Jackson Krule, 'The Origins of Aerial Photography,' *The New Yorker*, 24 October 2014, accessed 18 February 2020, <https://www.newyorker.com/culture/photo-booth/origins-aerial-photography>.

gies and forward planning. Hundreds of thousands of images were produced of the Western Front during this period, and by the end of the war it had become the most photographed place on Earth. The conflict encouraged a new level of image saturation and set the stage for the future control of war and conflict.<sup>13</sup>

As imaging technologies improved alongside machine powered flight it became increasingly possible to photograph, map, and importantly, control events on the ground in ways that were previously unimagined. Along with this new form of aerial vision came an increased awareness that the technology and its use created opportunities for higher levels of public scrutiny by state, military and commercial organisations.<sup>14</sup> Image information became a powerful tool in the subjugation of others and this power was magnified by the development of mass reproduction and image dissemination platforms that were often controlled by the military or state run agencies and private companies. This proliferation of visual information along with its potential to manipulate the public through various forms of propaganda was used to regulate a variety of social phenomena, from war to politics and anything else where one could exert control over others.

Cameras mounted to aircraft served as a perceptual device for strategic planners who used aerial imagery to update their understanding of events on the ground *without actually being there*. Military perception evolved in line with the development in the representation of events through photographic and aerial technology. As Virilio notes, “Soon a conflict of strategic and political interpretation would ensue, with radio and then radar complementing the picture.”<sup>15</sup> Imaging technologies continued to develop alongside the need to improve and update mapping, reconnaissance and targeting opportunities for the large-scale bombing campaigns that would accompany modern warfare into the future. This vision became synonymous with the perceived need to dehumanise civilian popu-

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<sup>13</sup> Dennis Cosgrove and William L. Fox, *Photography and Flight* (London: Reaktion Books, 2010), 26 -51.

<sup>14</sup> Martyn Barber, *A History of Aerial Photography and Archaeology: Mata Hari's Glass Eye and Other Stories* (Swindon: Historic England, 2011).

<sup>15</sup> Paul Virilio, *War and Cinema The Logistics of Perception* (London: Verso, 1989), 1.

lations in order to legitimise such campaigns and were used to promote the mass destruction of entire cities. The potential of the capacity for new technologies to facilitate strategic advantage encouraged an era of technological surveillance where power shifted towards those who had control of the image.

*In From God's-eye to Camera-eye: Aerial Photography's Post-humanist and Neo-humanist Visions of the World*, 2012 Paula Amad compares the development of aerial vision and its relationship with power linking the surveillance opportunities it created to the functioning of the Jeremy Bentham's panopticon prison originally proposed and designed 1798. The prison functioned in a similar way to the omnipresence of an All-seeing Eye or *God's Eye*.<sup>16</sup> The central positioning of the panopticon-viewing platform in the middle of the prisoner cells operated as a potent surveillance system at a *physical* and *psychological* level, its design and layout promoting the perception that the inmates were under constant surveillance, even though this was not always the case. As Foucault pointed out, "Hence 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>17</sup> Here Foucault was describing the importance of visibility within this context, yet as Gilbert Caluya notes, this should not be confused with an analysis of the gaze but rather an analysis of power created by the use of the gaze, "The principle of the panopticon is not the gaze but the automatization and deindividualization of power."<sup>18</sup> Power then in this context, has its principle mechanism not within any one person but spread through a variety of different distribution points within the structural components of the panopticon that the individual is caught up in.

This is an important historical context in relation to aerial vision, something Amad argues aligns with the Judeo-Christian tradition of a perspective of the world from the air as seen by a putative omnipotent God. Amad links the development of aerial photography to the notion of this panoptic gaze and ar-

<sup>16</sup> Amad, 'From God's-eye to Camera-eye,' 66-86.

<sup>17</sup> Michel Foucault, *Discipline and Punishment: The Birth of the Prison*, trans. A. Sheridan (London: Penguin, 1977), 205.

<sup>18</sup> Gilbert Caluya, 'The post-panoptic society? Reassessing Foucault in surveillance studies,' *Social Identities* 16 (September 2010): 621-633.

gues that the face of the world, its people and their behaviours were shaped by the conflicted nature of this eye, “the view from above, in other words, has always been dialectically in tension with the view of above from below, the two angels enmeshed in a struggle of attraction and repulsion.”<sup>19</sup> It was this perception of scrutiny from a judgemental presence that helped to influence the way in which people responded to a world subjected to aerial surveillance, both at a physical and psychological level.

In connecting the historical evolution of aerial imaging to state scrutiny and military imperatives it is not hard to see why this form of vision began to attract more malevolent connotations and suspicion within civilian populations. The view from the ground maintained its own level of intimacy and humanity in contrast to vision from above which tended to propagate a transcendent effect that lead to the development of a vision of entitlement and omnipotence that theorists such as Ernst Junger argued rendered those on the ground powerless.<sup>20</sup> There has long been a tension between these two opposing perspectives especially within a Judeo-Christian context and the development of aerial photography exposed this conflict. The shift in location mapping and targeting to an aerial perspective arguably instilled a growing desensitisation to its reality. Virilio suggested that this was symptomatic of the image beginning to take precedence over the object and helped to shape a new paradigm in conflict that was emerging at the time.<sup>21</sup> The new vision was seen by many, including Junger, to create a moral distance between the spectator and scenes of destruction. Photographs from an aerial perspective of cities that had been bombed during the first and second world wars depicted the destruction of buildings and infrastructure as opposed to the gruesome carnage of trench photography, which was deemed to extreme to print in the popular press.

After the WWI aerial photography became more commercialised and in 1921 a company named Sherman Fairchild

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<sup>19</sup> Amad, ‘From God’s-eye to Camera-eye,’ 66-86.

<sup>20</sup> Ernst Junger, ‘On Danger,’ *New German Critique* 59 (Spring/Summer 1993): 30.

<sup>21</sup> Paul Virilio, *War and Cinema*, 7 - 13.

combined images of Manhattan taken from a height of 10,000 feet to create aerial maps of the streets below. These images were extremely popular and created an insatiable interest in this genre of photography and were arguably the progenitor of what we know today as Google Earth. The view from above also presented propaganda opportunities that were quickly exploited by the Italian Fascists during the 1930s who evoked a compelling portrait of Italy from the air, and gloried Mussolini's grip on power through the use of photography and painting.<sup>22</sup> Our utopian understanding of aerial vision was also encouraged alongside the achievements of aviation explorers and stunt pilots during the early 20th century. These pioneers of aviation flew their aircraft under bridges and over vast record-breaking distances fascinating the public. Their feats captured the imagination of the public and transformed the pilots and their machines into the superstars of the time.

Developments in aviation and the images that were captured accordingly encouraged a new way of seeing the world, spawning artistic movements such as the Futurists, who appropriated its visual tropes and aesthetics and aligned themselves with notions of masculinity and dominance, while the Cubists rendered the aerial perspective through a flatness of form and content. Modernists examined more purist notions of the relationship between this vision and architectural design. La Corbusier described his *Unit De habitation* as a "machine for living" and noted that it was partly inspired by the new aerial technology that captured the zeitgeist of popular culture during this period in history.<sup>23</sup> Aerial photography was also being used for educational and entertainment purposes in order to enhance our understanding of the Earth's geography and the complex makeup of the biosphere. Imaging techniques were developed to miniaturise the landscape through stereographic and three-dimensional photography. This approach was augmented by the use of complex dioramas that insured a privileging of the genre, further encouraging a sense of enti-

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<sup>22</sup> Amad, 'From God's-eye to Camera-eye,' 69.

<sup>23</sup> Jonathan Clancy, 'Le Corbusier's Unité: is it a modern classic?,' 2 May 2013, BBC Culture, accessed 18 February 2020, <http://www.bbc.com/culture/story/20130423-design-icon-or-concrete-horror>.

tlement and reinforcing the Modernist illusion that was developing in Western culture at the time, which could be discerned as a type of technological mastery of the planet.<sup>24</sup> The capacity of the new imaging technologies to record the landscape below in great detail was enthralling, and quickly encouraged a sense of psychological ownership of the land below, effectively shrinking the countryside and urban terrain to a scale that could be digested easily by the spectator. An emerging desire to seize the world in a visual sense developed, fuelled by the new photographic medium.



Figure 2. Giacomo Balla, *Abstract Speed + Sound (Velocità astratta + rumore)*, 1913 -1914, oil on unvarnished millboard 45.5 x 76.5 cm, Solomon R. Guggenheim Museum.

Hundreds of towns and cities were destroyed in Europe and Japan during the WWII and aerial photography was an integral aspect of the planning and evaluation of these bombing raids that occurred on an industrial scale. The firebombing campaigns by the Americans of Japanese cities, especially To-

<sup>24</sup> Amad, 'From God's-eye to Camera-eye,' 66-86.

kyo during *Operation Meetinghouse*, were the most destructive bombing raids in history and culminated in the detonation of the first Atomic bomb over Hiroshima on August the 6th 1945.<sup>25</sup> Photographs taken on-board the B-29 Super-Fortress Enola Gay from high above the city depict the almost total obliteration of buildings and infrastructure at ground zero, yet they initially failed to convey the physical effects of the bomb on the inhabitants. (Interestingly the term *ground zero* was originally described by American soldiers in their accounts of the annihilation of the city centre of Hiroshima in the aftermath of the atomic bomb and was later used to describe the area of lower Manhattan devastated by the 2001 terrorist attacks.) The image of the mushroom cloud ballooning high into the stratosphere above Hiroshima on that day defined America's domination over Japan and resonated deeply within the West's historical narrative of the war. Footage of the destruction of Hiroshima and Nagasaki not only demonstrated America's posture as the 'superpower,' but also heralded a new age in weaponry, unleashing a realisation within the collective consciousness that humanity was now capable of annihilating itself. The power of such imagery cannot be underestimated as it arguably influenced the trajectory of the new atomic age and the Cold War that followed. It was not until John Hersey published his essay Hiroshima in 1946 in *The New Yorker* that the West actually began to come to terms with the horrific mortality and morbidity associated with this kind of weapon.<sup>26</sup>

Many of the aerial bombing techniques developed for the campaign were later used during the Vietnam War to carpet-bomb large areas of Vietnam, Laos and Cambodia. The US Secretary of State during the Vietnam War, Robert Strange McNamara, who had earlier helped to conceive and enact the strategy of low level incendiary bombing that destroyed cities such as Dresden during WWII, infamously stated that "in order to do good you may sometimes have to engage in evil" when questioned about the ethics of such wartime pursuits.<sup>27</sup> Im-

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<sup>25</sup> Robert F. Dorr, *Mission to Tokyo The American Airmen who Took the War to the Heart of Japan* (Minneapolis: Zenith Press, 2012), 157-170.

<sup>26</sup> John Hersey, 'Hiroshima,' *The New Yorker*, 24 August 1946, accessed 18 February 2020, <https://www.newyorker.com/magazine/1946/08/31/hiroshima>.

<sup>27</sup> Errol Morris (dir.), *The Fog of War: Eleven Lessons from the Life of Robert S. McNamara*, Sony Pictures Classic, 2003.



agery of Operation Rolling Thunder during the Vietnam War encouraged a negative perception of the conflict, while the American populace grew tired of footage of the indiscriminate bombing of civilians on their television sets at night. The tide began to turn and images of the effect of bombings raids on civilians population areas began to add to a growing public distaste for such activity and helped to change America's involvement in that war.<sup>28</sup> There is an interesting logical implication here as this discussion has focused on the fact that aerial photography began to re-set the perceived emotional response that such imagery was thought to elicit from the spectator.

Current public exposure to aerial imagery developed alongside the emergence of the '24-hour media cycle,' and this was particularly evident in the first Gulf War. The civilian public had been exposed to footage of conflict before, but this was the first time that it had been conveyed live from the battlefield. CNN broadcasts depicted what Paul Patton in his introduction to Jean Baudrillard's *The Gulf War did not take place* 1991 describes as a clean war with live feeds beamed from cameras mounted onto the nose cones of smart bombs and military hardware that destroyed targets rather than people; although this was patently not the case. Baudrillard argued that such vision encouraged the blurring of boundaries between reality and simulation.<sup>29</sup> Footage from the Gulf War felt eerily similar to computer war games of the time such as *F-15 Strike Eagle II*. This sanitised version of conflict encouraged the notion of a clean war with limited casualties. Baudrillard provocatively argued that the war did not take place as the viewing public were fed a type of virtual war in the sense that the images and narrative had already been predetermined by political and military strategists.<sup>30</sup> "The Gulf War thus witnessed the birth of a new kind of military apparatus which incorporated the power to control the production and circulation of the image along with the actions of bodies and machines."<sup>31</sup> The image

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<sup>28</sup> Michael Mandelbaum, 'Vietnam: The Television War,' *Daedalus* 111 (1982): 157-169.

<sup>29</sup> Jean Baudrillard, *The Gulf War did not take Place* (Indianapolis: Indiana University Press, 1991), 67.

<sup>30</sup> Ibid.

<sup>31</sup> Ibid, 3.

became just as much a weapon as any literal one, a weapon that was used to further shape and manipulate the truth and from this point forward; strategy became more about how images could be used to change perceptions of the very nature of conflict and thus the primary means in which we *qua* viewers experienced war from the comfort of our own homes.

*Zero*, 2018 (see fig. 3) is a work that was partly inspired by the night-time photo-imagery that emerged on our television screens during the first Gulf War (1990 - 1991). The night vision aesthetic or infrared look has become synonymous with war and its use in this piece interrogates the visual cues that have come to signify contemporary conflict within a tele-visual culture.

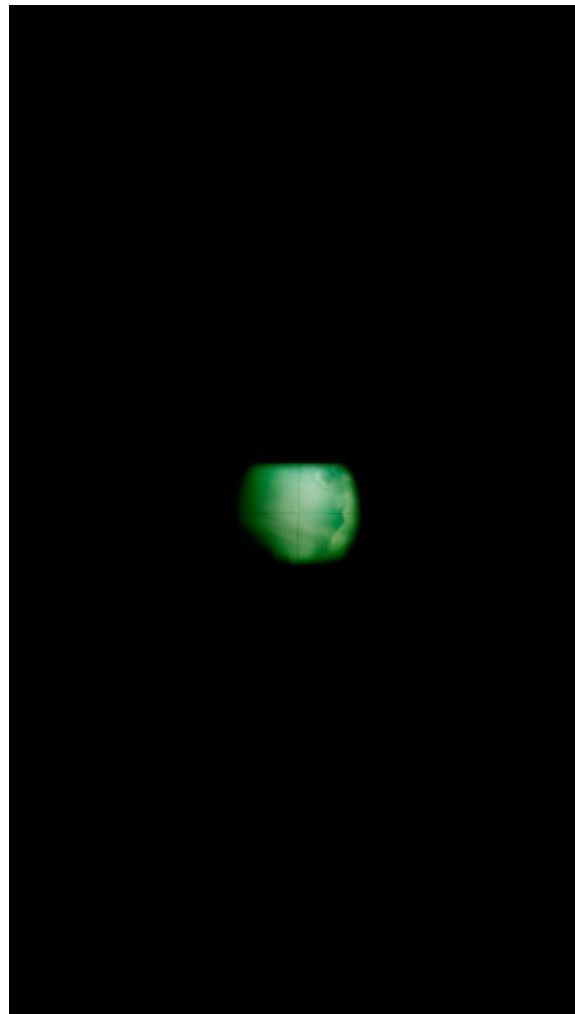


Figure 3. David Manley, *Zero*, 2018, archival photographic print, 2300mm x 1300mm.

This brief history of aerial photography helps to contextualise its technological development in line with state scrutiny and human conflict. What are the moral and ethical implications of such technologies and how are they linked to the experience of trauma and our capacity to empathise with others through the aerial photograph? The following discussion considers these concerns within a more detailed consideration of the allied bombing campaign that took place over Germany from 1943 until the end of the WWII.

The air war over Europe in 1945 reached a “monstrous complexity” through the industrialisation of technology specifically designed and produced to deploy an “orderly cycle” of professional operations that used thousands of bombers delivering high explosives and incendiary devices that created fire-storms of such intensity that the populations of entire cities were incinerated.<sup>32</sup> In a specific instance, Operation Gomorrah consisted of a series of air raids conducted by the Royal Air Force (RAF), with support from the US Army Air Force, over the city of Hamburg during the summer of 1943. New technologies were developed to maximise the destruction of industrial and residential areas through systematic aerial bombing where the population was at its densest. The use of aerial photography was an important aspect of this campaign that was designed to not only destroy infrastructure that supported Germany’s war machine, but to also reduce the city and its inhabitants to ash. Ten thousand tons of high explosive TNT and incendiary bombs were dropped onto the city of Hamburg in the early morning hours of July 27th. High explosive munitions weighing 4,000 pounds destroyed roofs, doors and windows, opening up entry points that allowed the incendiary devices to penetrate deep into the lower stories and cellars of the buildings, thereby igniting the structures from their foundations. Thousands of fires erupted throughout the targeted areas of over 20-square kilometres of the city, merging together and creating one enormous firestorm with a ferocity of unimagined intensity.

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<sup>32</sup> Sebald, *On the Natural History of Destruction*, 66.



Figure 4. *Bombing Hamburg Germany July 1943*, Alamy Stock Photo, unknown photographer.

Bomber pilots and crewmembers calculated the fires rising into the atmosphere at around 2,000 metres in height. Oxygen from the surrounding air was sucked into the storm vortex creating hurricanes that further fed the inferno, amplifying its destructive force and intensity. The fire burned for three hours across the city. According to Sebald, “the glass in the tram car windows melted; stocks and sugar boiled in the bakery cellars. Those who had fled from their air-raid shelters sank, with grotesque contortions, in the thick bubbles thrown

up by the melting asphalt.”<sup>33</sup> Smoke from the fire climbed up high into the atmosphere like an “anvil shaped cumulonimbus cloud.”<sup>34</sup> Pilots in reconnaissance planes reported a residual heat that entered their cockpits from the smoking city below. On the streets of Hamburg bodies lay strewn everywhere, “bluish little phosphorous flames still flickered around many of them while others had been roasted brown and reduced to a third of their size.”<sup>35</sup>

Hamburg was one of many German cities to be targeted by the Allied bombing campaign between 1943 and 1945.<sup>36</sup> The campaign killed approximately 40,000 civilians and created a vast homeless population.<sup>37</sup> As cities were bombed refugees would move to other cities seeking shelter in places that were then targeted by the Allies. These travelling populations would thus re-experience the trauma of having their city destroyed all over again. By 1945 Dresden’s population had swelled by the movement of refugees and was one of the last German cities to be targeted by four Allied bombing raids during February of that year. The ordinance that was dropped and the ensuing firestorms obliterated Dresden and personified the systematic destruction of Germany on an unimaginable scale.<sup>38</sup> It is estimated that over well over 35,000 people lost their lives during the Dresden raids, although this number has been challenged over the years, and it could be far greater.<sup>39</sup>

Through an analysis of Alexander Kluge’s ideas on the social organisation of disaster, W.G. Sebald (1944 – 2001) argued in his 1999 book *On the Natural History of Destruction* that we are ‘programmed’ by ever-increasing intensities of social, political and technological errors that move societies towards conflict and that these errors create the prerequisites of social organisation. In his book Sebald meditates on the enormous destruction wrought on Germany by the Allied bombing campaign during the latter part of WWII. Interestingly, he identifies a lack of written literature and historical accounts after the war surrounding this destruction, and given the scale of the events

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<sup>33</sup> Ibid, 27.

<sup>34</sup> Ibid.

<sup>35</sup> Ibid, 28.

<sup>36</sup> Keith Lowe, *Inferno: The Devastation of Hamburg* (Great Britain: Viking, 2007), first published 1943.

<sup>37</sup> Robert Philpot, ‘The Carpet Bombing of Hamburg killed 40,000 people. It also did good,’ *The Spectator*, 9 May 2015.

<sup>38</sup> A.C. Grayling, *Among the Dead Cities* (London: Bloomsbury, 2014), first published 2006.

<sup>39</sup> Debbie Robinson, ‘The Bombing of Germany 1940 – 1945: Allied air-strikes and civil mood in Germany,’ The University of Exeter: Centre for the Study of War, State and Society, accessed 18 February 2020, <https://humanities.exeter.ac.uk/history/research/centres/warstateandsociety/projects/bombing/germany/>.

and the combined physical and psychological toll the bombings had on the collective conscious of the German people, he asks why do these events continue to consume so little space within the cultural memory of Germany? One explanation for this may well be the collective guilt the German population experienced as a result of the countless atrocities committed by the Nazis. Perhaps another explanation may be that this amnesia was a result of the trauma experienced by the German population? As Sebald wrote, "It seems that no German writer with the sole exception of Nossack, was ready or able to put any concrete facts down on paper about the progress and repercussion of this gigantic, long term campaign of destruction."<sup>40</sup>

In Germany photographs played a role in the act of remembering after the war, to some degree, but any images of the destruction and violence were often hidden away; consigned to private areas in second-hand bookshops usually reserved for pornography.<sup>41</sup> It was as if the German population deliberately set out to un-remember the destruction of their cities and the aftermath of social degradation and humiliation that ensued. Importantly, Sebald goes on to describe the speed at which German social life revived after the war. The population demonstrated a strong ability to forget these events and to overlook the destruction that lay before them. "The population decided – out of sheer panic at first – to carry on as if nothing had happened."<sup>42</sup> The lack of writing and intellectual discourse surrounding the destruction of Germany during this time is the central thrust of Sebald's book and he explores the notion that the collective trauma experienced by the population was too overwhelming and therefore forgotten or at the very least neglected. A more recent publication by Christian Goeschel titled *Suicide in Nazi Germany* does address some the shame and guilt of Germans and goes some way towards filling the void in post war literature concerning these events from the perspective of the German people.<sup>43</sup>

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<sup>40</sup> Sebald, *On the Natural History of Destruction*, 30.

<sup>41</sup> Ibid, 98.

<sup>42</sup> Ibid, 41.

<sup>43</sup> Christian Goeschel, *Suicide in Nazi Germany* (Oxford: Oxford University Press, 2009).

How does a society assimilate experiences of such traumatic magnitude, events that go beyond the threshold of what is humanly tolerable into an historical narrative? If an individual can experience difficulties assimilating a traumatic event into their narrative timeline, can the same response also operate at a cultural level? This possibility might help to explain why German writers of the time had difficulties articulating the destruction of their country. Such a vacuum of information may well have been reflected in the need to forget events so extraordinary that they were unable to be absorbed into the narrative memory of the country's recent past.

One of the initial and indeed enduring psychological responses to trauma is the urge to repel any memory of the event from the mind. How many stories do we hear of returned service veterans remaining silent about their experiences of war? This may be partly an attempt to shield others from the reality of conflict, but perhaps this is also a coping strategy; a way to suppress difficult memories that may interfere with day-to-day life? These "islands of amnesia" develop in the minds of people who have encountered a traumatic event, but this may not necessarily be a sign that the person is truly able to forget their experiences.<sup>44</sup> This is a point that Sebald articulates eloquently in his discussion regarding trauma, memory and its assimilation into our lives.

It is as if a diffuse ability to forget goes hand in hand with the recurrent resurgence of images that cannot be banished from the memory, and that remain effective as agencies of an almost pathological hypermnesia in a past otherwise emptied of content.<sup>45</sup>

This idea will be developed further in Chapter 4 through a more detailed consideration of trauma and its psychological implications within the context of contemporary image-based culture.

High above, looking down on the ruins of Germany, we

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<sup>44</sup> Sebald, *On the Natural History of Destruction*, 149.

<sup>45</sup> *Ibid.*

are offered a collective vantage point, a metaphor for the history of modernity. This view of the destruction of cities and the misfortune of others may allow an opportunity to ponder mankind's propensity or pre-programmed edict for self-destruction. We can conjure Walter Benjamin's "angel of history" that looks back away from the future into the past where we see a chain of catastrophic events piled on top of each other strewn around the angel's feet.<sup>46</sup> Within this destruction a storm rages, its hot air propels the angel on into the future, a metaphor for the destructive reality of the ambivalent nature of modernity through the relentless forward march of technology. Hans Erich Nossack (1901 – 1977) underlines this in his novel *The End 2004*. "And in place of that worthless eagle chiselled by a boastful age into the monument, there will appear again the great rune of mother sorrow."<sup>47</sup>

The development of aerial photography during the WWI cemented its place within the military industrial complex as an invaluable technology used to control war and its lethality. The mass dissemination of such imagery created an entirely new set of ethical considerations that were unique to this form of vision. Early photographic theory based on the psychological effects of such imagery pointed to an apparent desensitisation to the horrors it depicted and this notion was seized upon by the military to promote war through propaganda. In his 1931 essay *On Danger*, Ernst Junger asserted that photographs of atrocity and destruction tended to harden and numb the viewer, creating a paradoxical effect whereby the images needed to become more graphic in order to attract attention. He believed that images that were intended to shock actually hardened the viewer's experience by distancing the spectator from the realities of war.<sup>48</sup> David Deriu argues that Junger's ideas have merit in a discussion regarding empathy towards the image, yet remain problematic especially in the context of photography's historical development and unique perspective of the world. In his analysis Deriu cites a lack of investigation into

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<sup>46</sup> Ibid, 68.

<sup>47</sup> Hans Erich Nossack, *The End Hamburg 1943* (Chicago and London: The University of Chicago Press, 2004), 44.

<sup>48</sup> Ernst Junger, 'On Danger,' 24.



how aerial images operate within a contemporary context of image saturation and its psychological impact on the spectator, and he suggests that we have moved beyond Junger's ideas.<sup>49</sup>

The 2009 release by the Aerial Reconnaissance Archives (TARA), at the University of Keele in the UK, of more than five million images of the Allied bombing campaigns over Germany during the WWII have helped to foster a renewed public interest in images of destroyed cities. According to Deriu, the accessibility and public interest in these photographs may help to unleash their "redemptive potential" through a sense of empathy that may develop due to the distance between a viewer and subject that such imagery creates.<sup>50</sup> He considers the complexities of viewing such imagery as entertainment within the popular press as well as the juxtaposition of this vision with more recent literature that considers photography's relationship with trauma.<sup>51</sup> This process may be due in part to a number of factors unique to this form of photography, particularly its ability to depict the aftermath of destruction from such a unique perspective. In line with Sebald,<sup>52</sup> Deriu suggests that such photographs contain a particular form of agency for bearing witness to the suffering of others due to the dynamic potential of distance that can encourage a more contemplative space in which to consider the true horror of war.<sup>53</sup> He emphasises the ability of the aerial image of ruination to promote a deeper empathic response to victims of war within the mind of the spectator as the abstract and detached nature of the aerial image may paradoxically help to foster a conscious opportunity for the viewer to place themselves in the position of those on the ground. This conscious awakening of the spectator has developed over a period of time and exposure to imagery of war and trauma.

Deriu points to the contradictory nature of aerial images of destroyed cities and describes how they helped to develop a new phenomenological aesthetic whereby distance and a

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<sup>49</sup> David Deriu, 'Picturing Ruinscapes: The Aerial Photograph as Image of Historical Trauma,' in Francis Guerin and Roger Hallas (eds.), *The Image and the Witness, Trauma, Memory and Visual Culture* (New York: Wallflower Press, Columbia University, 2007), 196.

<sup>50</sup> Ibid, 201.

<sup>51</sup> Ibid, 190.

<sup>52</sup> Sebald, *On The Natural History of Destruction*, 66.

<sup>53</sup> Deriu, 'Picturing Ruinscapes,' 190.

lack of information encourages the cognitive development of empathy. These scenes depicted a flattened urban landscape and the remains of civic infrastructure. They demonstrated the vulnerability of cities to aerial attack, and created an unintended public interest in their aesthetic qualities through a fascination that tapped into an emerging fear and a conceptualisation of vulnerability; a type of immersive sublime that captured the imagination of the spectator.<sup>54</sup> Perhaps this fascination was part of an emerging empathy towards those on the ground? The lack of discernable graphic information of the carnage and death that needed to be imagined is an important point when we begin to consider the historical implications this type of photography had on civilian populations.

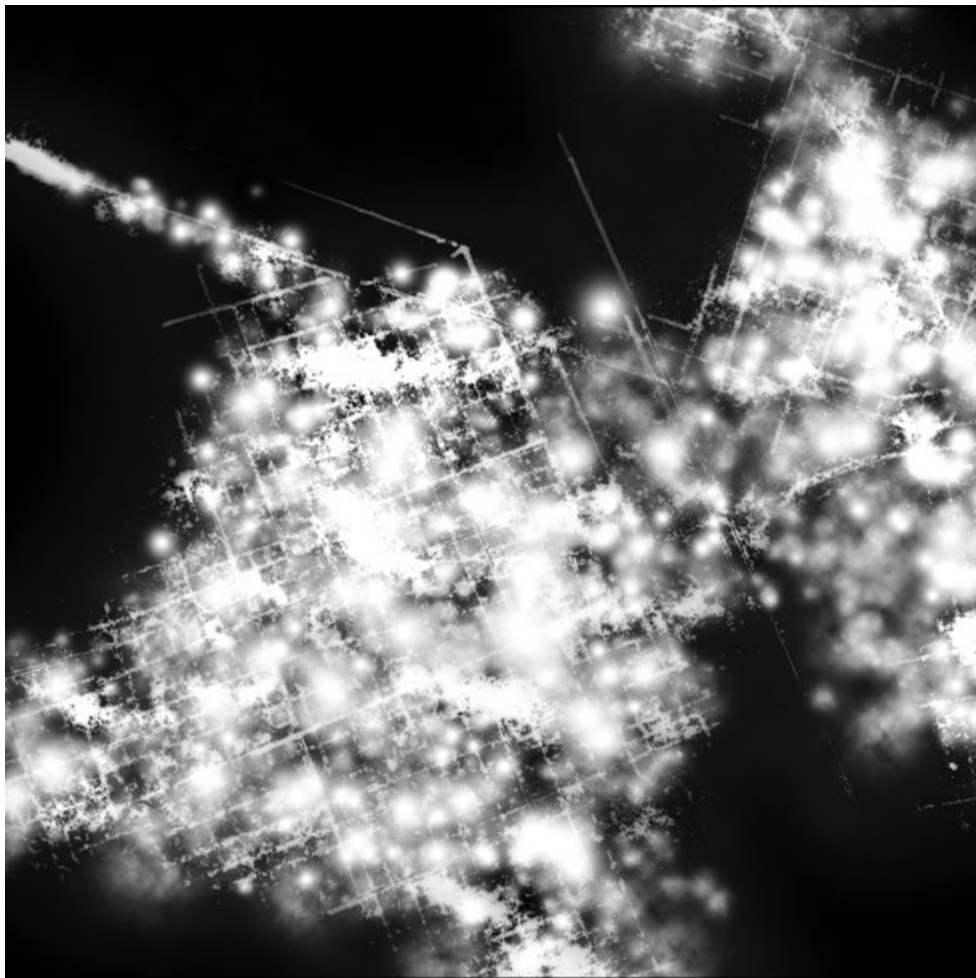


Figure 5. David Manley, *Gomorrah visualisation* (detail), 2020, photogram and digital post-production.

<sup>54</sup> Ibid, 92.

This approach may help to shed some light on a more contemporary understanding of the spectators' engagement with aerial images that depict destruction. According to Susan Gair empathy is a cognitive skill, an ongoing learning process developed through a capacity to place oneself into the experience of another. Empathy is different to sympathy, which is more of a feeling. "You have to be able to venture into worlds that aren't your own, otherwise you're extremely limited."<sup>55</sup> The distancing effect of these photographs may act to hold the viewers' attention long enough for these empathic skills to be born out?

As Deriu said,

Critiques that merely reiterate the abstract, artificial and detached properties of this imagery fall short of acknowledging its dynamic potential as a trigger for the kind of ethical response central to the act of bearing witness.<sup>56</sup>

Can we in fact respond in a more empathic way to photographs that, rather than depicting actual suffering, instead show its traces? Expanding on Deriu's argument it may be possible to reframe the historical visual field in relation to the psychological impact that aerial images of destruction have on the viewer through the cognitive process of building empathy. This considered approach to images of violent events has the potential to provide added agency in our understanding of what humanity is actually capable of. Historical examples of such photographs from the WWII, and more recently conflicts in South East Asia and the Middle East, attest to photography's unique capacity to bear witness from such a unique perspective. The view from above could be seen less as a cold abstracted one, and more as a vision that allows a space from which to consider societal violence and the true magnitude of war and human suffering. This contemplative space becomes an important area of diagnosis and treatment within the context of the research as it offers a potential opportunity of de-

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<sup>55</sup> Gair quoted in Michael Bodey, 'The essence of the journey,' *The Australian*, 19 March 2006.

<sup>56</sup> David Deriu, *The Image and the Witness, Trauma, Memory and Visual Culture* (New York: Wallflower Press, Columbia University, 2007), 197.

celeration, a theme that will be explored and developed further throughout this project.

Here one might consider the work of artist Matthew Day Jackson. His practice incorporates a variety of mediums that include sculpture, painting and photography to create “hagiographies” and historical narratives that explore and interrogate significant social and political issues such as the impact of war and technologies on societies. Jackson’s work interrogates the ambivalent nature of technology that can be, on the one hand, an arbiter of great change and human development and, on the other, a harbinger of immeasurable destruction and suffering. His work links technology’s development to war and conflict and recognises the darker aspects of the human condition as revealed through the driving force of modernity. Some of humanity’s greatest evolutionary adaptations and achievements have occurred during periods of great physical and psychological stress. Jackson considers this stress as the impetus that expands our ability to adapt during times of difficulty. These evolutionary and technological adaptations encourage new possibilities and objectives that can have both positive and negative outcomes, both of which bear the potential to influence the future in unforeseen ways. As Bill Arning points out in his discussion of Jackson’s work, “the purist and most progressive thoughts may confirm the seeds of apocalypse, while weapons can be repurposed for peaceful ends.”<sup>57</sup> Through a race to enhance our status in life it has become increasingly difficult to see the difference between cooperative and competitive spirits.

The Apollo Moon missions embody the ambivalent nature of human competitiveness and technological development. These missions were not solely great explorative ventures into the unknown, but were also deeply political, as they cemented America’s position as the dominant superpower during the Cold War. Many of the technologies developed for the lunar missions during the 1960s and 1970s would be later applied

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<sup>57</sup> Bill Arning, Matthew Day Jackson: The Immeasurable Distance (Houston: MIT List Visual Arts Centre and Contemporary Arts Museum, 2009), 15.

to a variety of military and domestic uses. The progenitor of the intercontinental ballistic missile was the German V2 rocket, which was developed by the Nazis as a retribution weapon against the Allied bombing campaign of German cities during the final years of WWII. Many of the German scientists and engineers (most notably von Braun) who built these weapons were later employed by NASA and the Soviets after the war to apply their knowledge and skills in the development of space programs such as Apollo and Sputnik that propelled the Cold War space race. These programs in turn encouraged the construction of intercontinental ballistic missiles that could carry nuclear payloads from one side of the globe to the other. Here we encounter the conflicting nature of technological progress in so far as war can both encourage great social change and enterprise *and* also sow the seeds of future conflict.

Jackson's work *August 6th 1945*, 2008, (see fig. 6) is an example of this very ambivalence. The assemblage is comprised of burnt wood and lead. The diptych work depicts the city of Hiroshima reduced to black ash and charcoal from an aerial perspective after the first atomic bomb was detonated there in August 1945. Another work in this series of images of destroyed cities demonstrates a similar visualisation of Washington DC. It too has been reduced to ash, a metaphor for our annihilation of not just a city but also the human soul. As Arn- ing said,

These paintings mark a new human possibility made feasible by the power of flight, photography and remote sensing that allow the hubris from which God's in legends (and horror films) punish mortals.<sup>58</sup>

The use of such a weapon on civilians created for the first time within the collective conscious the realisation that humanity was capable of annihilating itself. The spectator encounters Jackson's work from an aerial perspective where we see the total destruction of the city. This god's eye view may act to

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<sup>58</sup> Ibid, 32.

distance the viewer's gaze or hold it, allowing time for a more empathic response to develop in regard to the true nature of such weaponry.



Figure 6. Matthew Day Jackson, *August 6th 1945*, 2009, burnt wood and lead, 80 x 80 inches.

Through a reflective research practice influenced by photographic images of the Allied aerial bombing campaigns over German cities during WWII, accessed through The National Collection Aerial Photography (NCAP), I have developed an imaging method and process that derives its aesthetic look

from night-time photographic images of destroyed German cities taken during the second World War. The work *Gomorrah #1* (see figs. 7) is a photogram that has been created through the use of light sensitive photographic film. The film is exposed to acetate maps that I have drawn from an aerial perspective, which are then covered in ash. The particles of ash help to create the look of incendiary fires, city lights and impact zones in and around the cityscape. These maps are then exposed to light with a photographic enlarger. These large format analogue negatives are then developed using traditional chemical processing techniques. The image remains in the negative form to create the night vista. This work is a visual restaging and representation of imagery taken from the bombing raids that were used by military planners to develop technologies that improved their accuracy and lethality. *Rupture*, 2016, (see fig. 8) is an initial digital mock-up version of the works that helped to inspire the development of the photograms.

This chapter has traced the historical development of aerial photography through peace and wartime with particular attention paid to its use in military strategy in order to demonstrate the way that photography influences the trajectory of social and technological development. The bombing of Germany during World War II was considered in light of Sebald's offerings that implicate post-traumatic stress with a type of social amnesia that he argues develops from the difficulties associated with the processing of trauma on such a massive scale. Photography and Architecture are implicated in this discussion through their relationship with the act of remembering such events. The aerial image as a way of bearing witness to the destruction of cities was considered in light of Deriu's assertions that its distancing effect may actually promote an opportunity for empathy towards those on the ground.

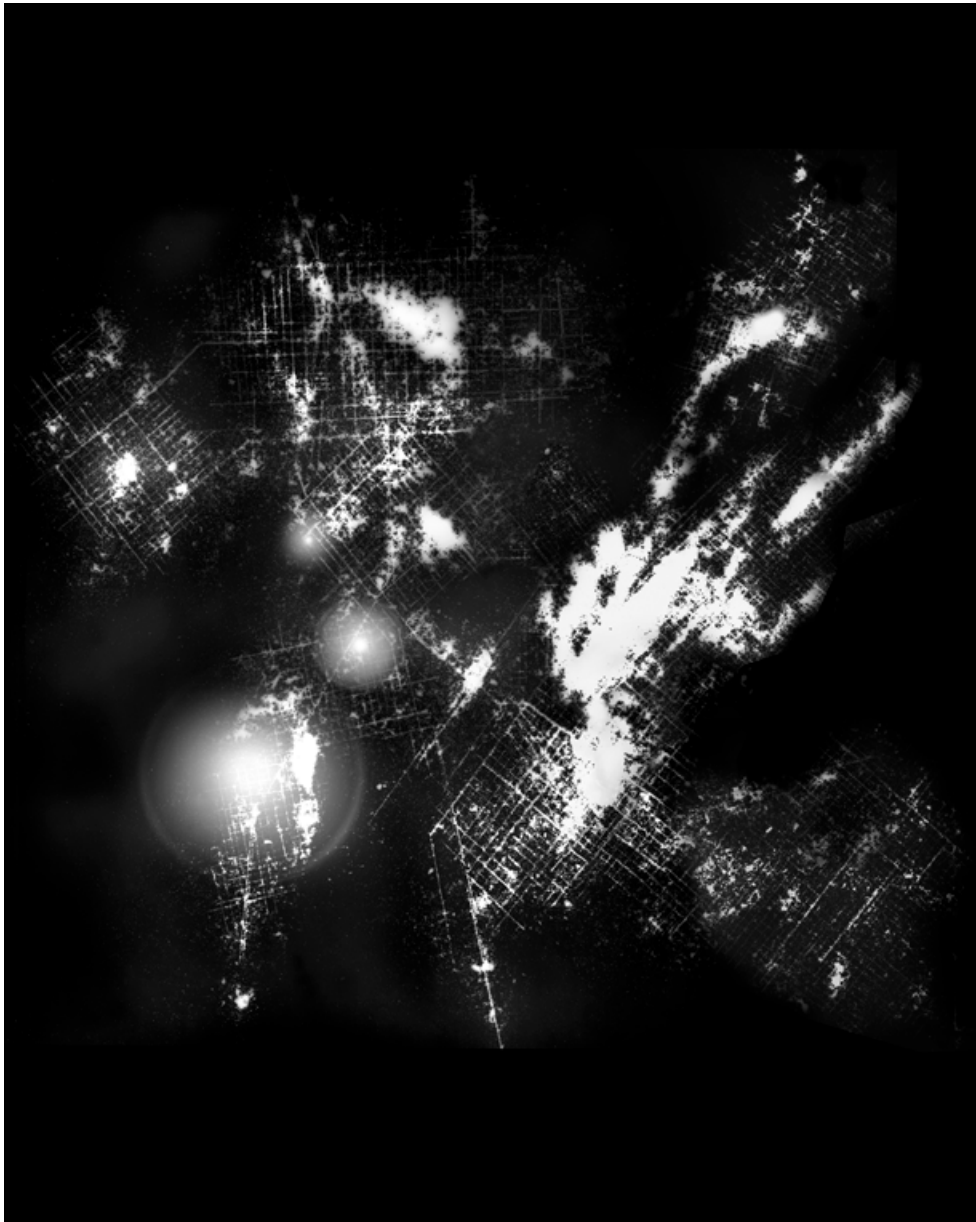


Figure 7. David Manley, *Gomorra #1*, 2019, archival photographic print 25.4 x 20.32 cm, photogram with digital post-production.



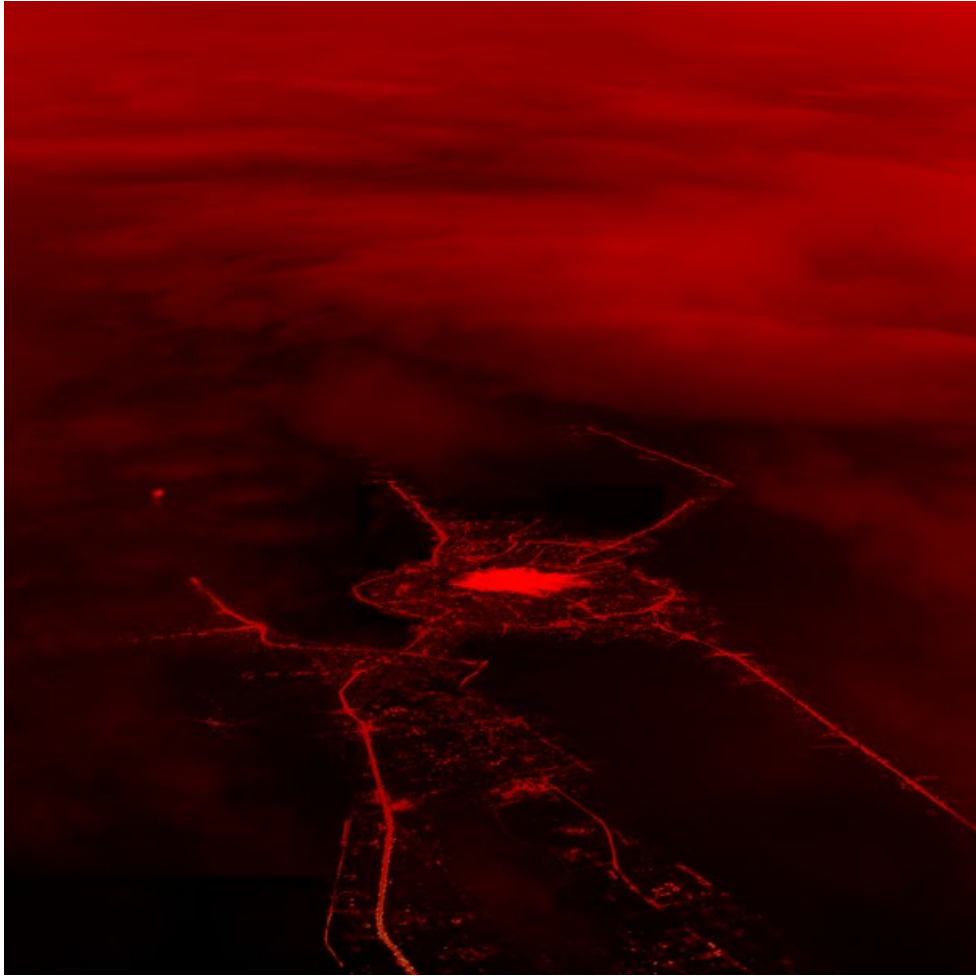


Figure 8. David Manley, *Rupture*, 2016, archival photographic print, 250mm x 250mm.

## Chapter 2: Instant Horizons

This chapter considers current image saturation and its capacity to form and shape our lives. The disruptive nature of the image cycle is explored within the context of “chronoscopic” time, a time of the instantaneous and immediate, defined by present image-based culture.<sup>59</sup>

We are currently living through a period of exponential growth in our exposure to the image. Nicholas Mirzoeff has described the way in which the image modulates contemporary life. According to Mirzoeff the image has become so pervasive that perhaps we tend to underestimate its psychological power to influence the way we think, feel and, importantly, engage with the world, and this has become the focal point of much visual culture theory.<sup>60</sup> Ariella Azoulay describes a form of “image fatigue” in society that relates to the deluge of media imagery we are exposed to in contemporary society.<sup>61</sup> It is the accumulative effect of this imagery, coupled with its intensity that raises questions as to whether our identities can be modified and regulated through a constant exposure to the image. During the 1960s and 1970s writers such as J.G. Ballard (1930 – 2009) predicted the explosion of a type of mediatised trauma through the saturating dosing of images via various platforms such as television, cinema and advertising billboards. Ballard already saw that the image was much more than a passive object or illuminated screen to be consumed – he realised that it dramatically influences our perception of events shaping our lives in unpredictable ways.<sup>62</sup> In works such *The Atrocity Exhibition*, 1970, and *Crash*, 1973, Ballard explored the way in which the image merged with psychological development to shape and build the neural pathways of the individual. This fusion of image and psychological processes conditioned the way in which his characters interacted with the urban terrain and the instantaneous and violent nature of the media cycle.

*The Atrocity Exhibition* explored the impact of this im-

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<sup>59</sup> Virilio, *Open Sky*, 136.

<sup>60</sup> Nicholas Mirzoeff, *An Introduction to Visual Culture* (London and New York: Routledge, 2000), 1.

<sup>61</sup> Ariella Azoulay, *The Civil Contract of Photography* (New York: Zone Books, 2008), 11.

<sup>62</sup> J.G. Ballard, *The Atrocity Exhibition* (London: Jonathan Cape, 1970).

age saturation and was structured around a discordant, non-linear narrative that itself mimicked the disruptive nature of the media cycle and the implications it had on our perception of time. The work used seemingly unrelated snippets of complex narratives and shocks in the form of one-paragraph vignettes that confront the reader in entirely unpredictable ways. These jolts of displaced narrative interfere with the temporal rhythm of the novel suggesting that imaging technologies and their platforms create their own form of temporal dissonance. Ballard's novel explored how the image displaces the temporal continuity through its traumatic imprint within the mediated techno-culture that was quickly developing during the 1960s. Photography and time are inextricably linked. The photograph acts as an indexical representation of a moment and can influence temporal perceptions in a past, present and future context. Ballard's work recognised a shift in our experience of time as we moved from chronological time to *chronoscopic* time, a time that is characterised by the instantaneous moment and the influence of technology.<sup>63</sup> Cinema has long used the trope of shock and awe to entertain. Indeed, the first motion picture ever screened included footage taken of a train accelerating towards the audience, which was a deliberate visual and temporal assault on the patrons, many of who ran out of the theatre believing the locomotive would crash through the screen. This tactic was employed by the producers to create an unrivalled event that ushered in the grand spectacle of the cinema.<sup>64</sup>

In his 2000 book *Home Territories, Media, Mobility and Identity* 2000 David Morley cites Shaw Desmond's article written for the trade journal *Television* published in September 1929. The article predates Virilio's notion that the televised image has the capacity to "destroy" our experience of chronological time.<sup>65</sup> Desmond saw the evolution of live television as a form of entertainment and an all-encompassing lifestyle, and argued that this revolution would have profound implications

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<sup>63</sup> Virilio, *Open Sky*, 136.

<sup>64</sup> Mark Cousins (dir.), *The Story of Film: An Odyssey*, Hopscotch Films, 2011.

<sup>65</sup> David Morley, *Home Territories Media, Mobility and Identity* (London: Routledge, 2000), 171.

for our understanding of space and time where perception was altered by the immediacy and compelling context of the instantaneous dissemination of media imagery that would allow the spectator to be anywhere in the world, in a virtual sense, at any given moment. He argued that the disruptive capacity of the image has the potential to rupture the moment and displace the diachronic scaffolds of our lives. Morley notes that in 1944 J.B. Priestly (1894 – 1984) asserted that social and political structures would form around the new technologies and timeframes, predicting the “virtual geography” of the post-modern era.<sup>66</sup>

Virilio was also concerned with the influence of technology on the individual’s psyche. His visual cultural framework and theory in works such as *Open Sky*, 1997, and *The Aesthetics of Disappearance*, 2009, placed technologies, socialites and cultures as complex shapers and determinants of contemporary life.<sup>67</sup> Virilio’s work responded to the inherent speed and acceleration of technological development, which he argued is coupled to the ongoing militarisation of our society. He saw this speed as a type of physical, psychological and symbolic violence where the accelerated nature of technologies acts to possess and control physicality and psychological territory. This perceptive field changes the development of societies and the way that war is waged where the spectator has become a more active participant through the accessibility of the media platforms and their immediacy.<sup>68</sup> It is not just imagery of violence that is important, it must be recognised within a much broader image culture of saturation that exerts its own level of violence through its pervasiveness and intensity.<sup>69</sup>

The invention and development of the photographic medium brought into question traditional notions of temporality with the image acting as a portal to the past while also reminding us of our own inevitable death and this has implications for the way we understand time as the temporal aspects of the image displace the present.<sup>70</sup> Such disruption could be

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<sup>66</sup> Reprinted in Matthew Gellat (ed.), *From Receiver to Remote Control* (New York: Museum of Contemporary Art, 1990), 109.

<sup>67</sup> John Armitage, *Virilio and Visual Culture* (Edinburgh: Edinburgh University Press, 2013), 39.

<sup>68</sup> *Ibid*, 3.

<sup>69</sup> Paul Virilio, *Speed and Politics* (Los Angeles: Semiotext(e), 1977).

<sup>70</sup> Roland Barthes, *Camera Lucida* (New York: Hill and Wang, 1980), 96.

considered in a number of ways from the benign all the way through to a form of cultural malignancy that permeates every part of our lives, or perhaps more realistically something in between. Here however there must be some acceptance that such technology does have a level of impact on our lives and our interaction with the world. Within a contemporary context, and when we consider in particular the coupling of computer technology and the overwhelming nature and omnipresence of the image, one could argue that pre-photography Western perceptions of time moving in a linear way, like the ticking of a clock or the trajectory of an arrow, have been altered by such technologies. This is not to suggest that space and time have been altered through their influence, but rather that images have overlaid a contemporary experience of time on top of the more traditional notions of temporality. As Morley attests, “it is rather a question of how physical and symbolic networks become entwined around each other.”<sup>71</sup> The new communication technologies are not replacing a traditional understanding of time, but rather producing new definitions of its experience that are built on top of these perceptions.

Historically our experience of time occurred within local and regional zones. In a globalised and emerging virtual world we now tend to experience time through the conduits of instantaneous networks that permeate our lives. The speed of media transmission and its consumption has redefined the topographical texture of the temporal environment where the immediate nature of digital technologies replaces the terrestrial velocity of transportation. The current 24/7 media environment has encouraged a time that is instant, thus eliminating in theory spatial distance. As Ronald Purser (2009: 11) suggests, we are now living in a perpetual present as a result of the instantaneous availability that digital technologies afford. Such a scenario demands reactions that are immediate, eroding opportunities for deliberation and reflective decision-making. As Purser says, “the sort of relief necessary for developing a

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<sup>71</sup> Morley, *Home Territories*, 176.

sense of the world – is simply not available.”<sup>72</sup> The constant demands and the disruptiveness of technology create a time poor individual with impaired judgment.

A new temporal paradigm of chronoscopic time has evolved from chronological time, itself a superficial temporality that turned its abstract nature into quantifiable divisions used to organise labour and commerce. Chronoscopic time encourages a type of perpetual present or “telepresence” which refers to a diminished presence in lived time.<sup>73</sup> In *Marking Time* 1990 Herbert Rappaport described the psychological impact of these temporal dynamics as “telepression” – an induced state of hyper-awareness where we find ourselves constantly plugged in to the 24/7 grid of networked communication.<sup>74</sup> Purser asserts that the experience manifests as an anxiety over a loss of control over future events.<sup>75</sup> “Living in such a Mobius-like immaterial-material world, time in chronoscopic environments flashes as a sense of pure and unrelated presents,” he says, characterised by compression where events are announced through the media as flashes and often-unrelated fragments that make it difficult to construct a narrative of one’s life that has coherence around information.<sup>76</sup> Virilio described this temporal dissonance or disruption as “picnolepsy”, a form of altered consciousness experienced through a state of speed that was characterised by the fragmentation and deconstruction of narrative time into “snippets” and gaps.<sup>77</sup> In this light we become operators devoid of our subjective nature, nodes in a vast terminal of connectivity dutifully clicking like mice hitting the feeder bar, *liking* in an endless pursuit of desire and gratification. Here the character of the individual is shaped by an alienation of the present, which is something driven by the new economies that encourage an engagement with the world defined by fragmentation and fuelled by desire.

The concept of time under the auspice of divisible units becomes a representation of order and is something we can all generally agree on, yet conversely the concept of time it is

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<sup>72</sup> Ronald E. Purser, ‘*The Coming Crisis in Real Time Environments: A Dromological Analysis*,’ 13 December 2017, Academy of Management, accessed 18 February 2020, <https://doi.org/10.5465/apbpp.2000.5535615>.

<sup>73</sup> Ibid.

<sup>74</sup> Herbert Rappaport, *Marking Time* (New York: Simon and Schuster, 1990), 32.

<sup>75</sup> Purser, ‘*The Coming Crisis in Real Time Environments*.’

<sup>76</sup> Ibid.

<sup>77</sup> Paul Virilio, *The Aesthetics of Disappearance* (Paris: Semiotext(e), 2009), 19.

an obstinately difficult notion to grasp because it is not based in physical matter. In an attempt to reconcile this we approach an understanding of time as though it were comprised of such measurement that encourages a sense of mastery over it. The more recent shift in temporal topography to chronoscopic time has influenced our psychological development through technologies that are prone to failure; the system itself relies on planned obsolescence and constant updating of hardware. Such experiences, however pervasive, have developed on top of spatial time; an order that responded to the mechanisation of societies yet developed from far deeper conceptualisations, a concept of time that incorporated cycles of rhythm, change and the experience of memory. Such concepts can be understood through cultures that have different time orientations and values such as the Indigenous American's who perceive time as cyclical and endless.<sup>78</sup> Through the impact of technological systems and the compression of distance via digital interfaces, chronoscopic time has emerged as the new temporal paradigm – a shift now woven into the speed and instantaneous nature of networked societies and the 24-hour media cycle driven by the relentless desire for immediacy.



Figure 9. David Manley, still from *Tranquillity Bay*, 2018, single channel video installation comprising sourced audio and video.

<sup>78</sup> Bhasker Pant, 'Different Cultures See Deadlines Differently, Cross-Cultural Management,' 23 May 2016, *Harvard Business Review*, accessed 18 February 2020, <https://hbr.org/2016/05/different-cultures-see-deadlines-differently>.

*Tranquillity Bay*, 2018, (see fig. 9) is a sound and video installation that interrogates the temporal dissonance created by contemporary image culture. The audio component of the work uses samples from the 1969 Apollo Moon landing combined with video footage of an Apache Hellfire missile attack on Taliban rebels in Afghanistan during the ongoing conflict post September 11th. The work juxtaposes two separate events that are inextricably linked through the development of technology and its applications in military conflict and it attempts to demonstrate the links between the speed of technological development and its violent underpinnings. *Tranquillity Bay* collapses time between the Moon landing and the conflict in Afghanistan, creating a time gap that draws attention to the accelerative pace of the image and its traumatic imprint through its capacity to disrupt. Consideration of the work within this context may also help to demonstrate strategies for what I will refer to here as deceleration, which I have developed through my creative practice. In the context of this particular work deceleration refers to the time slip between the audio and the video and operates a space for contemplation and reflection.

This chapter has considered the changing media technologies and their capacity for disruption at a psychological level. The images capacity to disrupt was linked to the violence of modernity that Virilio describes. An argument was developed that the speed and accelerative pace of image culture sustains its own level of violence and traumatic imprint. This anxiety was considered through the temporal disruption of image saturation that Virilio argues has encouraged a new temporal paradigm of chronoscopic time, a time of the instantaneous, a real time that has compressed space and distance.



## **The Post-Traumatic Urbanist series 2016 – 2020**

My *Post-Traumatic Urbanist* series has emerged through the transposition of trauma from a theoretical base to one of artistic tropes in an attempt to explore my own post-traumatic psychology. This series, which is a major component of the practice-based research, was developed partly in response to a previous body of work completed in 2015 titled *Ambivalent Structures*. *Ambivalent Structures* was a visual and textural exploration of the aftermath of modernity, and the series incorporated photography, sound and video installation works that were architecturally inspired. The *Post-Traumatic Urbanist* series refines and develops some of the methods used in this previous body of work through a distillation of concept and process. In this series I have deliberately deployed a soft, subdued light in order to infuse a sense of stillness or quietness into the landscapes. The clouds hover above the architectural structures in an ominous way (see fig. 10). These visual tropes attempt to tap into shards of trauma and memory through a type of temporal inversion. The zones and the architectural relics we encounter in this series are devoid of time and project an almost infinite quality, a temporal slip that encourages a more contemplative stance from which to consider the world. At a broader level the works also represent a diagnosis of the ambivalent nature of modernity where technology can be considered as much as a symbol of progress as of destruction.



Figure 10. David Manley, *Post-traumatic Urbanist #11*, 2019, archival photographic print, 1250mm x 1000mm.

Using cardboard and paper, the series involved the construction of architectural models that are placed into landscapes made from sand and cement dust. The landscapes are

painted with a fine mist of acrylic paint diluted and applied to the surface of the diorama with a water spray gun. The moisture from the mixture reacts with the cement surface curing it into a hardened crust. Once dry, fine cracks appear in the crust, creating a sense of scale. Models and features are then added to the landscape (see figs. 12 and 13). In *Post-Traumatic Urbanist #1* (see fig. 11) the boulders in the landscape support the brutalist structure and are arranged to display the architectural piece in a formal way suggesting an aesthetic inspired by the dioramas that can be found in natural history museums. *Post-Traumatic Urbanist #2* (see fig. 13) develops the aforementioned ideas further. The work incorporates architectural constructions made from honeycomb packing cardboard, which is an important physical material used in the development of the series as it resembles architectural structures at scale.



Figure 11. David Manley, *Post-Traumatic Urbanist #1*, 2017, archival photographic print, 1000mm x 1000mm.

A reference bank of cloudy skies was created during the production of the series and these images were later composited into the dioramas enhancing the scale of the structures and landscapes. Through a process of conceptual refinement some of these images were then printed separately onto photographic paper and placed into the dioramas, further emphasising the scale and visual aesthetic. The work references artists such as Hiroshi Sugimoto's 1976 natural history museum aesthetic and Thomas Demand's use of paper in the construction of his models, but rather than attempting to emulate their imagery, the series attempts to redevelop similar methodologies of physical and photographic representation and construction as a visual exploration of the theoretical concerns of this research. The use of powdered cement in the creation of the models and landscapes was also important conceptually as it connects some of the textual theory on the psychological implications of conflict and technologies to the practice work through its physicality, as sand and cement are the constituents of the urban terrain.

Works such as *Post-Traumatic Urbanist #7*, 2018, (see fig. 12) are intended to delve into the deeper recesses of the subconscious, unearthing through a type of visual archaeology an architectural history of humankind that taps into human conflict and technological progress. The deconstructive approach emphasises the vulnerability and flux of our daily lives and the structures we create to live them in. The models and dioramas have a conflicted nature as they contain, at once, the tropes of utopian possibilities and dystopian decline that reference architectural brutalism, fused through the textual component of the project with our ongoing obsession with technological development. These architectural conglomerations are conjoined in sometimes-grotesque ways paying homage to the complex blends of our collective past, while also reminding us of the entropic nature of architecture, which is unstable and susceptible to the vagaries of human conflict and the desola-

tion of time. *The Post Traumatic Urbanist* series is a psychological survey of these concerns drawn together and unified as a unique body of work.



Figure 12. David Manley, *Post-Traumatic Urbanist #7*, 2018, archival photographic print, 1000 mm x 1000mm.



Figure 13. David Manley, *Post-Traumatic Urbanist #2*, 2017, archival photographic print, 1000mm x 1000mm.

### Chapter 3. Terrorvision

In this chapter the links between contemporary image culture and trauma are considered and a case is built around how the technology disrupts temporal typographies in a comparative way to the effects of post-traumatic stress disorder (PTSD). The intrusive nature of photography is elaborated on further through a discussion on Jean-Martin Charcot's images of cataleptic patients in the 19th century. This process is used as a metaphor in which to consider photography's disruptive capacity. Bauman's theory on the ambivalence of modernity is linked to Virilio's accident theory in order to situate and strengthen the theoretical underpinnings of the research project thus far.

Here I would like to link Virilio's discussion on temporal disturbances associated with the speed and acceleration of technology to trauma. This will be undertaken in order to outline a contemporary understanding of time in an era of a "continuous tele-presence and virtuality," where the disruptive capacity of the image promotes its own traumatic imprint.<sup>79</sup> In Virilio's discourse time unfolds within a non-narrative of abrupt instances delivered through an exposure of events at the speed of light through a variety of visual platforms. Michele Bedard-Gilligan and Lori A. Zoellner consider Bessel van der Kolk's theory that an overload of traumatic information can lead to a form of dissociation during an event disrupting the coding and storage of memory manifesting later as PTSD. "Fragmentation is thought to result from a lack of elaboration of the memory due to high emotion and dissociation during the traumatic experience."<sup>80</sup> Van der Kolk's theory is compelling and forms the foundations of our understanding of the development of this disorder and its impact on memory and temporal perception. This theory specifically relates to a neurological model of memory encoding in the context of a stressful event that triggers the release of high levels of

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<sup>79</sup> Jennifer Good, *Photography and September 11th, Spectacle Memory, Trauma* (London: Bloomsbury, 2015), 9.

<sup>80</sup> Michele Bedard-Gilligan and Lori A. Zoellner, 'Dissociation and Memory Fragmentation in Post-Traumatic Stress Disorder: An Evaluation of the Dissociative Encoding Hypothesis,' *Memory* 20 (2012): 277, 277-299.

cortisol, which is thought to contribute to a dysfunction in the hippocampus.<sup>81</sup>

According to Bedard-Gilligan and Zoellner the experience of trauma has the potential to de-stabilise the logical support mechanisms we use to make sense of our surroundings, fragmenting our perception of the world and our place within it.<sup>82</sup> To quote Sebald, “The experience of terror also dislocates time that most abstract of humanity’s home.”<sup>83</sup> When considering the traumatic, he argues that the points in our lives that give us stability are replaced by an internal vision that is caught up in the event replayed in a type of loop that interjects in the day-to-day cycles of memory.<sup>84</sup> An analogy of this may be that the human mind is similar to the hard drive of a computer in which memory is stored and laid down in an ordered way. A traumatic event is characterised by an overload of information that is difficult to process. The memory of this event stays on the desktop of the computer and is unable to be assimilated or coded into the hard drive. Unprocessed, its continued presence has the potential to degrade the computer’s long term functioning. Perhaps the need to forget could be seen then as the mind’s coping strategy, connected to the intensity of vision and memory associated with the disruptive capacity of the event?

In *Photography and September 11th, Spectacle Memory, Trauma*, 2015 Jennifer Good points out that Virilio deliberately linked this exposure to the process of photography,<sup>85</sup> which was a comparison also used by Ulrich Baer.<sup>86</sup> Both argue that during the arresting moment of a traumatic experience the brain operates in a similar way to the shutter mechanism of a camera. In *Pressed for Time: The Acceleration of Life in Digital Capitalism*, 2016 Judy Wajcman concurs and notes the paradox of information speed and accessibility in which an overload of stimulus fractures and disrupts temporal perception creating a situation where we can only take advantage of small instances or slices of the information presented to us. Wajcman argues

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<sup>81</sup> Ibid. 278.

<sup>82</sup> Ibid.

<sup>83</sup> Sebald, *On the Natural History of Destruction*, 150.

<sup>84</sup> Ibid, 159.

<sup>85</sup> Good, *Photography and September 11th*, 9.

<sup>86</sup> Ulrich Baer, *Spectral Evidence: The Photography of Trauma* (Cambridge: MIT Press, 2005), 9.



that this has the effect of “annihilating” our experience of real-time by interfering with the process and development of narrative memory to the point where viewers “lose themselves in the eternity of electronically networked information.”<sup>87</sup> Experience of stressful events over an extended period is often initially characterised by desensitisation: we become numb to the stimulus and this is partly to do with the brain’s coping strategies for processing such high levels of difficult information. Indeed, people who work in jobs that entail repetitive exposure to trauma, such as nurses, paramedics and doctors for example, report that they tend to block out stressful events. However, the effects of work-related stress in many of these settings tends to build up over time.<sup>88</sup> The doses of trauma accumulate until a threshold is reached, at which point PTSD may develop.<sup>89</sup>

What are the historical contexts for the relationship between trauma, memory and photography? In *Spectral Evidence: The Photography of Trauma*, 2005 Ulrich Baer uses the analogy of the cataleptic patient to examine the interplay between trauma and photography through studies that were carried out by Jean Martin Charcot (1825 – 1893) during the late 1800s into the condition known as hysteria.<sup>90</sup> Baer’s interpretations of these studies are of interest here as the research is concerned with the traumatic and temporal implications of the photographic process, and Baer’s work helps to contextualise some of these issues. Catalepsy can be triggered by a sudden event and the patient’s body contorts in a physical reaction. Charcot used the relatively new technologies of photographic imaging to capture the instantaneity of the flash exposure and its effect on his female patients who had a history of clinical hysteria. Under these conditions, Charcot captured the contorted bodies of his patients on film in the moment of a cataleptic seizure, a phenomenon that was partly induced by the magnesium flash of the photographer. After this process the patients would then return to their pre-cataleptic or

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<sup>87</sup> Judy Wajcman, *Pressed for Time: The Acceleration of Life in Digital Capitalism* (Chicago, The University of Chicago Press, 2015), 24.

<sup>88</sup> Sedigheh Iranmanesh, Batool Tirgari and Hojat Sheikh Bardsiri, ‘Post-traumatic stress disorder among paramedic and hospital emergency personnel in south-east Iran,’ *World Journal of Emergency Medicine* 4 (2013): 26-31.

<sup>89</sup> Fiona Cocker and Nerida Joss, ‘Compassion Fatigue among Healthcare, Emergency and Community Service Workers: A Systemic View,’ *International Journal of Environmental Research* 13 (June 2016): 1.

<sup>90</sup> Baer, *Spectral Evidence*, 26.

non-hysterical states. The seizure was then studied through the positive photographic image of the event. The process allowed for a reading and deciphering of information that would normally go unseen but was in fact to a large degree provoked by the photographer's use of technology.<sup>91</sup>

Baer argues that Charcot's photographs, and in particular the ones of the girl Augustine, illustrate the notion that the literal – almost filmic – nature of traumatic memories in the form of a flashback are a “distortion of memory.”<sup>92</sup> Understanding the comparative nature of photography through the inducement of catalepsy allows us to see that it is not a purely phenomenal event. Baer asserts that the photographic process inherently “resists” any certainties of the perceptual senses. “Through the allegory of Charcot's photography we see what we can't see.”<sup>93</sup> Sigmund Freud later developed these ideas, placing them into a temporal context when considering dissociative states. He hypothesised that they were actually re-enactments of past traumatic occurrences that the patient had been unable to assimilate into their narrative memory.<sup>94</sup> “The flash takes you by surprise, no matter how long you have been warned. It cuts into a scene with the violence of the lightning bolt and yet instantly displaces attention from itself to the darkness of its surroundings.”<sup>95</sup>

Charcot's manipulations of his patients through the inducement of a cataleptic state could be repeated over and over again; a process determined by the reproducibility of photography. Catalepsy is a physical reaction that has comparisons to the way in which a camera captures a moment. A darkened room was flooded with light for an instant immobilising his subjects as statues disrupting the temporal continuity of the patient. Charcot's images were an “allegory” of this process. Baer argues that Charcot's methodology for photographing his female subjects may have evoked a sense of “mastery” over them, a demonstration of power through the provocation of these symptoms.<sup>96</sup> He points out that Charcot's mirroring of

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<sup>91</sup> Ibid, 26.

<sup>92</sup> Ibid, 47.

<sup>93</sup> Ibid, 50.

<sup>94</sup> James Strachey and Anna Freud (eds.), *The Standard edition of the Complete Psychological Works of Sigmund Freud*, Volume II, (1893-1895) (London: The Hogarth Press and the Institute of Psycho-analysis, 2001), 186-222.

<sup>95</sup> Baer, *Spectral Evidence*, 34.

<sup>96</sup> Ibid.

a subject frozen in time is a symptom of the desire to control, not only his patients, but the photographic process as well. Charcot understood the potency of this interruption and its potential to change future events and possibilities.<sup>97</sup> As Baer describes, “The flash does not immobilize woman in motion; instead it creates and captures simultaneously an instance that hovers between movement and immobility, memory and trauma, narrative and shock.”<sup>98</sup> Here we see the complicity of the medium, not only through its profound influence on the physical and psychological experience of the world, but also its cause and effect and the way it disrupts temporalities that achieve a modality through the staging of representational input that merges together into a singularity and instantaneity between what has passed before and that which will pass in the future. Photography has traditionally been viewed as the great documentary medium, yet it harbours another guise that has remained hidden; its ubiquity as the great disruptive force of contemporary life.

Roger Luckhurst considers the experience of trauma through the symptom of the recurrent and intrusive image in his work in *The Trauma Question* 2005 and argues that its impact may often defy any language that is able to describe it.<sup>99</sup> As suggested above, a common symptom of trauma is the experience of flashbacks, a psychological phenomenon that can be intrusive and immobilising. These “shards” of a traumatic event tend to disrupt our temporal experience of the world in much the same way as the *picnolepsy* that Virilio described.<sup>100</sup> After a trigger, the victim of trauma can be transported back to the event through an intense visualised replay of the experience, a type of dissociative state that can form part of the diagnostic criteria for PTSD.<sup>101</sup> According to Luckhurst the flashback is often experienced through an incarnation of imagery, a point he argues that garners little attention in the literature.<sup>102</sup> Luckhurst cites the work of Elizabeth A. Brett and Robert Ostroff and their observations on the “neglect” of the traumatic

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<sup>97</sup> Ibid, 41.

<sup>98</sup> Ibid, 42.

<sup>99</sup> Roger Luckhurst. *The Trauma Question* (new York: Routledge, 2007), 147.

<sup>100</sup> Ibid.

<sup>101</sup> American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (Washington: American Psychiatric Publishing, 2013), 275.

<sup>102</sup> Luckhurst. *The Trauma Question*, 147.

flashback within clinical literature.<sup>103</sup> This type of imagery can be encountered in a number of ways by those who suffer from the disorder through intense and intrusive recollections, flashback moments or even reoccurring nightmares of the event. In such instances the victim innately feels as though they are reliving the experience in the form of visual, auditory and somatic hallucinations.<sup>104</sup>

Trauma related psychopathology has been the subject of intense scrutiny within the arena of psychiatry for many years. The experience of shell shock or “war neurosis” was investigated by Pierre Janet, a French psychologist and psychotherapist whose work during the 1880s pioneered a form of cognitive behavioural therapy that sought to assimilate intrusive imagery back into the trauma victim’s personal narrative through a form of exposure therapy whereby the traumatic event is re-encountered through counselling, time and again, until the distressing memories increasingly take on a benign quality within the narrative arc of the victim’s life.<sup>105</sup> We can trace the development of our understanding of PTSD through the 1960s counterculture movement when Lysergic Acid Diethylamide (LSD) was used as a recreational narcotic and was characterised by intense sensory hallucinations. Years later users of the drug experienced flashbacks and a return to what Luckhurst describes as “traumatic perceptions” or insights that were often experienced during an LSD trip. These regressive moments involved intense visualisations and “breakthroughs” of repressed ideas and memories that took on perceptive qualities that many liken to photographic or cinematic imagery.<sup>106</sup> Victims of trauma find it difficult to express their experience through the usual language processes and this inability to organise memory through symbolic and linguistic strategies encourages memories of trauma to be coded and stored in the form of intrusive imagery around the event. This may be one reason why people use the language of photography to describe this phenomenon. Such imagery can seriously affect

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<sup>103</sup> Ibid.

<sup>104</sup> American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders*, 75.

<sup>105</sup> Luckhurst, *The Trauma Question*, 148.

<sup>106</sup> Ibid, 147.

the day-to-day functioning of the individual; this disrupted state promotes a retreat towards more primitive coping strategies that manifest as severe personality vulnerabilities.

Elizabeth A. Brett and Robert Ostroff's 1985 research into *Imagery and Post Traumatic Stress Disorder* considers a prominent defence strategy that victims of trauma use to deal with traumatic stimulus through compulsive and repetitious replaying of the event. They argued that this instinctual defence operates in order for the victim to gradually gain some control or mastery at a psychological level over the experience.<sup>107</sup> Given this possibility, one cannot help but reflect on the media's tendency to replay traumatic imagery over and over again, and the spectator's consequent need to join in on this repetitive cycle of image consumption. Televised imagery of the Twin Towers collapsing was repeated over and over on the day, searing the event into the psyche of those who saw it on their television and computer screens. Interestingly, this process of repetition is used by children to deal with difficult or foreign stimuli in order to develop some level of control over it. Luckhurst argues that traumatic imagery that resists assimilation with the temporal narrative of the individual is often expressed within a "somatosensory" context through "iconic" visualisation such as nightmares, flashbacks and intrusive image fragments of the event.<sup>108</sup> PTSD is characterised by experiences that are often out of context and difficult to locate in time and space.<sup>109</sup>

Baer developed his photographic comparisons with trauma further arguing that traces of a traumatic event are recorded or "etched" into the unconscious mind in a way comparable to the manner in which images are captured onto the emulsion of film. In the case of PTSD these moments announce themselves in an often disruptive and intrusive way that is generally out of context, haunting the conscious mind and reminding us that absolute safety remains an illusion and mortality is continually in question.<sup>110</sup> Indeed, Marianne Hirsch describes the

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<sup>107</sup> Brett and Ostroff, 'Images and Post Traumatic Stress Disorder,' 418.

<sup>108</sup> Luckhurst, *The Trauma Question*, 148.

<sup>109</sup> Bessel A. Van der Kolk, Onno Vander Hart, 'The Intrusive Past The Flexibility of Memory and the Engraving of Trauma,' in *Trauma Explorations in Memory*, Cathy Caruth (ed.) (Baltimore: The John Hopkins University Press, 1994), 158-181.

<sup>110</sup> Luckhurst, *The Trauma Question*, 149.

photograph as an “intersubjective, transgenerational space of remembrance linked specifically to cultural or collective trauma.”<sup>111</sup> These images remain intact within a psychological context and are intricately linked to our memory and coded into our genetic makeup. Conjuring such imagery is not difficult, a rush of adrenalin and a flood of de-contextualised information create an imprint of visual memory that may disturb an individual for years. The image of a young naked Vietnamese girl fleeing her burning village after a US napalm strike, or the second plane striking the World Trade Centre: these are examples of how image, memory and trauma coalesce at a subconscious and/or semi-conscious level, announcing themselves from time to time when triggered by a current event that may or may not be related. Here the photograph and the memory of it operate as a form of perpetual playback mechanism. The Vietnamese girl is always fleeing, her body always being burned; the Twin Towers are always collapsing.

There is a compelling relationship between visual culture and trauma discourse, and difficulties occur when we attempt to decouple the image from the traumatic as they are so enmeshed within the context of a relentless development of imaging technologies and media that saturates our lives.<sup>112</sup> Indeed, Robert Jay Lifton links this saturation to what he describes as the emergence of a psychological state defined by its pervasive nature and he argues that this flood of imagery manifests within the individual as a traumatic identity.<sup>113</sup> It is difficult to consider the psychological implications of trauma and an event separately from the influence of the image as this fragment of the traumatic may often come to represent the experience either psychologically, or photographically, or both. Even the language of trauma uses metaphors derived from photography to compare and understand its experience: ‘I can’t get the image out of my head.’ Ballard would often compare the neural networks of the human brain with the vast tele-mediated systems of the urban landscape that operate

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<sup>111</sup> Marianne Hirsch, ‘Surviving Images: Holocaust Photographs and the Work of Postmemory,’ *The Yale Journal of Criticism* 14 (2001): 10.

<sup>112</sup> Luckhurst, *The Trauma Question*, 150.

<sup>113</sup> R.J. Lifton, *Boundaries: Psychological Man in Revolution* (New York: Random House, 1969), cited from Luckhurst, *The Trauma Question*, 150.

and respond to what Luckhurst describes as an unbuffered assault of imagery on the individual that induces a state of “continual thematic shock.”<sup>114</sup>

When we consider the influence of the mediated image on the trajectory of societies, cultures and the psychology of the individual, there was one event that encapsulated the extraordinary power of the image and its disruptive capacity. Jennifer Good linked Virilio’s theory of picnolepsy to the terrorist attacks on New York in 2001 and used it to make sense of how people described their experience of events that day. Many of those who witnessed the attacks spoke of a sense of derealisation (a mental disturbance where one feels that ones surroundings are not real) and a fragmentation of time as they saw the towers collapsing, “as if they were watching a movie.”<sup>115</sup> Virilio considered the experience of intense exposure to media imagery as chronoscopic in nature where the perception of time is distorted and the normal narrative arc of our daily life is disrupted. This event could be a contemporary example of this.<sup>116</sup> He argued that this experience is an essentially violent event, not necessarily because of what the imagery depicted (although this obviously played a huge role in the attacks), but rather by the way in which the imagery is delivered and how it is consumed. Here the distinction between form and content becomes important. Violence relates to Virilio’s central argument in that the pervasive intensity of digital image speeds and the disruption unleashed has implications with the processing of narrative memory creating distortions in our perception of time.<sup>117</sup> To quote Paul Crosthwaite, “The process of speed is nothing more than the unleashing of violence.”<sup>118</sup>

Within this instantaneous time exposure, something Virilio saw as a form of temporal contamination, arises the perception of events as they happen: an exposure to events occurring at any given moment from any point on the globe consumed through a multitude of platforms. This rupture of the moment interferes with the succession of time and the

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<sup>114</sup> Roger Luckhurst, *The Trauma Question*, 150.

<sup>115</sup> Good, *Photography and September 11th*, 10.

<sup>116</sup> Virilio, *Open Sky*, 136.

<sup>117</sup> Virilio, *The Aesthetics of Disappearance*.

<sup>118</sup> Crosthwaite, ‘A Secret Code of Pain and Memory.’

processing of narrative memory. Such experiences are immediate and reach us at light speed; terminal velocity. Virilio also likens this phenomenon to the photographic process that acts to halt and isolate a moment. “To the passing time of the longest durations, we now add accordingly a time that is exposed instantaneously,” he says, a shift to the immediate moment through the images disruptive capacity, which he argued is in and of itself a violent act.<sup>119</sup>

Virilio’s photographic analogy goes beyond that of a simple metaphor to articulate the violence of modernity, especially when we consider the psychological implications of this chronoscopic exposure to real-time events. There is a simultaneous eruption of light, instant and object, and instantaneous photographic exposure that, translates into the viewer’s experience of the image at any point in future time we may view as an “eternal presence.”<sup>120</sup> Virilio went so far as to describe this as “dromospheric pollution,” a death of geography in which the territorial body is lost along with the social and animal body through the instantaneity of tele-presence, a presence that collapses geographical distance.<sup>121</sup> The televised image creates urgency, a present time that encapsulates the viewer, disrupting temporal perspective, accelerating the televised image, its speed and inherently violent nature. The physical horizon is diminished along with the depth of field of physicality, until the real space of geography is represented only through the televised process. The terrorist attacks on New York and the Pentagon highlighted this over exposure and rupture of chronological time that many experienced first-hand and then continued to re-experience many times over through the thousands of replays of the event. This situation created a level of image saturation that was profoundly overwhelming within the context of visual spectacle so much so that it created a new set of problems and reactions in relation to how we view and process such information.<sup>122</sup>

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<sup>119</sup> Virilio, *Open Sky*, 4.

<sup>120</sup> Good, *Photography and September 11th*, 10.

<sup>121</sup> Virilio, *Open Sky*, 63.

<sup>122</sup> Good, *Photography and September 11th*, 3.



The 2001 terrorist attacks on New York and the Pentagon demonstrate the extraordinary power of the image and its enduring effect on the world in shaping future events. Imagery of the attacks consumed the airwaves, however Good describes an interesting lack of theorising in relation to the 'collective power' of trauma related imagery captured on the day.<sup>123</sup> Some key works have been undertaken such as Maryann Hersch's 2001 essay *I took Pictures: September and Beyond*, as well as a 2001 essay by Richard Drew titled *Falling Man: A Photograph by Andrea Fitzpatrick*. Good argues that given the magnitude of the event, and the way the public consumed it, there remains a definite lack of critical analysis of its impact on those who witnessed the trauma unfold within the context of photography.<sup>124</sup>

In the broader September 11th discourse much of the debate was concerned with how these images are bound up with issues that relate to the witnessing of trauma and the implications this may have on memory and grief. This is an important discussion, yet much of this conversation neglects the totality of photography that was generated on the day and the effect this glut of imagery had on those who consumed it. "They cannot within their remits relate it fully to an extended political critique of the dominant readings or ideological mobilisations of September 11th photography as a body, en masse" Good says.<sup>125</sup> She argues that part of this problem lies in the fact that the images are caught up in a variety of social and political genres to do with journalism, politics, history and cyber culture.<sup>126</sup> Each may account for an element of the effect of this type of imagery and its pervasiveness, but to date there has been little conjecture into the cultural immersion of this imagery on such a scale and its initial and ongoing impact. Good asserts that in the case of photography and the intense media saturation surrounding the event there are only limited accounts of its collective impact and this is surprising given its scale and mass consumption and rightly asks, "what are

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<sup>123</sup> Ibid, 4.

<sup>124</sup> Ibid.

<sup>125</sup> Ibid.

<sup>126</sup> Ibid.

these pictures doing to us?”<sup>127</sup> Perhaps there has been a type of shyness of scholarly writing away from the ‘collective influence’ these images have and this may well be an appropriate framework in which to consider the event within the context of photography?<sup>128</sup>

Image and text have always had a strong relationship; implicit in this understanding was the expanded interpretation of photography and the exploitative properties and capabilities it affords.<sup>129</sup> The September 11th terrorist attacks were extraordinary and unprecedented in a media sense as they were televised live to a captive audience who were drawn to the visual immersion of the event.<sup>130</sup> Prior to these attacks televised events invariably had a backstory, or at any rate the audience had some understanding at least of what we were witnessing. By contrast, the vision of a passenger plane striking the North Tower of the World Trade Centre was unique, not only because of the sheer scale of the spectacle but also because the imagery initially lacked any credible explanation.<sup>131</sup> When we think about the impact that the image had on that day, and its implications within broader media culture, these attacks become compelling. As Good says,

Though it was for a long time deemed unacceptable to say so, this was a spectacular event: a terrorist attack designed to operate on both literal and symbolic levels, but which surely achieved the latter with a degree of success beyond the perpetrators’ wildest dreams.<sup>132</sup>

In a media sense, the attacks became the ultimate spectacle, drawing the world’s attention, a dosing and re-dosing of traumatic imagery delivered via continuous visual loop into our living rooms and bedrooms and anywhere else there was a television screen.

What is the impact of image speeds and experiential acceleration on the psychology of the individual? Is the experience of time distortion that Good and Virilio describe a re-

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<sup>127</sup> Ibid.

<sup>128</sup> Ibid, 5.

<sup>129</sup> Yuliya Komska, ‘Ruins of the Cold War,’ *New German Critique* 38 (Winter 2011): 155-180.

<sup>130</sup> Good, *Photography and September 11th*, 11.

<sup>131</sup> Ibid, 4.

<sup>132</sup> Ibid, 8.

sponse to the violence associated with its pervasive intensity and capacity to disrupt? The implication here is that the violent nature of visual image culture, its speed and acceleration, has its own level of psychic trauma. Coupled to this speed is the way in which the image is consumed through the relentless media cycle. In light of this, and when we link violence to the pervasive nature of image culture, one must consider its psychological impact and how it affects our engagement with the world. Ballard described similar disturbances – through his characters, as a response to our complex interaction with technology – as “the death of affect”; namely, an inability to feel and respond to the accelerative nature and violence of the information we are exposed to.<sup>133</sup> Perhaps what Ballard was alluding to is a symptom of traumatic stress?

With this in mind, and in the context of photography, it is useful to attempt to ask what are some of the concerns in relation to the new imaging technology’s influence on temporal perception and is there a relationship between these concerns and the experience of trauma? Virilio suggested that the revolution in the transmission of imagery and the development of interactive technologies has radically changed the urban environment to the extent that there is a commutation in which the importance of the image surpasses the importance of the actual object or event it captures.<sup>134</sup> He argues that slowly, over time, our perception of the city is fractured into a “paradoxical conglomeration” in which the relationships of intimacy and locality are replaced by interrelationships characterised by remoteness and transmission.<sup>135</sup> Here we experience the urbanisation of real-time and the culture of paradox: we can arrive at a destination without the physical need to leave through the conduit of technological systems. Interval gives way to interface. There is no journey or time lag complicating a sense of temporal connectedness; inside and out no longer have importance, there is no before and after, but only the tele-presence of real-time.<sup>136</sup>

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<sup>133</sup> Ballard, *The Atrocity Exhibition*, 108.

<sup>134</sup> Paul Virilio, *From Modernism to Hypermodernism and Beyond* (London: Sage, 2000), 69.

<sup>135</sup> Virilio, *Open Sky*, 19.

<sup>136</sup> *Ibid*, 45

Pursuing this idea further – within the context of a traumatic event as opposed to say a casual event like a conversation in the park when we tend to remember an aspect of the conversation rather than the vivid details of the park and its surroundings – victims of trauma will often describe in great detail the context of the traumatic event along with the experience of time being altered in some way. This could be considered as something akin to an extreme temporal focus; details become overwhelming as there is too much information to process. In a study of novice skydivers, Leah A. Campbell and Richard A. Bryant investigated how perceptions of time may alter in the lead up to, and during, a jump. More heightened levels of fear were associated with reports of time distortion where a significant number of skydivers reported an increase in subjective time prior to a sky dive. This was consistent with predictions that time estimation is influenced by how much a situation is “strenuously anticipated.” It is common for people in stressful situations to report that time seemed to slow or stand still in the lead up to, and during, an event, and then they report that time went very quickly after it. In this scenario there is a deluge of intense information and generally only fragments are remembered, and the usual, orderly process of narrative memory is disrupted.<sup>137</sup> Virilio asserted that the nature of tele-presence, video, film, image, virtual reality, alters our ability to create and store memories in an orderly way.<sup>138</sup> It is the splitting of time into fragments that he was interested in, the invasive nature of telecommunication, something that limits how we retain and store memory that has evolved over many millennia through the need to create a narrative around temporal context.<sup>139</sup>

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<sup>137</sup> Leah A. Campbell and Richard A. Bryant, ‘How time flies: A study of novice skydivers, Behaviour Research and Therapy,’ *Elsevier* 45 (2007): 1389-1392.

<sup>138</sup> Virilio, *Open Sky*, 45.

<sup>139</sup> Paul Virilio, *The Vision Machine* (Bloomington: Indiana University Press, 1994).

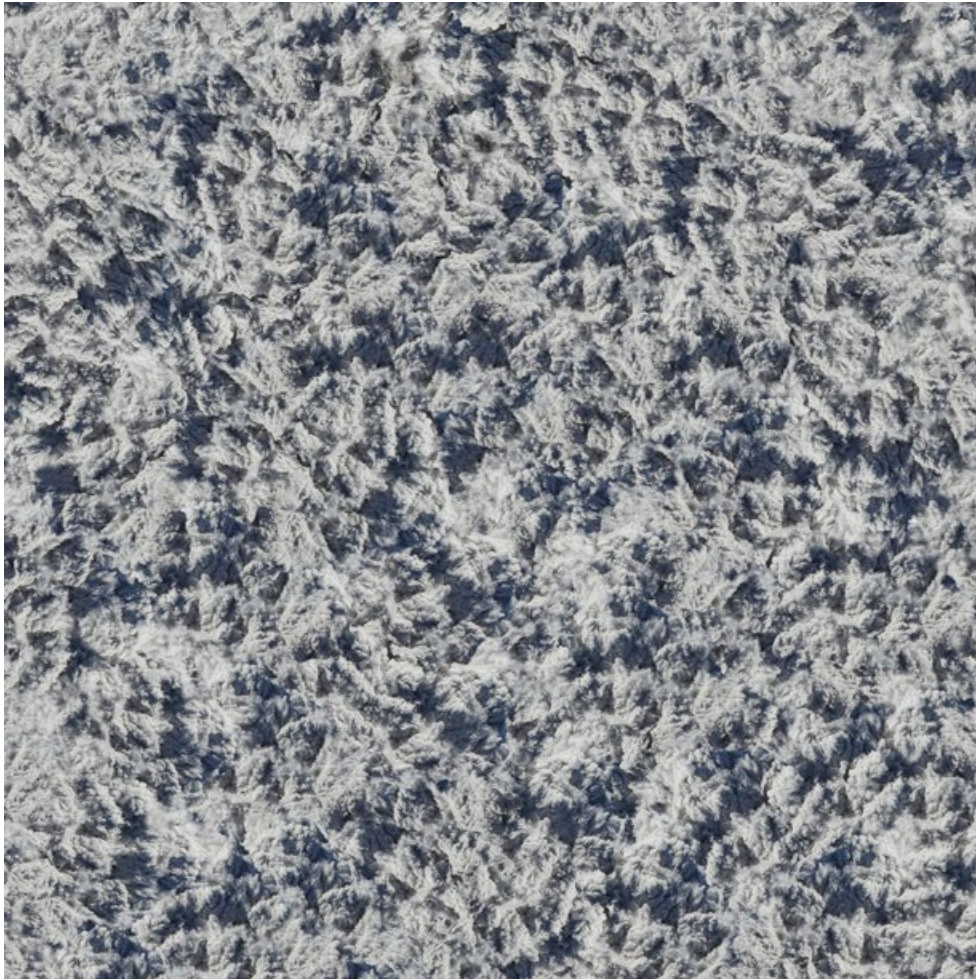


Figure14. David Manley, *Post Traumatic Urbanist #3* (detail), from the *Post Traumatic-Urbanist Series*, 2017.

*Post Traumatic-Urbanist #3*, 2017 (see fig. 14) developed alongside a series of diorama works. The photographic component of the installation piece was created using a small sample of a high-resolution image, captured by New York City police cameras mounted on a helicopter, that depicted the extraordinary dust plume that was created when the Twin Towers collapsed. This plume released hazardous toxins and deadly asbestos into the air. The implosion of the towers pulverised the asbestos into ultra-fine particles and scattered debris over

lower Manhattan. The ongoing effects of these materials on the health of New Yorkers is yet to be fully realised as the symptoms of asbestosis can take many years to develop.<sup>140</sup> The work is a tapestry of small segments of the dust cloud stitched together over a thousand times to create the final image. The re-staging of the event within a practice-based context investigates the repetitive nature of the 24-hour media cycle by combining snippets of the original image to create a traumatic landscape from above, an ultra-plume of latent catastrophe.

One recent incident that brings into sharp focus the links between violence, trauma and the speed of the image within a contemporary societal context was the Christchurch Mosque massacres, which occurred in New Zealand on the 15th March 2019. There was an obvious physical violence attached to the massacre that had a devastating impact on the victims and families, yet in the aftermath of the event much of the public condemnation centred on how social media was implicated in the killings. The event was a compelling reminder of the latent violence of technology and how its imaging possibilities were integral to the terrorist's aims and objectives. As the headlined of Kevin Roose's New York Times article pointed out, the killings were "A Mass Murder of, and for, the Internet."<sup>141</sup> Much of the outrage was concerned with the way in which the gunman announced his intentions before the attacks to an audience and then live streamed his murderous rampage on Facebook, footage that was then shared across a variety of platforms.

Condemnation of social media platforms considered the way in which these sites feed extremist beliefs by algorithms designed to encourage likes, and generate recommendations for more extreme content. Roose describes this as a deliberate loop that encourages more time spent on the platform and therefore more exposure to advertising, which generates revenue for the company. The Christchurch terrorist understood that such technology would amplify the horrific detail of the

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<sup>140</sup> Michelle Whitmer, 'Asbestos, 9/11 and the World Trade Centre,' 2008, Asbestos.com, accessed 19 February 2020, <https://www.asbestos.com/world-trade-center/>.

<sup>141</sup> Kevin Roose, 'A Mass Murder of, and for, the Internet,' *The New York Times*, 15 March 2019, accessed 19 February 2020, <https://www.nytimes.com/2019/03/15/technology/facebook-youtube-christchurch-shooting.html>.

atrocities through our engagement with it as a society en masse. This was evident in the way in which politicians and commentators broadly condemned Facebook, YouTube and Twitter for the role they played in the killings. One might argue that the imaging capabilities of these media platforms helped to encourage the crime through their mass audience opportunities and uncensored distribution capabilities. There is a latent violence attached to these sites, which have up until now have existed without regulation. More broadly, the event exposed this potential by crystallising their agonisingly negative impacts in the minds of many.

Here I would like to link Zygmunt Bauman's (1925 – 2017) work *Modernity and Ambivalence*, 1991 to Virilio's ideas in relation to technology. This idea is important within the context of the discussion as it is linked to the influence of technology on societies and helps to create a framework that further interrogates its disruptive capacity. Bauman's work characterises the experience of modern ambivalence as the discomfort we feel when we are unable to designate order or classification in a world of chaos. The human desire to create such order and classification has been seen by many as the driving force of contemporary technologically orientated societies. Take, for example, the development of computing systems. As one set of problems are solved another level of complexity and problems arises, creating a feedback loop in which the need to assign order paradoxically creates even more disorder. Bauman describes this as a fundamentally conflicted process.<sup>142</sup>

Bauman's ideas can be illustrated through works by the artist Jack Goldstein (1945 – 2003) such as *Untitled*, 1983, (see fig. 15) Goldstein explored the inherent calamity of construction and the coded future of architecture's demise. The precarious nature of Goldstein's earlier sculptural pieces and the materials he used exploited the possibilities of structural danger as well as the ephemeral nature of architecture—something that challenged commonly held perceptions of its rep-

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<sup>142</sup> Zygmunt Bauman, *Modernity and Ambivalence* (Cambridge, UK: Polity Press, 1991).

resentation as one of permanence. As Alexander Dumbadze notes in regard to Goldstein's work, "Goldstein left the status of much of this work to fate."<sup>143</sup> He used wooden beams in the construction of his early sculptural pieces, first acquiring such beams from local lumberyards and then later arranging them in his studio or gallery environments in a "dynamic" and freestanding way.<sup>144</sup> The force of gravity, combined with Goldstein's refusal to adhere the components of the structures together, meant that the works would inevitably fail under the weight of a variety of certain unanticipated variables.

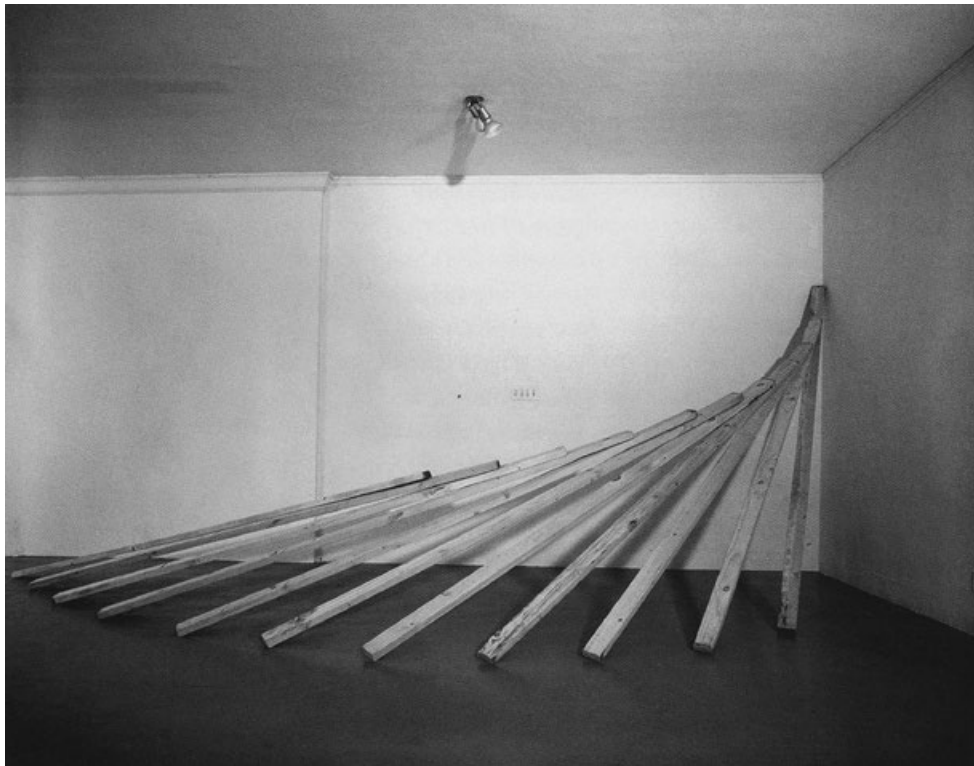


Figure 15. Jack Goldstein, *Untitled*, 1971; wood dimensions variable.

<sup>143</sup> Alexander Dumbadze in Phillip Kaiser (ed.), *Jack Goldstein x 10,000* (New York: Orange County Museum of Art and Delmonico Books, 2012), 18.

<sup>144</sup> *Ibid.*, 12.



Goldstein's later work traversed what John Armitage refers to as the "apocalyptic sublime," a genre of art closely aligned with Virilio's notions and engagement with contemporary visual culture.<sup>145</sup> Virilio argues that contemporary technologies and materials have had a revolutionary impact on the way in which art is produced and consumed today within a culture of speed.<sup>146</sup> Goldstein was an appropriation artist; he used a variety of materials and mediums in his work that borrowed from the broader corporate and media-driven narratives of the time during the 1980's. His practice tapped into this discourse of market imperatives and the development of technology pointing to the coded accident embedded into such systems. In other works, Goldstein used cinematic representations that exploit our expectations of the photographic medium. His large-scale paintings employed a photorealist aesthetic, which emphasised the gulf between what we expect to encounter through doomsday scenarios that explored the intersection between technological progress and its influence on human behaviour and the notion of the sublime. These works remind us of Virilio's concerns in regard to the "discontinuity" of visual expectations.<sup>147</sup>

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<sup>145</sup> Armitage (ed.), *Virilio Now*, 201.

<sup>146</sup> Paul Virilio, *Art as Far as the Eye Can See* (London: Bloomsbury, 2010), 6.

<sup>147</sup> Armitage (ed.), *Virilio Now*, 212.



Figure 16. Jack Goldstein, *Untitled*, 1983, acrylic on canvas 152.4 x 368.5 cm. Courtesy: Mitchell Innes & Nash, New York.

Bauman's ideas point to the fact that when we develop new systems we also unwittingly create the flaws and mishaps that plague its functioning. Virilio described a similar ambivalence as the original 'accident' of the machine: "When you invent the ship you also invent the shipwreck."<sup>148</sup> In *Speed and Violence: Sacrifice in Virilio, Derrida, and Girard*, 2001 Mark Featherstone discusses this theory within the context of the Challenger disaster and argues that the pace and development of technology becomes limited through any fault in the technology that the accident may disclose. Here we see the dynamic interplay between the way in which technology leads to ever increasing complexity that in turn creates subsequent ever more complex faults that need to be addressed, once they are revealed, that in turn create a reliance on a continual reinvention of systems, and in the case of the Challenger the fault was cataclysmic.

<sup>148</sup> Mark Featherstone, 'Speed and Violence: Sacrifice in Virilio, Derrida, and Girard,' *Anthropoetics* 6 (Fall 2000/ Winter 2001), accessed 19 February 2020, <http://anthropoetics.ucla.edu/ap0602/virilio/>.

These systems inevitably fail at varying levels, which promotes the development of new technologies to deal with these subsequent failure – a circularity of ambivalence Virilio considered to be a by-product of modernity.<sup>149</sup>

Photography has always been a medium used to exploit and manipulate the truth through state-controlled propaganda and advertising. However, the potential fluidity of the new digital image capture systems, editing software and viewing platforms has arguably turbocharged this potential. Image registration has shifted from a chemical trace on photographic emulsion to the infinite options for manipulation of the elastic, electronic bitmap, and this digital terrain has further questioned notions of authenticity. This fluidity, combined with the deluge of imagery from a myriad of mobile devices and often unverifiable sources, further complicates our relationship with the image, encouraging a climate of uncertainty in which fake news and questionable media sources proliferate and act to disrupt traditional paradigms of media consumption.

Media technologies such as mobile devices, computers and virtual reality platforms continue to influence our understanding and experience of the world through the creation of spaces that are heavily influenced by the image. This has created new ways to conceptualise the idea of community through contemporary constructs of networks that go beyond physical localities and are arguably made up of increasingly distant and fragmented relationships developed in the frontiers of cyberspace. These networks are patched together to form a sense of personal community. More and more we live in a time of “immanent connectedness” where we maintain a “symbolic proximity” with each other.<sup>150</sup> This proximity is achieved through the connectivity of computers and mobile devices, and according to David Morley this instant tele-presence not only skews our perception of time but also changes what he describes as our “alterity” or a sense of “otherness” in relation to our spatial and temporal frameworks of the world.<sup>151</sup>

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<sup>149</sup> Paul Virilio, *Politics of the Very Worst*, (Los Angeles: Semiotext(e), 1999), 11.

<sup>150</sup> Morley, *Home Territories*, 179.

<sup>151</sup> Ibid.

Given this new connectivity and its psychological influence, we now find that technology and our ever-increasing reliance on it promotes a state of constant availability as communication agents. The contemporary experience of this alterity changes our understanding of physical connectedness and has an equal and opposite effect of diminishing its importance. The immediacy of a world that was previously inaccessible becomes more tangible within the context of information gathering as any event, regardless of geographical locality, can be communicated within a connected world and thus in principle experienced immediately.

It is important to consider some of the ways in which the new media platforms and their instantaneous nature affect the trajectory of politics and societies, especially in light of Bauman and Virilio's concerns. In recent history the disruptive capacity of tele-visual technologies has radically changed the fundamental nature of democracy. For example, image power and cyber technologies are increasingly being used by a variety of online hackers to influence the way we think and indeed vote. The 2016 United States presidential election has been widely described as an election determined by outside influences that understood the power of the image and its use through social media to manipulate a result that was in their best interests.<sup>152</sup> When we consider this some interesting outcomes have been noted that relate to the influence of the relatively new social media platforms that rely on the instantaneous power of the image cycle. The Pew Research Centre found that 42% of voters in the election accessed their news exclusively through social media.<sup>153</sup> Ed Carr, a liberal left commentator, argued that it was the media of the cosmopolitan elite that drove a backlash from conservative voters to elect Donald Trump as the US President. He noted that many of these voters felt disenfranchised with mainstream media sources, believing that traditional news outlets had disregarded their negative experiences of immigration and globalisa-

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<sup>152</sup> Amol Rajan, 'Can Democracy Survive Facebook?', 1 November 2017, BBC News, accessed 19 February 2020, <https://www.bbc.com/news/entertainment-arts-41833486>.

<sup>153</sup> Jeffrey Gottfried and Elisa Shearer, 'News Use Across Social Media Platforms,' 6 September 2017, Pew Research Centre, accessed 19 February 2020, [https://www.journalism.org/wp-content/uploads/sites/8/2017/09/PJ\\_17.08.23\\_socialMediaUpdate\\_FINAL.pdf](https://www.journalism.org/wp-content/uploads/sites/8/2017/09/PJ_17.08.23_socialMediaUpdate_FINAL.pdf).

tion.<sup>154</sup>

What are some of the psychological drivers that help to feed the current crisis of democracy that theorists such as Carr are concerned with? As previously mentioned in Chapter 2 the image is a complex shaper and determinant of how societies change and develop and Morley described the mechanism of this phenomenon back in 2000 before the advent of mainstream social media. He argues that one of the ways that people learn to assimilate with their environment is through the symbolic naming of places to create familiarity and a sense of connection.<sup>155</sup> When inevitable change occurs, take for example globalisation and its displacement of labour and shifts in economic power bases, members of a society may encounter a dislocation within the familiar. Examples of this may be changes in the distribution of labour and production or the introduction of new forms of cultural symbols and identities that encroach on peoples' lives, undermining a sense of safety and stability.<sup>156</sup> This disenfranchisement encourages resentment towards state and political bodies that are seen to represent and encourage a shift in any status quo. Perhaps this process may be one aspect in the development of xenophobia and racism as people feel like strangers in their own homes and seek to enhance their own status by inflicting a quality of strangeness onto others?<sup>157</sup>

Carr argued that Facebook had created an "echo chamber" for its users, and their views reinforce their own opinions and beliefs, and helped mobilise what has become known as the alt-right to vote in great numbers in support of Donald Trump. "The more we click, like and share stuff that resonates with our own views the more Facebook feeds us with similar stuff" and here we see a contemporary example of the technology mediating an event through algorithms designed to promote capital.<sup>158</sup> Trump's political advisors realised the power of these algorithms to galvanise his rhetoric while at the same time enhancing a distrust of mainstream media. This

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<sup>154</sup> ed. Carr, 'Nationalism Grows,' 19 November 2016, Radio National: Saturday Extra, Australian Broadcasting Commission, accessed 19 February 2020, <https://www.abc.net.au/radionational/programs/saturdayextra/nationalism-grows/8037858>.

<sup>155</sup> Morley, *Home Territories*, 174.

<sup>156</sup> *Ibid.*, 175.

<sup>157</sup> *Ibid.*, 174.

<sup>158</sup> Carr, 'Nationalism Grows.'

analysis serves to highlight the influence that technology can have over our experience and socio-political engagement. Suffice to say that the influence of technology overlays what has gone on before, thus transforming our experience of the world especially within the rapidly changing social and political contexts that are more and more influenced by the encroachment of imaging technologies.

*ZuckerTrump* 2017 (See fig 17) is a work that was inspired by the research above and incorporates the possibilities of digital manipulation in a satirical way that draws attention to the power of the image to shape the social and political landscape in unpredictable ways.



Figure 17. David Manley, *ZuckerTrump*, 2017, sourced digital media.

In this chapter the traumatic imprint of the image was considered through events such as the September 11th terrorist attacks and the Christchurch Mosque shootings. An historical investigation into Chargot's flash photography of cat-

aleptic patients strengthened Virilio's concerns in relation the disruptive capacity of the image. The way in which the image has shaped social and political structures was developed further within a context of chronoscopic time. In light of this Bauman's theory of the ambivalent nature of modernity was linked to this disruption. Within this framework, technology can be considered as the driving force of modern culture where its systemic breakdown is addressed through ever more complex technological systems that have their own latent failures.

## Chapter 4. Big Optics

This chapter explores issues around remote and proximal imaging technologies and introduces architecture as a visual staging ground and indicator of trauma. State and military sanctioned violence is interrogated through image resolution thresholds that are deliberately calibrated to censor information. Imagery generated from mobile phones and satellites may present issues of verification and a restricted humanity that may complicate any interpretation of such data, especially when viewed separately.

Artist Richard Mosse's work *Incoming*, 2017, is made with a military grade thermal imaging camera that he used to document the refugee exodus from Syria to Europe. These cameras are designed to detect thermal radiation, including the heat from human bodies from a distance of 30km. Under international law, such cameras have been designated as weapons because of the opportunities they create for long range surveillance and targeting by the military. Mosse re-appropriates the camera, subverting its military use to document the movement of the Syrian refugees in their plight, which is a direct result of civil war. Interestingly, the effect of the use of the camera by Mosse subverts the tropes of military imaging that may act to distance the spectator by humanising the imagery and making it even more compelling through the visceral monochrome depiction of body heat emanating from the refugees juxtaposed with the cold steel of military infrastructure. "The world around them whether the vast undulating sea or the makeshift streets of the "Jungle" camp in Calais, teaming with displaced humanity, seems Ballardian in its relentless grey otherness," said a reviewer when commenting on Mosse's work.<sup>159</sup> Mosse's work creates a resistance to the accelerative pace and speed of modernity by appropriating military technology, turning it back on itself in order to draw attention to this humanitarian crisis created by the Syrian civil war.

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<sup>159</sup> Sean O'Hagen, 'Richard Mosse: Incoming review - shows the white-hot misery of the migrant crisis,' *The Guardian*, 15 February 2017, accessed 19 February 2020, <https://www.theguardian.com/artanddesign/2017/feb/15/richard-mosse-incoming-re-view-barbican-curve-migrant-crisis>.





Figure 18. Richard Mosse, still from *Incoming*, 2017, three channel video and sound installation.

The opportunities afforded by military optics and imaging systems are enormous. Such technology has shaped and changed both the physical and political landscape. Artist Eyal Weizman explored the implications of the remote imaging of architecture and the political implications of this within a context of forensic investigation and its potential influence on trauma and memory. In his work, *Violence at the Threshold of Detectability* 2010 he considers historical and recent events in which the use of aerial photography has played a major role in influencing our understanding of an event and how it is also complicit in the way we visualise and redefine our world through technological systems. Weizman considers a controversial legal battle that took place during the early months of 2000. The case interrogated aerial the capacity of photography to be used as key evidence in court. Opponents in the case were the strident Holocaust denier David Irving and the publishing company Penguin Books. During the case, both sides forced the court to test the veracity of aerial photography as empirical evidence. Irving alleged that an image depict-

ing holes in the roof of crematorium II of the Auschwitz-Birkenau concentration camp, taken from a height of 13,000 feet by US surveillance aircraft towards the end of the WWII, were deliberately faked. As an expert witness for Penguin books, Robert Jan van Pelt argued that the holes were used to pump lethal Zyklon-B gas into the crematorium as part of the mass extermination of the Jewish population undertaken by the Nazis during the war.<sup>160</sup> Irving countered this by arguing that the images had been doctored through the use of a fine artists' brush that was used to render the holes in the roof of the crematorium onto the negative, and that this in turn supported his quite ludicrous argument that the Holocaust did not occur: the holes were faked and therefore the Holocaust was faked. Irving's argument followed the line that the holes were part of a larger conspiracy that propagates the idea that the Nazis were responsible for the mass genocide of the Jewish population which deniers obstinately believe did not take place.<sup>161</sup> Van Pelt argued, by contrast, that the holes in the concrete roof slab of crematorium II were used to cipher the poison gas into the chamber of the building.

The roof of the crematorium collapsed when German guards tried to destroy the building immediately after the end of the war in an attempt to hide evidence of its use. The court case focused primarily on the existence of these holes and Irving argued that there was no physical proof of their existence. This lack of a 'smoking gun' argument has been used in the past as evidence by Holocaust deniers to denigrate the testimonies of eyewitnesses and most notably victims. Weizman describes the obsessive nature of Irving's focus on this lack of evidence that would later be used by the defence to counter his strategy. "By posing matter against memory, they demanded a history without subject and beyond language."<sup>162</sup> The lack of physical evidence that proved the existence of the holes was used as negative evidence, a tactical argument employed to disrupt and negate information given by accounts of

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<sup>160</sup> Richard Brietman, *The Architect of Genocide: Himmler and the Final Solution* (New Hampshire: The University Press of New England, 1991).

<sup>161</sup> Eyal Weizman, 'Violence at the Threshold of Detectability,' *e-Flux* 64 (2015): 2, accessed 19 February 2020, <https://www.e-flux.com/journal/64/60861/violence-at-the-threshold-of-detectability/>.

<sup>162</sup> *Ibid.*

victims and witnesses.

Photographs of the crematorium were inadvertently taken during a US reconnaissance mission conducted over Poland, which was documenting a German petrochemical factory, towards the end of the war. These images also showed sections of the crematorium at the Auschwitz-Birkenau complex because, coincidentally, it happened to be very close to the factory. This was only discovered in 1978 when two investigators from the CIA examined the negatives and noticed what looked like four holes in the roof of the structure. These were the same holes used to pump gas through tubes that ran into the roof of the building - the same holes that Irving argued were faked. During the case, van Pelt produced evidence from the aerial image expert Kevin Bryant, an employee of NASA, to give his opinion and analysis of the negative, and specifically whether or not the film had been tampered with in any way. Bryant presented new digital image processing techniques that were used to magnify the original silver halide crystals—the core component of the negative film. The important point here was how the concrete was recorded on the film that was exposed from an altitude of 13,000 feet.<sup>163</sup>

According to Bryant, at this height a hole on the negative in the roof of the crematorium would be roughly the size of a human figure and would be recorded onto the film as one silver halide crystal. “A single grain represented an area of about half a metre squared on the ground.”<sup>164</sup> Bryant demonstrated that objects of that size imaged from a similar height would expose just one single grain of film and that the shape of the silver halide crystal mimicked the stroke of a fine brush. Bryant compared the holes on the roof of the crematorium with other images recorded by the surveillance aircraft that showed prisoners walking in the campground. The inmates also appeared as brush strokes on the film. “When the object photographed approximates the recording ability of a negative, it is in a condition that we can refer to as the threshold of

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<sup>163</sup> Ibid, 5.

<sup>164</sup> Ibid, 9.

detectability.”<sup>165</sup> Van Pelt had developed a strong contextual case for the existence of the holes in crematorium II by drawing together historical and recent developments in aerial imaging technologies. The case opened up important discourse within the context of imaging resolutions and their limits and how this can be used for political and tactical advantage. For instance, the size of the hole a drone missile makes when it punctures a cement structure is actually smaller than publicly available satellite imaging resolution capabilities, i.e. one digital pixel in the sensor array bitmap. In other words, the size of the hole along with imaging thresholds are designed to go undetected. Onboard satellite imaging systems have the capacity to show such information, however, it is censored through the choice of image resolution agreed on by state and military agencies.

Up until 2014 legal requirements stipulated that publicly available satellite image resolution would be set at 50cm per pixel, where one pixel represents one half a square metre of the ground when images are taken from an orbiting satellite height. The legal determinant of this resolution threshold exists because it is a similar size to that of a human being. A 50cm pixel resolution is desirable because it allows for privacy as one single pixel will not identify a person; a single pixel and will only show tonal and colour variations excluding other details. “The pixel resolution is not only a product of optics and data storage capacity, but a modular designed according to the dimensions of the human body.”<sup>166</sup> This image threshold has a number of advantages depending on how you look at it. Weizman pointed out that the security rationales for deliberately limiting these thresholds means that sites of “strategic” significance can be “camouflaged” through such thresholds and perhaps more importantly the fifty cm limit could mitigate any evidence of military activity.<sup>167</sup> This investigation may help to shed some light on the limits of imaging thresholds within the context of forensic architectural investigations and the po-

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<sup>165</sup> Ibid, 5.

<sup>166</sup> Ibid, 7.

<sup>167</sup> Jonathon Green, ‘Forensic Architecture,’ 20 April 2019, Radio National: Blueprint for Living, The Australian Broadcasting Commission, accessed 19 February 2020, <https://www.abc.net.au/radionational/programs/blueprintforliving/forensic-architecture/10998030>.

litical reasons as to why these thresholds exist.<sup>168</sup>

Much of Weizman's work explores the forensic evidence gathering opportunities created by the new technologies. Drone missiles, for instance, are designed to puncture cement structures and then detonate inside the building, discharging thousands of pieces of metal shrapnel that is intended to kill, or severely injure, any occupants while any holes created in the roof remain difficult to detect. "The human figure is the thing to which drone vision is calibrated, obviously because it is designed to deliver munitions to people and kill them."<sup>169</sup> Such vision is modulated to identify individuals with varying degrees of success, whereas satellite images are deliberately calibrated to mask detail thus rendering forensic investigations difficult.<sup>170</sup> Killing for military purposes, and any subsequent investigation, often relies on image investigation and interpretation, both of which are influenced – if not controlled to some degree – by a combination of proximity and remoteness. As highlighted above, the monitoring of drone strikes by the human rights organisations and the public is often conducted through information provided by satellites that are deliberately calibrated to render images at a comparatively low-resolution. There is an important point here when we consider the core principles of forensic science in regard to information gathering in the context of criminal war activity. Those investigating human rights abusers are often disadvantaged by the low-resolution threshold of the image data they are able to collect, which ultimately benefits the perpetrators of such crimes.<sup>171</sup>

A side note that encapsulates the problems faced by those who seek to hold perpetrators of human rights violations to account is what is known in military speak as the Glomar response, which is a term used by US military officials to counter accusations of drone activity involving the death of civilians.<sup>172</sup> This response is intended to 'neither confirm nor deny' details of such activity and is characterised instead by a lack of detail, something compounded by the satellite reso-

<sup>168</sup> Eyal Weizman, 'Violence at the Threshold of Detectability,' 7.

<sup>169</sup> Ibid.

<sup>170</sup> Ibid.

<sup>171</sup> Andrew Herscher cited in Bechir Kenzari, *Architecture and Violence* (Barcelona: Actar, 2011), 138.

<sup>172</sup> Paul H.B. Shin, 'The CIA's Secret History of the Phrase 'Can Neither Confirm Nor Deny'', 7 June 2014, ABC News, accessed 19 February 2020, <https://abcnews.go.com/US/cias-secret-history-phrase-confirm-deny/story?id=24033629>.

lutions mentioned above. Both systems work together to censor information, creating difficulties for those wishing to hold those involved in war crimes to account, especially in areas of the world where media coverage is blocked. Glomar makes it much easier for the military to evade any questioning and is a deliberate tactic that is encouraged by the calibration of the imaging technologies that creates a blanket of information censorship. Occasionally eyewitness images do make their way out of areas where media blockades are imposed, but often the footage is unverified and difficult to substantiate. A case in point was footage smuggled out of Waziristan province that depicted the aftermath of a US drone strike inside a house that graphically demonstrated how the occupants were killed.<sup>173</sup> Outlines of the victims' bodies were traced into the walls of the room by shrapnel that was not absorbed by their bodies when the ordinance exploded. The walls acted like a recording device akin to the emulsion of photographic film, creating a negative imprint of the victims on the walls. These images are reminiscent of the ghostly shadowing effect of human figures that were etched into the asphalt after the detonation of the atomic bombs in Hiroshima and Nagasaki. Here, architecture and the event coalesced as an indexical representation of the moment of violence.

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<sup>173</sup> Weizman, 'Violence at the Threshold of Detectability,' 10.



Figure 19. The shadow of a Hiroshima victim is permanently etched in stone, August 6th, 1945, unknown photographer.

Since 2001 the American military has continued to increase its drone combat missions in a variety of regions around the world.<sup>174</sup> Vision from these missions is delivered to the public through low-resolution black and white footage that rarely shows any collateral civilian damage. As discussed previously in Chapter 2, theorists such as Virilio and Baudrillard argued that war is increasingly controlled through image-based technologies. With the relentless development of global surveillance from satellites, stealth and un-manned drones, the tar-

<sup>174</sup> W.J. Hennigan, 'Drone Pilots go to war in the Nevada desert, staring at video screens,' *Los Angeles Times*, 17 June 2015, accessed 19 February 2020, <https://www.latimes.com/nation/la-na-drone-pilots-20150617-story.html>.

getting and killing of enemies has become more abstract and remote in a physical sense. Part of the reason as to why these technologies were developed was to remove the soldier from the immediate theatre of war, yet such technologies afford their own set of ethical problems as their use has significant psychological implications for those who operate these systems. This form of warfare may have a level of detachment, but the trauma experienced by the drone operators in the line of their work is very real.

Since in the late 1990s remote sensing technologies via satellite have been commercially available and non-government agencies and the public have been able to access terrestrial imagery of the globe from space relatively easily. During the same period the proliferation and evolution of mobile phones equipped with cameras and video capability meant that anyone could become a live news broadcaster. How such data is combined to make sense of the world presents a variety of challenges. The integration of social media and news channels further complicates the way such data is disseminated; the validation of stories and events becomes difficult. Compounding these challenges is the notion that the concentration of real-time media coverage through instantaneous news feeds has a direct effect on how news events unfold. In the past media coverage generally came from the perspective of an observer.

Digital technology and social media, and their immediacy, becomes an assertive part of the evolving news story. Media coverage of mass school shootings in America are deliberately prolonged to encourage the importance of an event by raising contentious political issues that may or may not have a direct relationship with the situation at hand. Here we encounter the complexity and totality of the technology and its role in shaping how we perceive and interact with the world something that is mixed together with the dynamic interplay of human political behaviour and the type and quality of infor-



mation provided.<sup>175</sup> Andrew Herscher argues that along with this expansion of vision comes a new type of “violence” that he links to ever evolving technology.<sup>176</sup>

This shift in the technical mediation of human experience through systems of remote sensing has redefined the visual field and our place in the world. Our understanding of what it means to be human often relies on the dissemination of information provided to us through what Herscher describes as an “inhuman temporality and spacing” from television, computers, and smart phones that continue to evolve at a tremendous pace whereby the reporting of truth passes from an historical context of proximal reportage to that of remote imaging. As he says, “The availability of satellite images may therefore render the witness as unverifiable thus removing the human experience.”<sup>177</sup> Remote sensing technologies create an opportunity for anyone with a computer to scrutinise the globe. Alongside this we have seen the rise of social and political activism through the use of imagery that was previously unavailable to the public. When we think of remote sensing technologies and their ability to substantiate violence, one could argue a case that such vision offers a totally believable account of events compared to the “distortions” that may occur through proximal sensing technologies given the issues around verification and authentication that exist today.

To demonstrate Herscher’s point, in the context of evidence of human rights violations, satellite imaging’s perspective from above may add to or exacerbates the lack of evidence gained on the ground by those involved with or who bear witness to violent events.<sup>178</sup> There is as an “incompleteness” and “inadequacy” of information obtained from this vantage point.<sup>179</sup> “The satellite’s supplementation of a human witness is simply an enhancement of intelligence.”<sup>180</sup> Such evidence can be substantiated by information from those on the ground where remote and proximal evidence can then be combined to develop a more accurate picture of the event. The issue here is that im-

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<sup>175</sup> Nell Lenze, Charlotte Schriwer and Zubaidah Abdul Jalil (eds), *Media in the Middle East: Activism, Politics and Culture* (New York: Palgrave Macmillan US, 2017), 107-142.

<sup>176</sup> Herscher cited in Kenzari, *Architecture and Violence*, 141.

<sup>177</sup> Ibid.

<sup>178</sup> Ibid.

<sup>179</sup> Ibid, 131.

<sup>180</sup> Ibid.

ages gathered remotely may become a representation of the event, which could be used to augment and clarify eyewitness accounts and actual evidence of war crimes and human rights abuses on the ground. Given the deluge of proximal images and issues related to their verification, as well as the obvious opportunities for manipulation and distortion, such imagery can become problematic. Herscher asserts that such imagery needs to be discerned through a combination of optics that may augment the truth and neutralise the restricted humanity that such technologies may encourage when considered on their own.

Satellite imaging technology such as Google Earth is capable of photographing and recording terrestrial landscapes intermittently at a resolution that can readily depict architectural structures, while maintaining the invisibility of the occupants. In this context the monitoring and visualisation of architecture remotely can demonstrate compelling evidence of violence through the destruction of buildings and infrastructure by comparing before and after images.

A case in point is the Kyo-hwa-so No. 1 prison camp in North Korea that has been used to detain political prisoners. This structure is visible from orbiting satellites via Google Earth and the physical nature of the architecture can be studied in detail to reveal the use of its spaces for confinement, torture and burial. Remote analysis of violence may often concentrate on how architecture is affected by military interventions through the use of photographs that enable temporal comparisons. In this scenario architecture becomes a key signifier, as it can be analysed both pre and post destruction. These images can then be considered in light of testimonials from prisoners who have managed to escape from the prison, supporting concerns about human rights abuses by the North Korean regime. Eyal Weizman's Forensic Architecture project<sup>181</sup> employs this technology in order to draw attention to these issues and is considered here as an example of how the use of the tech-

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<sup>181</sup> 'About – Agency,' Forensic Architecture, accessed 19 February 2020, <https://forensic-architecture.org/about/agency>

nology is upended, exposing the covert violence attached to systems of confinement and subjugation.<sup>182</sup> Here photography is used as a counterpoint that can interrogate the passive acceptance of human rights violations through a lack of information and substantiated evidence. The use of these technologies in this way could not be considered as mainstream. Such technology is generally controlled by military and government organisations that have the power to use it at their own discretion. Artists and activists do however encourage us to consider these imaging capabilities within a new light that questions dominant paradigms of power and control.



Figure 20. Aerial view of Nagasaki: before (left) after (right) detonation of an atomic bomb (RWU Archives and Special Collections/Digital Commons).

Virilio argues that remote sensing and virtual reality technologies create a situation in which we increasingly negotiate our lives through a type of “stereoscopic” reality.<sup>183</sup> Distance mediated through the immediacy of this technology will mean that our engagement with the world through our perceptive capabilities will need to incorporate an additional reality in order to grapple with the experience of two worlds at once. This creates a set of values within one world that may not pertain to the other. As Purser argued, “Rarely are such real time technologies assessed for the disorienting effects they may have on our personal, social and collective perspectives.”<sup>184</sup> Drawing from the discussion earlier it is often the case that

<sup>182</sup> Herscher cited in Kenzari, *Architecture and Violence*, 137.

<sup>183</sup> Virilio, *Open Sky*, 135.

<sup>184</sup> Ronald E. Purser, ‘The Coming Crisis in Real-Time Environments.’

proximal imaging remains unsubstantiated as the nature of the conflict may create a climate where information becomes somewhat diffuse and difficult to consider. Corroborated information from those on the ground can help to substantiate claims of human rights violations, but this may often depend on whether or not this information can be disseminated to the outside world. The “arrogation” of those who witness violence and conflict on the ground and the unsubstantiated nature of witness testimonies is a reminder of the “restricted humanity” noted earlier.<sup>185</sup> “It is impossible to state that no one was in the war zone, only if those who were the objects of violence and human rights protection do not count as one.”<sup>186</sup>

Through a consideration of the physical perspective of the Earth that remote sensing technologies can deliver, we see the importance of terrestrial objects such as architecture in orientating this vision from above. In a context of violence and trauma, architecture becomes the object for which this information is identified and witnessed. Or, as Herscher attests, “architecture has assumed the status of a privileged representation of humanity in distress.”<sup>187</sup> From proximal and remote vantage points (as well media coverage of events such the terrorist attacks on New York in 2001 and more recently the Syrian Civil War) architecture has reasserted its place in our collective conscious as a potential space for violence that signifies humanity’s predilection to move towards conflict. In an age of remote sensing, architecture has taken on a new form of visibility that indicates a world through a heightened sense of anxiety in which the destruction of the built environment becomes a visual staging ground of suffering that we experience from a variety of compelling view-points.<sup>188</sup>

Maralinga from Geosynchronous Orbit, 2017, (see fig. 21) interrogates the links and possibilities between modernism’s visual aesthetics and digital resolutions within the context of satellite imaging. The work incorporates images appropriated from Google Earth of the Maralinga atomic test site in South

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<sup>185</sup> Herscher cited in Kenzari, *Architecture and Violence*, 143.

<sup>186</sup> Ibid.

<sup>187</sup> Ibid, 130.

<sup>188</sup> Ibid.

Australia, which, when composited together, show the scale of the site while also referencing aerial photography's mapping capabilities. The Maralinga site has architectural significance as the British conducted a number of atomic tests there during the 1950s that required buildings and infrastructure to support the program. This work is comprised of over 20 separate images stitched together to produce a final image at a resolution that incorporates the detail of the landscape and human intervention. In an account of the landscape it would be important to acknowledge the significant indigenous trauma that occurred as a result of these tests.

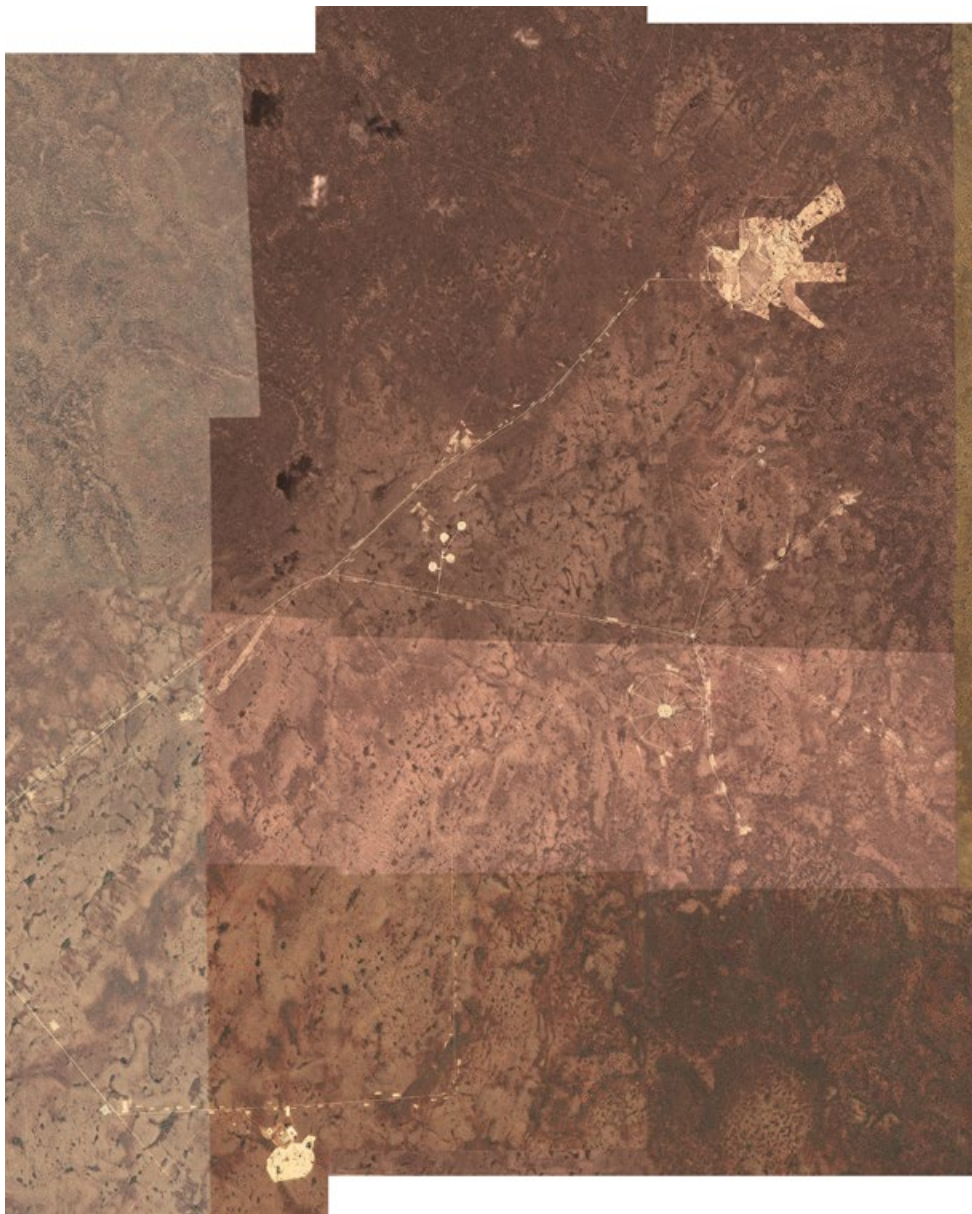


Figure 21. David Manley, *Maralinga from Geosynchronous Orbit*, 2018, archival photographic print (size to be determined).

This chapter has explored the use of military imaging capabilities and issues of image resolution thresholds and censorship. The ambivalent nature of these technologies was examined through their use by artists and Human rights activists to draw attention to the plight of refugees and human rights abuses perpetrated by state and military organisations. Architecture was introduced as the staging ground for the traumatic where proximal and remote imaging data allows the spectator to bear witness to the suffering of others.

## Chapter 5. The Dark Matter of Architecture

This chapter will develop the notion that architecture has continued to assert its place as a signifier and conduit for violence and trauma. This is undertaken through a discussion surrounding the hidden structural violence of social, political and technological systems in which architecture plays a central role. The discussion will link the immediacy of vision and the symbolic power of the image through an analysis of the hidden, objective violence of social and political systems that Slavoj Žižek considers in his book *Violence* 2009.

Jonathan Meades has described war as “politically, demographically and technologically predictive.” It shapes the present and future in innumerable ways, from the distribution of power and the implementation of borders to migration and the inevitable political and social upheaval that population movement creates. Human conflict has always been a prime motivator for the evolution and development of technologies that in turn change the way war is waged. As he says, “We are all beneficiaries of marshal ingenuity.”<sup>189</sup> This historical development can be traced through the architecture of war. For example, throughout history the evolution of the bunker has been characterised by a perpetual antagonism between military technologies. The bunker evolved from castles on hills to underground fortresses in direct response to the development of military firepower designed to destroy it. History also demonstrates that architecture responds to a variety of social forces. Take, for example, the development of architectural brutalism; its form and futuristic aesthetic were partly inspired by Hitler’s Atlantic wall, a massive series of bunker fortifications constructed along the west coast of Europe and Scandinavia during WWII in order to repel an Allied invasion. These Béton-brute structures incorporated new cement moulding technologies that would later inspire architects such as Le Corbusier in the design and rebuilding of post-war Europe.

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<sup>189</sup> Jonathan Meades, *Bunkers Brutalism and Bloodymindedness*, 2014, Vimeo, accessed 19 February 2020, <https://vimeo.com/93963469>.

This new structural technology and unique visual aesthetic revolutionised architectural thinking and building through the development of social housing and civic infrastructure after the Second World War.<sup>190</sup>

The links between architecture and violence are complex and vexed. Most architecture will eventually meet some form of violent end either through entropy, the vagaries of war or the perpetual state of tabula rasa that contemporary economics demands. This reality disrupts the commonly held notion that architecture operates as a stable metaphor in life; a physical representation of refuge and permanence. Images of war are a constant reminder of humanity's predilection to destroy, and architecture is the primary signifier of this destruction.

Photographic images of destroyed cities fill the media cycle. From current conflicts we see a new vision of war via drone imagery captured from above conflict zones that show the physical destruction of cities at relatively close range (see Chapter 5). This aerial footage taken from digital camera systems mounted on military hardware has allowed for a bird's eye view of the destruction of cities such as Aleppo and Mosul in Syria. This footage has become a new and emerging medium for the capture, representation and dissemination of war in a similar way that night vision captured an audience during the first Gulf War. Importantly this new vision can be accessed and seen at the click of a button by the spectator on any computer. It is not just the accessibility of this imagery, but also its immediacy, that significantly modifies and shapes social and political reaction to it. As Virilio attests, "A war of pictures and sounds is replacing the war of objects."<sup>191</sup> The way we view and consume war (i.e. the Syrian War for example) feels peculiarly privileged, even voyeuristic, when we stop to consider the actual death and destruction wrought on civilian populations.<sup>192</sup> Here the destruction of architecture becomes a powerful visual representation of human conflict. If we consider Virilio's

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<sup>190</sup> Paramita Atmodiwirjo and Yandi Andri Yatmo, 'Architecture as Machine: Towards an architectural system for human well-being' (paper presented at Le Corbusier 50 years later International Congress, Valencia, 18-20 November 2015), accessed 19 February 2020, [https://www.researchgate.net/publication/314923288\\_Architecture\\_as\\_machine\\_Towards\\_an\\_architectural\\_system\\_for\\_human\\_well-being](https://www.researchgate.net/publication/314923288_Architecture_as_machine_Towards_an_architectural_system_for_human_well-being).

<sup>191</sup> Virilio, *War and Cinema*, 5.

<sup>192</sup> Roger Stahl, 'What the drone saw: the cultural optics of the unmanned war,' *Australian Journal of International Affairs* (20 September 2013): 659-674.



assertions that the speed and acceleration of technology has its own coded violence and subsequent traumatic imprint on our lives, something that has developed within a complex of the concomitant evolution of technological systems and social socio-political contexts, one may ask: how is architecture implicated within this socio-political landscape?

Nadir Lahiji interrogates the relationship between architecture and violence and considers Slavoj Žižek's theoretical discourse on violence, which is comprised of two "distinctive" categories that he refers to as the "subjective" and "objective." In Žižek's framework, the subjective aspect of violence refers to forms that are visible and obvious, while objective violence operates at both a "symbolic" and "systemic" level, and as such goes largely unseen.<sup>193</sup> When linking architecture to violence, Lahiji asks, "is architecture in collusion with violence or does it function as its instrument?"<sup>194</sup> If architecture is a technology that has historical underpinnings born out of war and conflict is it possible that it may retain a latent violence, or "originary violence"? Or does architecture attract violence from outside through the systemic conduits of social and political conflict?<sup>195</sup> These categories are used in order to frame and analyse a contemporary understanding of violence within an architectural discourse.

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<sup>193</sup> Slavoj Žižek, *Violence Six Sideways Reflections* (London: Profile Books, 2009), 8.

<sup>194</sup> Nadir Lahiji, 'Must Architecture be Defended? The Critique of Violence and Auto-immunity,' in Kenzari (ed.), *Architecture and Violence*, 200.

<sup>195</sup> Ibid.



Figure 22. David Manley, *Post-traumatic Urbanist #10*, 2019, archival photographic print, 1000mm x 1000mm.

Peter Demetz develops Walter Benjamin's consideration of modernity as a structurally violent experience in which its systemic and symbolic forms operate in a way that are not readily apparent perpetuating state monopolies of violence and therefore rendering any discussion on the subject inherently political.<sup>196</sup> This is a point Žižek underlines in his 2009 critique, *Violence: Six Sideways Reflections*. He asserts that objective violence remains unseen. He calls it, in fact, the "dark matter" of violence, and thus as such is a covert part of post-modern systems,<sup>197</sup> which are the same systems of mediated and tele-technological culture that Virilio refers to in

<sup>196</sup> Peter Demetz (ed.), *Walter Benjamin Essays, Aphorisms, Autobiographical Writings* (San Diego: Harcourt Brace Jovanovich, Inc, 1978).

<sup>197</sup> Žižek, *Violence Six Sideways Reflections*, 2.

his work. Such forms of violence are analogous to subjective violence and remain structurally hidden. Objective violence is the “counterpart to the all-too-visible subjective violence.”<sup>198</sup> It is however important to take objective violence into consideration if we want to make sense of the often sudden disruption of subjective violence when it occurs. Lahiji argues that if we are to embark on a thorough political analysis of violence and its relationship with architecture we must consider this hidden objective violence that both Benjamin and Žižek describe.<sup>199</sup> For architecture to distinguish itself from mere building, it must primarily distinguish itself as representational. Part of this violence resides in the symbolism of architecture “for, metaphoric though this may be, it is perfectly constructed to remind us of what distinguished architecture from building: that is, a logical power organizing architecture beyond anything the building supports in terms of possible use.”<sup>200</sup> Take the Twin Towers for example. The structures were representative of world trade and their symbolism was imbued with this historical narrative. When we consider the subjective correlate of Žižek’s analysis of violence we may consider the physical collapse of these structures as a metaphor that illustrates the power of this symbolism.

An understanding of the complexities associated with any analysis of violence is important when linking it to the symbolism of architecture and the institutional systems of power that controls and sustains it. Historically the philosophical discourse around architecture considered the metaphor of architectural structures as a physical incarnation of the symbolic and systemic representations of power and control. Asylums, prisons, state and corporate institutions all retain inherent aspects of violence that operate at both the physical and structural levels in order to influence the socio-political context within which they exist. Foucault commented on this very phenomenon, noting,

Prison is not unique. It is positioned within the disciplined society, the society of generalized surveillance in which we live. What is so astonishing

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<sup>198</sup> Ibid, 8.

<sup>199</sup> Lahiji, ‘Must Architecture be Defended?’, 200.

<sup>200</sup> Dennis Hollier, *Against Architecture The Writings of Georges Bataille* (London: The MIT Press, 1989), 32.

about the fact that our prisons resemble our factories, schools, military bases, and hospitals – all of which in turn resemble prisons.<sup>201</sup>

There has been much discourse and conjecture in regard to architecture's capacity to dominate and oppress, so much so that an in-depth discussion on this would be too broad for this thesis. Suffice it to say here, then, that many of the invisible structural systems of violence that exist within penitentiaries and the like may also exist within other institutions. Psychiatric hospitals and prisons are an obvious example where power and control are sustained through the hidden objective violence that Žižek refers to.



Figure 23. David Manley, *Post-Traumatic Urbanist #8*, 2019, archival photographic print, 1000mm x 1000mm.

<sup>201</sup> Michel Foucault, 'On the Role of Prisons,' *The New York Times*, 5 August 1975, 26, accessed 19 February 2020, <https://www.nytimes.com/1975/08/05/archives/michel-foucault-on-the-role-of-prisons.html>.

Is it possible for architecture to operate outside of any political analysis of violence and its hidden structural complexities within a contemporary context? Lahiji presents a case that architecture has the potential to act as an antidote for what he describes as the “manipulative exploitation of the image and its perverse enjoyment” in order to restore architecture’s “critical project” a premise central to the themes in this research.<sup>202</sup> He invokes Georges Bataille’s (1897 – 1962) assertions that architecture functions in a way that can be likened to the mathematics that permeate nature or a type of “formal coat” or “omnipresent” state from which we are unable to escape. Bataille argued that architecture was the “system of systems.”<sup>203</sup> “There is consequently no way to describe a system without resorting to the language of architecture.”<sup>204</sup> Bataille’s analysis positions architecture as “societies’ authorised superego”, and thus the foundation for any discussion surrounding violence.<sup>205</sup> This stance may seem obvious, yet it does position architecture within the discourse of violence. In any event, architecture must be seen as a potent conduit for the types of objective violence articulated by Žižek who provides a platform for the “psychoanalytical symbolism” that one should consider in such an analysis that Lahiji articulates.<sup>206</sup> This complicity can be considered through Žižek’s theoretical categories supporting Bataille and Foucault’s ideas in relation to the metaphor of architecture, its institutional structures and their relationship with violence. In light of this, Lahiji argues that architecture must be defended from the internal and external forces that both Benjamin and Žižek ascribe in order to free it within a psychological and metaphysical context from these confines.<sup>207</sup>

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<sup>202</sup> Lahiji, ‘Must Architecture be Defended?’, 201.

<sup>203</sup> Georges Bataille, *Against Architecture* (Cambridge, Massachusetts: The MIT Press, 1992), 32.

<sup>204</sup> Ibid.

<sup>205</sup> Ibid.

<sup>206</sup> Lahiji, ‘Must Architecture be Defended?’, 201.

<sup>207</sup> Ibid, 214.



Figure 24. David Manley, *Geneva*, 2020, archival photographic print, 500mm x 500mm.

How are architecture and violence linked to the image in contemporary culture? Lahiji argues that architecture is implicated in the neoliberal violence Žižek describes, something characterised by the speed and acceleration of a mediatised tele-techno culture that is quickly becoming the sole world order.<sup>208</sup> Žižek also identifies the current globalised neoliberal paradigm that dominates world politics and commerce and describes it within a context of a violence driven by the image in which its control has become “the key to social pow-

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<sup>208</sup> Ibid, 210.

er.”<sup>209</sup> “Image power” resides within identifiable or tangible iconic objects such as buildings, monuments, places and logos. In *Afflicted Powers, Capital and Spectacle in a New Age of War*, 2005, Ian Boal et al. argue that this power has been refined and distilled in a deliberate process of concentration and is characterised by contemporary systems of democracy in which ultra-wealth lies in the hands of the few.<sup>210</sup> The concentration of power is caught up with the image. Boal et al. evoke the September 11th attacks as an example that exposed a fundamental weakness and vulnerability in such systems as the same systems of violence can be used against them.<sup>211</sup> The terrorists seized control of the image and used its symbolic capital to gain an advantage over their rivals and this was certainly true in a visual sense during the attacks on New York and Washington.

This argument may be further developed by focusing on the “spectacular defeat” of what Lahiji describes as “image architecture.”<sup>212</sup> The underlying premise here is that capitalism requires as a “structural necessity” an excess of commodities to sustain itself, which in turn demands the manufacturing of desire through a constructed image culture that helps to fuel overproduction through an increase in capital. It is this power that aligns itself to the symbolism of imagery and its concentration that acts to amplify the potential for violence from those who seek to oppose it. The World Trade Centre in New York was a symbol of globalised systems of wealth borne out not only through their physicality of cement, glass and steel, but also through their concentrated economic and political power. These structures were totemic signifiers, the gates to the neoliberal world, and a target for those who hated the West. As Boal et al. assert, “the new terrorists succumbed to the temptation of the spectacle, rather than devising a way to outflank and contest it!”<sup>213</sup> The terrorists used the symbolism of The World Trade Centre, hijacking not only the planes that destroyed the buildings, but also, more importantly, the image

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<sup>209</sup> Ian Boal, T.J. Clark, Joseph Matthews and Michael Watts, *Afflicted Powers, Capital and Spectacle in a New Age of War* (London: Verso, 2005), 28.

<sup>210</sup> Ibid.

<sup>211</sup> Ibid.

<sup>212</sup> Lahiji, ‘Must Architecture be Defended?’, 210.

<sup>213</sup> Boal, et al., *Afflicted Powers*, 28.

power that sustained their mystique. “They were exponents of the idea, brilliant exponents, but this only reveals the idea’s heartlessness.”<sup>214</sup> In light of this Lahiji argues that we must defend architecture from what he describes as an “autoimmunity”, whereby architecture becomes infected through the power of the image and is thus imbued with a latent potential for violence.<sup>215</sup> This biological analogy is apt as it considers this symbolic violence within a hyper-mediated visual culture that not only attracts violence from the outside, but also integrates it at an objective level from within. A more purist reconfiguration of architecture could be considered through Benjamin’s framework, a conduit for “experience” and “organization”<sup>216</sup> when viewed against the “total system” of a mediated society that incorporates an exploitative violence that both Virilio and Žižek refer to.<sup>217</sup>

The Twin Towers were often referred to as deeply “ambivalent structures” coded for destruction by the very social systems that supported their mystique within a climate of growing hatred towards the West.<sup>218</sup> Perhaps, as Lahiji describes, the events of September 11th were symptomatic of an “autoimmune” crisis that developed within a social and political context during this period in history?<sup>219</sup> Lahiji’s biological analogy is interesting as the immune system acts to protect the organism from invasion by foreign organisms and viruses. In the case of autoimmunity, however, the immune system becomes perverted, protecting itself by destroying not only the virus but also its host. The symbolic nature of the World Trade Centre attracted the fanatical attacks that culminated in its destruction. This symbolism acted as a form of latent catastrophe, much like Virilio’s accident that was discussed in Chapter 4. Those who witnessed the event are now destined to see these structures within a context of annihilation. “How can one not ‘see’ these two towers without ‘seeing them in advance, without foreseeing them slashed open?’”<sup>220</sup> There is the inherent retrospective problem here because only in hind-

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<sup>214</sup> Ibid.

<sup>215</sup> Lahiji, ‘Must Architecture be Defended?’, 213.

<sup>216</sup> Ibid.

<sup>217</sup> Ibid, 215.

<sup>218</sup> Ric Burns, New York: A Documentary Film, PBS, 2003.

<sup>219</sup> Lahiji, ‘Must Architecture be Defended?’, 203.

<sup>220</sup> Ibid, 214.



sight can we plot the calamity this event unleashed into the world.<sup>221</sup> If we are to accept Lahiji's crisis of autoimmunity then we must defend the essence of architecture and specifically its plurality as an art form from the inherent violence of a mediated culture. This assertion implies that for architecture to be defended it must assume a possibility to exist in an existential or purist sense beyond the environment of speed.

*Sirius 1.46*, 2017, is a work that responds to the redevelopment of the Sirius building, situated at The Rocks in Sydney. The structure was designed and built with a brutalist aesthetic and used for social housing for almost 40 years. Located on prime harbour front real estate, the structure has been much maligned over the years and considered by many as visually problematic given its location. The necessity for such accommodation came under pressure within a much broader push by the New South Wales State Government to sell off social housing assets in Millers Point and the Rocks. The State Government at the time developed an argument that its sale would free up money to develop other public housing assets in less affluent areas of the city. Opponents of the proposed sale argued that the building actually represented an era of architecture that was historically important within the context of social housing and campaigned for its preservation. In 2017 a construction ban was placed on the site, but this was later overruled and the building was earmarked for redevelopment into luxury apartments. The conflict that arose in relation to the visual aesthetic of the building, its real estate potential and its use as social housing made it a prime target for fiscal rationalism by the State Government, but thankfully the overruling was revoked in June 2019, so it is now safe from demolition and this remains current in 2020. However there will be a cosmetic makeover to the façade of the building to rectify the aesthetic concerns people have raised in regards to this style of architecture.

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<sup>221</sup> Giovanna Borradori, *Philosophy in a Time of Terror* (London: The University of Chicago Press, 2003), 187.



Figure 25. David Manley, *Sirius 1.46*, 2017, archival photographic print 500 x 500mm.

Building on Lahiji's ideas and the nexus that lies between violence and architecture, and incorporating Benjamin's 1921 Critique of Violence that attempted to separate violence into particular categories in order to create a "typology of discernible violence between the 'legal and illegal' the secular from the theological," we encounter what Lahiji describes as a "crisis of critique."<sup>222</sup> To separate and discriminate has its own level of objective violence attached to it and therefore presents another level of complexity. One may draw on an analogy

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<sup>222</sup> Lahiji, 'Must Architecture be Defended?', 206.

from the history of photography in order to gain more insight into this idea. August Sander's photographic portrait typologies of working class Germans, taken during the 1920s and 1930s, were later considered by some to stereotype the German working class by virtue of a process of classification that he used to photograph his subjects that demonstrated their physical and vocational attributes. Sander's work was considered subversive by the Nazi regime during the lead up to the WWII, even though it could be argued it employed systems of categorisation similar to those the regime applied to race and genetic predispositions. Here we encounter the complexities of Benjamin's critique in which such systems of classification and order can become, or be seen to express, a hidden violence similar to that which Žižek refers to.<sup>223</sup>

Another example that could be used to demonstrate these ideas can be drawn from the history of cinema. Its independence as an emerging art form during the era of Italian fascism was challenged through its use as propaganda by the state. Its power and alluring qualities were appropriated by the regime in order to entrench a fervent form of nationalism and a desire to promote and expand Italian territory during the 1920s. Thus cinema in Italy began to lose its independence status as an emerging art form. Lahiji argues that architecture has also lost its independence, in a similar way; it has become the primary "locus" for our experience of technology.<sup>224</sup> Architecture provides the main site for the interface between technology and the individual, as it is a condition and the object of experience within technological systems. Fundamentally, architecture operates as a conduit for the "interaction" of technology and our experience of it. The parameters of this sensory experience are determined through its physicality, while a constant flux of decline and renewal is maintained. Architecture is not eternal or even stable; it is necessarily fluid and inextricably linked to the violence of technological development; "Those forces that do violence from without and those which are im-

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<sup>223</sup> Philippi Desa, 'August Sanders 20th Century People,' *Art on Paper* 3 (September 1998): 44 - 48.

<sup>224</sup> Lahiji, 'Must Architecture be Defended?', 207.

manent from within.” Here, subjective violence is experienced as a disruption within the status quo in which “non-violence” is the “background” norm and objective violence is the “invisible force” that manifests within this norm sustaining the perception that no violence exists.<sup>225</sup>

Further analysis of this structural violence within social and political systems may also be drawn from modernist cinema through an interpretation of films such as Luis Bunuel’s (1900 – 1983) *The Exterminating Angel*, 1962, and Michael Haneke’s *The Seventh Continent*, 1989. Both films map a decline of social functioning through their characters within the confines of architectural settings. *The Exterminating Angel* explores the social degradation of a group of people who are unable to leave a room in a house for no apparent reason. The film is set around the backdrop of the Spanish Civil War. The dinner guests represent the Spanish ruling class who celebrate the defeat of the workers’ revolution by hosting a feast that never seems to end and who thus find themselves trapped within their self-imposed bourgeois lifestyle. The architecture of the house, its rooms and confines, represent the fate of the ruling class.<sup>226</sup> Michael Haneke uses a similar theme in *The Seventh Continent* which investigates one family’s rejection of a post-modern lifestyle, a rejection that leads to a suicide pact within the family home. The drawn out and brutal nature of the family’s demise, through the use of prescription medication, serves as a protest towards modernity’s regulated lifestyle within the family home which initially operates as something of a refuge, and ultimately serves as their crypt; an allegory of ultimate rejection.

*High Rise*, 2018, (see fig. 26) was constructed from cardboard packing materials. Adhesive spray was applied to the outside of the cardboard once it had been cut and assembled. The structural components of the models were then covered in cement dust, which bonds to the glue. The work was then deliberately set alight with a blowtorch. On completion of this

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<sup>225</sup> Ibid, 203.

<sup>226</sup> Robert Ebert, ‘The Exterminating Angel,’ 11 May 1997, Robertegbert.com, accessed 19 February 2020, <https://www.rogerebert.com/reviews/great-movie-the-exterminating-angel-1962>.

process I was struck by how the maquette of Le Corbusier's *Unité d'habitation* 1952 resembled the burnt structure of the Grenfell Tower in London that was engulfed by fire in June 2017, incinerating 71 people.<sup>227</sup> The media imagery and background of the Grenfell fire are interesting from a research point of view as the building was designed and built towards the end of the 1960s as social housing. The building had a brutalist design and was seen by many as an eyesore in the London skyline. In 2012 the tower block underwent a major renovation in order to address these concerns and cladding was applied to the exterior to hide its original cement construction. Tragically, it was this cladding that ultimately encouraged the rapid spread of the fire that took hold in a matter of minutes.<sup>228</sup> The artwork mentioned above (see fig. 26) taps into the monolithic aftermath of a catastrophic event and was a progenitor for some of the architectural structures developed throughout *The Post Traumatic Urbanist Series* that was discussed in Chapter 3.



Figure 26. David Manley, *Post Traumatic Urbanist #4* (production documentation), 2016.

<sup>227</sup> Laura Connelly and Remi Joseph-Salisbury, 'Teaching Grenfell: The Role of Emotions in Teaching and Learning for Social Change,' *Sociology* 53 (2019): 1026-1042.

<sup>228</sup> Feng Fu, 'London tower fire: How did the Grenfell Tower fire spread so quickly?,' 15 June 2017, ABC News, accessed 19 February 2020, <http://www.abc.net.au/news/2017-06-15/london-tower-fire-how-did-grenfell-blaze-spread-so-quickly/8620026>.

Artist Ian Strange acquired a number of houses in suburban areas of America that had a recent history of trauma, economic downturn and social dislocation. The site-specific works involve spray-painting images and motifs directly onto the houses. Strange employs film production teams to document the works that then become video, sculptural and photographic installations (see fig. 28). His *Suburban*, 2013, builds on a previous work *Home*, 2011, a large-scale site-specific piece that was exhibited at Cockatoo Island in Sydney as part of the Sydney Biennale in 2011. The work incorporated a full-scale reproduction of Strange's childhood house replete with skull mural as well as a sound and video offering that depicted the destruction of three Holden Commodore cars. The installation raised issues around human habitation and our relationship with architecture. Strange's work primarily challenges the idea of the suburban home as a place of safety and permanence and may help to demonstrate further some of the ideas that have been discussed within this chapter.<sup>229</sup>



Figure 27. Ian Strange, *Corrinne Terrace*, 2013, archival digital print 1100 mm x 1560 mm. Courtesy: National Gallery of Victoria.

229 Linda Cheng, 'Ian Strange turns condemned suburban house into temporary gallery,' 6 October 2017, *ARCHITECTUREAU*, accessed 19 February 2020, <https://architectureau.com/articles/ian-strange-turns-suburban-house-into-temporary-gallery/>.

These ideas can be extrapolated further through a consideration of the enmeshed complexities of trauma and memory within a broader architectural discourse and by applying Žižek's objective realm to analyse image violence and its relationship with architecture. Žižek casts what he describes as a cursory glance from six perspectives towards violence in order to analyse its contemporary experience.<sup>230</sup> He argues that there is a mystifying problem when trauma is addressed in a direct way because of the often horrific and overpowering impact it has on our lives, something that prevents us from processing its true nature. He concedes that this "dispassionate" way of addressing violence tends to neglect the trauma associated with such events and is thus complicit in the experience and "horror" of violence.<sup>231</sup> Here notions of truth become blurred, yet eyewitness accounts remain overwhelming and compelling, and are often the only way such experiences can be considered.

When considering accounts of trauma from those who have experienced it, the idea of truth understandably becomes complicated because of the cognitive impact such events have on the victim. Being unable to remember an incident does not invalidate the experience and how the mind tends to process it. If a victim of violence was able to deliver a factual rendition of a traumatic occurrence in a manner that was conscious and clear, then suspicions would naturally arise as to the validity of the account. An example can be drawn from the situation of a civilian victim who spoke of her experience during an investigation into a US drone attack on her home in Mir Ali, Pakistan. A computer simulation was used to encourage memories of the incident. The woman was able to move freely through rooms that were created within a virtual reality program. The witness described pieces of human flesh hanging from a fan in the dining area of the house, but interestingly this was not part of the program. Her memory appeared to insert this information into her engagement with the simulation.<sup>232</sup> Here

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<sup>230</sup> Žižek, *Violence Six Sideways Reflections*, 3.

<sup>231</sup> Ibid.

<sup>232</sup> 'Drone Strike in Mir Ali, Pakistan, October 4th, 2010,' Forensic Architecture, accessed 19 February 2020, <https://forensic-architecture.org/investigation/drone-strike-in-mir-ali>.

we encounter a convergence of event, trauma, memory and evidence. “The problem here is part of the solution; the very factual deficiencies of the traumatised subject’s report on her experiences bear witness to the truthfulness of her report.” Žižek’s analysis considered this discourse deliberately through a distant prism in order to demonstrate a more respectful discussion regarding those who have experienced trauma.

Let us revisit Sebald’s *Austerlitz*, 2001. The novel offers the reader a detached prism for exploring trauma. The story is partly told through an unnamed, detached narrator in order to create some space for the reader to contemplate the difficulties faced by the young boy. According to Roger Luckhurst, “Sebald’s narrator is virtually effaced, becoming only an invisible repository, an archive for collected information.”<sup>233</sup> This narrative style may initially appear frivolous and counter intuitive, but as Luckhurst argues in his 2007 book *The Trauma Question*, it may actually operate paradoxically to evoke a more empathic response. The novel traces Austerlitz’s journeys through post-war Europe to Antwerp where he encounters the Breendonk bunker fortification. These bunkers were built as an ultimately failed defensive system that grew in response to the development of ever more destructive military technologies that could be used to destroy them. Ultimately became a place of deprivation and torture inflicted by the Nazi SS. The symbolic nature of the structures aligns with Austerlitz’s own psychological defence mechanisms that developed over many years following his traumatic past as part of the Kindertransport generation.<sup>234</sup> During a visit to the fortifications, Austerlitz experiences the unleashing of a torrent of repressed memories linked to his past. The use of the bunker system as a place of torture and deprivation, along with the dank, musty smell and claustrophobic confines, provokes a deeply hidden emotional response in which the “mechanism of dissociative memory” breaks down Austerlitz’s own psychological defences, in turn revealing the deprivation of his own compartmentalised child-

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<sup>233</sup> Luckhurst, *The Trauma Question*, 112.

<sup>234</sup> Ibid, 114.



hood.<sup>235</sup>

Luckhurst argues that the work evokes a “classic” trauma narrative in which repressed memories and images of an event are recalled to consciousness later in life at the beginning of the story, then the life of the main protagonist is “recast” in response to this enlightenment.<sup>236</sup> The affective journey of Austerlitz is an example of the “objective” and “subjective” violence Žižek refers to through the encounter with the symbolism of architectural structures and their history. The bunker fortifications act as a “patently symbolic” reference to its architectural ambivalence. As Sebald wrote, “No one can explain exactly what happens to us when the doors behind which our childhood terrors lurk are flung open.”<sup>237</sup> The complex narrative framing of a distant narrator may paradoxically increase our empathy towards the young boy’s traumatic past. Perhaps this may operate in a similar way to when artists draw attention to trauma by not addressing it directly?

Luckhurst describes Sebald as one of the “quintessential” writers of trauma fiction.<sup>238</sup> Many of his works offer an exploration into the confines of lives defined by traumatic events through a variety of narrative styles from the distant narration of Austerlitz and indeed *The Emigrants*, 1993, to the first-hand accounts of those who experienced the bombing of Dresden in 1943 in *On Natural History of Destruction*, 1999. In this later work, Sebald offers a different approach in his analysis of trauma through first-hand accounts that Luckhurst describes as his “post traumatic exhaustion.”<sup>239</sup> Sebald’s work details in great length the human experience of the destruction of Germany through the eyes of its civilians as a way of jolting the reader into an understanding of their suffering. Here we see a different approach to the analysis of trauma than we encounter in Austerlitz. Yet both have similarities since Sebald often meditates on the “occlusion” of historical events such as the lack of literature surrounding the Allied bombings by German writers, and its impact on civilians, or a lost childhood as in the

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<sup>235</sup> Ibid.

<sup>236</sup> Ibid.

<sup>237</sup> W.G. Sebald. *Austerlitz* (London: Penguin Books, 2001), 33.

<sup>238</sup> Luckhurst, *The Trauma Question*, 114.

<sup>239</sup> Ibid, 115.

case of Austerlitz, where the “belated” recovery of memory is recalled later in life through the symbolism of architectural structures.

Other examples of this detached prism for viewing trauma may be drawn from a visual arts perspective. In Magdalena Jetelová’s *Atlantic Wall*, 1995, laser projections onto Hitler’s bunker fortifications on the coast of France created a similar conceptual distance for exploring the invasion of Poland and subsequent genocide of its Jewish population by the Nazis in WWII (see fig. 28). The work subverts the metaphor of the bunker and its initiatory power by incorporating its symbolism in defiance of Nazi atrocities. Peter Eisenman’s *Berlin Holocaust Memorial*, inaugurated on the 10th May 2005, may be interpreted as a sculptural work that reminds us that the task of remembering atrocity and trauma is never over. Andrew Benjamin writes that the grey cement structures of the monument act to “maintain the incomplete.”<sup>240</sup> Eisenman references the human difficulty in remembering the magnitude of such an event.

This discussion is intended to draw attention to some of the difficulties faced by artists when we attempt to articulate the imprint of trauma through a creative practice. There are obvious moral and ethical complexities attached to the experience of trauma that must be considered and perhaps Sebald’s literary offerings enable a more considered approach through which to view such concerns? As Luckhurst rightly points out, such literary tropes may blur the boundaries between “fictional narrators and authorial persona, true historian and narrative invention.”<sup>241</sup> The motifs used to explore trauma make sense because at some level writers such as Sebald understand that the boundaries of fictional literature are unable to “contain” the complexities of trauma and the novel is compromised or “breached by the traumatic force of the real.”<sup>242</sup> This view links back to Žižek’s assertions that the experience of trauma creates complexities that remain unseen by those who seek to

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<sup>240</sup> Andrew Benjamin, ‘NOW STILL ABSENT: Eisenman’s Memorial to the Murdered Jews of Europe,’ *Architecture Theory Review* 8 (2003): 58.

<sup>241</sup> Luckhurst, *The Trauma Question*, Routledge, 116.

<sup>242</sup> Ibid.

understand it from a non-traumatised perspective and this point has implications in any analysis of trauma within a creative context.



Figure 28 .Magdalena Jetelová, *Atlantic Wall*, 1995, laser projection of a quote from Paul Virilio's *Bunker Archeology*.

Blue Brute, 2016, (see fig. 29) sits alongside High Rise, 2018, and completes a mixed media installation. The photographic element of the work uses digital imaging technologies to isolate an image taken of a staircase that forms part of a larger brutalist structure. The staircase has been isolated in the work and the background replaced with a white canvas that is then inverted rendering it black. The use of inversion is conceptually important as it taps into the objective violence Žižek alludes to while linking certain styles of architecture such as brutalism and modernism with the military industrial complex. The cement structure is inverted both physically and photographically and becomes a negative of the original positive that pays reference to the subterranean bunker.

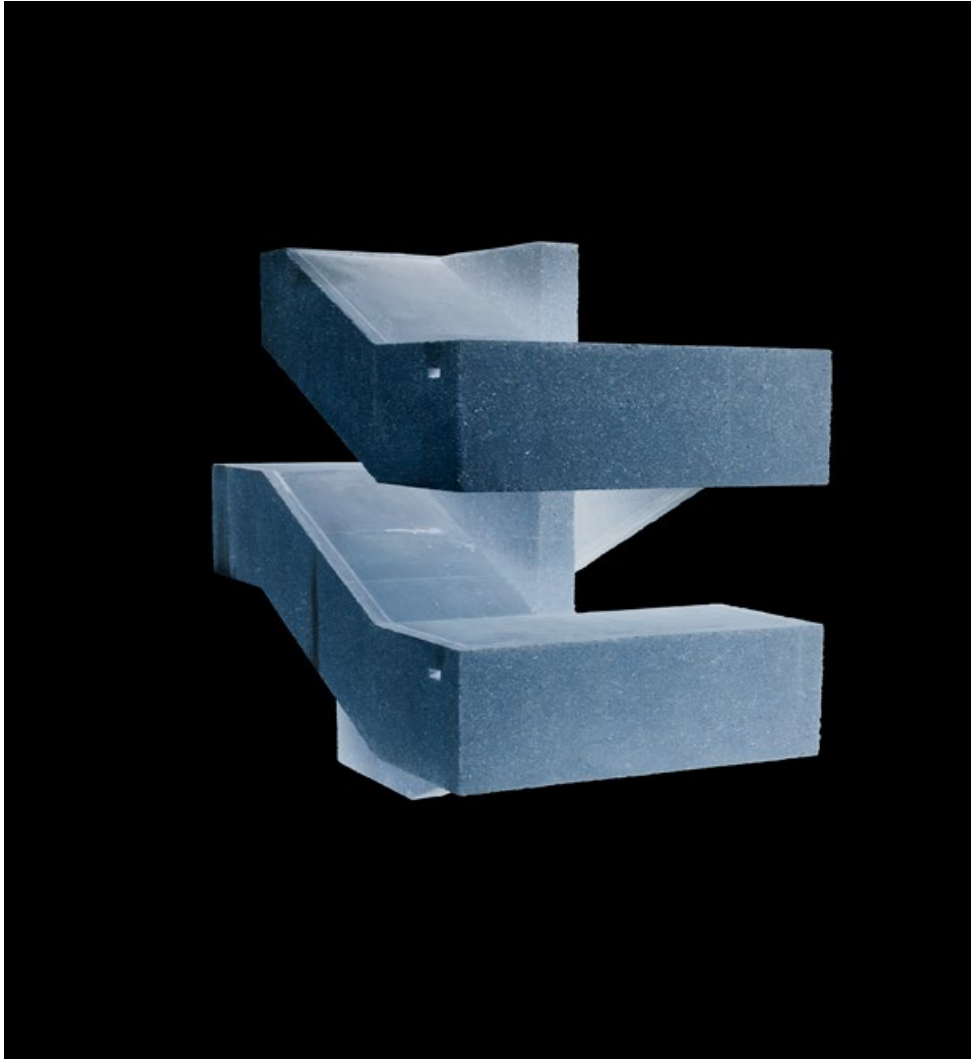


Figure 29. David Manley, *Blue Brute*, 2017, archival photographic print. 900 x 980mm.

This chapter has situated architecture as a signifier and staging ground for trauma. Žižek's structural analysis of violence was applied to the social and political milieu in which architecture plays a central role. The hidden violence of architecture was explored through its symbolism and relationship with systems of power and control.

The destruction of the World Trade Centre was used to

demonstrate these ideas within the context of present day image culture. A detached lens for considering trauma within a creative context was also introduced. This distant prism becomes important as art may be constrained by the complexities of trauma especially when one attempts to understand it from a non-traumatised perspective.

## Chapter 6. The Post-Traumatic Urbanist

This chapter will look at the experience of trauma and consider how its effects have become more mainstream and decoupled from their historical connection to psychoanalysis. The September 11th terrorist attacks unleashed a growing theoretical and cultural discourse around trauma and its language that had been developing for some time. As a result of this the civilian is framed as a quasi-combatant in an urban terrain that has morphed into a potential combat zone in both a physical and psychological sense.

The study of trauma psychology has up until recently been primarily the domain of psychoanalytical therapy and its associate theory. In recent years, however, the complex implications of the various psychological, social and political impacts of trauma have found their way into a broader discourse within the arts and mainstream media. Indeed, this recent interest may be partly attributed to the notion that modernity itself may have its own traumatic imprint. Mark Jarzombek describes a history of trauma discourse defined by the “privileged theoretical premise” that was largely pre-occupied with “sexual abuse” and the psychological effects of the physical injuries of war. A more recent understanding of trauma implicates a variety of what he describes as “painful realities” that stem from man-made as well as natural occurrences.<sup>243</sup> It would be important to note here Pat Barker’s reflection in regards to war and trauma in *The Regeneration Trilogy* 1991. He notes that men, when traumatised by war manifest symptoms that women experience in ordinary everyday peacetime.

If we consider the history of psychiatry, we see a tradition of poor diagnostic and treatment outcomes in regard to a varying set of psychological maladies. Male schizophrenia and childhood autism, for example, were often attributed to over-bearing mothers who were commonly referred to as “refrigerator mums.”<sup>244</sup> Electro convulsive therapy (ECT) was

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<sup>243</sup> Mark Jarzombek, ‘The Post-traumatic Turn and the Art of Walid Ra’ad and Krzysztof Wodiczko: From Theory to Trope and Beyond,’ in Lisa Saltzman and Eric Rosenberg (eds.), *Trauma and Visuality in Modernity* (New Hampshire: University of New England Press, 2006), 250.

<sup>244</sup> Susan E. Fostein and Beth Rosen-Sheidley, ‘Genetics of Autism: Complex Aetiology for a Heterogeneous Disorder,’ *Nature Review, Genetics* 2 (December, 2001), 943.

used extensively in the 1950s and through to the 1970s to treat a variety of neuroses with often serious and deleterious side effects on patients. Commonly known at the time as shock treatment, its use has been much maligned in recent decades due to poor regulation and its overuse during its early history. The treatment has, however, been quite successful (albeit at low doses) in the management of illnesses such as severe depression, and according to Shorter and Healy it continues to be used extensively in psychiatry.<sup>245</sup> The institutionalisation of patients in large state owned psychiatric hospitals and their segregation from the community had its own iatrogenic impact on those who suffered from mental illness. Institutional care and the use of strong sedatives as well as anti-psychotic medications had major long term physical and psychological impacts on patients that could last a lifetime. The way in which psychiatry was delivered in the past inflicted its own level of trauma on patients and this was recognised during the 1980s in Australia when many psychiatric institutions were phased out and replaced with community mental health services. It is notable that here the phrase 'consumer' refers to the client/patient of mental health services, and is a term chosen by those who access care here in Australia and overseas.

In recent decades mental health services have demonstrated a vast improvement in the ethical treatment of those seeking treatment. Reform in the discipline and the development of advocacy and consumer rights groups has helped to improve services. Contemporary mental health interventions have garnered a greater acceptance through improved evidence-based outcomes in line with the development of care that incorporates a model of collaborative support between the consumer and mental health clinician. These developments coincided with the period between the end of the Cold War and the destruction of the World Trade Centre in New York, when, according to Jarzombek, the new post-traumatic terrain came strikingly into view. In the case of psychiatry, he suggest-

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<sup>245</sup> Kari Ann Leikens, Lindy Jarosh-von Schweder and Børge Høie, 'Contemporary Use and Practice of Electroconvulsive Practice Worldwide,' *Brain and Behaviour* 3 (2012): 283 – 345.

ed that this post-traumatic world was characterised by a “release of trauma from the obligations of shame and privacy.”<sup>246</sup> Immediately after the attacks on New York and Washington, the word trauma began to appear more widely in newspaper articles and the term took on more mainstream attributes. This event unleashed a growing theoretical and cultural discourse around our understanding of trauma and its language, which had been growing for some time.

In recent years, a more nuanced understanding of trauma has developed within the mainstream media and psychiatry in general, and its broader impact and ongoing health effects rank closely with cardiac disease, cancer and diabetes as one of the most debilitating problems in many Western countries.<sup>247</sup> Studies of traumatic stress in relation to survivors of a variety of traumatic occurrences, and those exposed to media coverage of such events, have led to a far better understanding of the effects of trauma on the civilian population. This interest in trauma related morbidity has helped to encourage a new generation of researchers who in the 1990s and early 2000s were well positioned to analyse the effects of events such as the bombing in Oklahoma City and the September 11th terrorist attacks. One such study, published in 2000 by Betty Pfefferbaum et al., into trauma related imagery associated with the Oklahoma City bombing and its psychological effect on children suggested a significant increase in the incidence of symptoms associated with PTSD for up to two years after the research participants were exposed to media imagery of the event.<sup>248</sup> Their research recognised, arguably for the first time, the scope of trauma related media exposure and its effect on the populace by identifying varying modalities ranging from traumatic amnesia to PTSD to critical PTSD and a variety of PTSD subsets, each with varying degrees of severity.<sup>249</sup> Cases of traumatic stress within professional occupations such as nursing, medicine and paramedics have also been identified, while the true costs of the effects of traumatic exposure at

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<sup>246</sup> Jarzombek, ‘The Post-traumatic Turn,’ 250.

<sup>247</sup> Marc-Antoine Crocq and Louis Crocq, ‘From shell shock and war neurosis to post-traumatic stress disorder: a history of psychotraumatology,’ *Dialogues in Clinical Neuroscience* 2 (March 2000): 47-55, accessed 19 February 2020, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3181586/>.

<sup>248</sup> Betty Pfefferbaum et al., ‘Posttraumatic Stress Two Years After the Oklahoma City Bombing in Youths Geographically Distant from the Explosion,’ *Psychiatry* 63 (Winter 2000): 358-370.

<sup>249</sup> Ibid.



varying levels has been recognised and quantified.<sup>250</sup>

Terrorist activity has grown alongside ideological, geo-political conflict and the development of online cyber technologies. This new paradigm of war has also had an extraordinary impact on the way in which we not only experience trauma but also in the way we interact with the urban landscape. Civilians are now technically at war with extremists and this has radically altered the way we see our cities, where public space has morphed into “civilian space.”<sup>251</sup> This notion has developed through the recent discourse on the status of the civilian in a contemporary urban landscape where safety from a war being waged in another country is not guaranteed and the civilian perversely becomes a quasi-combatant within the urban terrain. This idea has replaced notions of public space initially considered during the 1980s when populations were studied in a systematic way within the context of war and trauma for the first time by researchers and academics.<sup>252</sup>

Other recent examples of civilians in an urban combat context include the Bali Bombings in 2002, the 2015 Lindt Café siege in Sydney, and more recently the Christchurch mosque attacks. These events and their aftermath have had a curious impact on our understanding of the humanity of conflict. “Just as the civilian now has to discover the soldier within, the military accepts the soldier as having the civilian within.”<sup>253</sup> It was the study of PTSD in Vietnam War veterans that led to this new understanding of the ambivalent status of the soldier who is at once combatant and civilian vis-à-vis the civilian who has now become a potential soldier. This duality could also be true for the post-traumatic civilian who is unable to decouple themselves from the anxiety of conflict within spaces that were once considered safe. When we consider the way that terrorism has evolved and changed over the years, both physically and psychologically, the urban terrain continues to be contextualised (most notably by the media) as an active war zone. In light of this transformation of urban space, trauma is

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<sup>250</sup> Cocker and Joss, ‘Compassion Fatigue.’

<sup>251</sup> Jarzombek, ‘The Post-traumatic Turn,’ 256.

<sup>252</sup> Ibid.

<sup>253</sup> Ibid, 259.

now being viewed as a modifier of culture that possesses its own set of socio-political influences. This new era in war is further complicated by the disruptive capacity of emerging technologies that vie for our attention through the media cycle, which itself serves to propagate fear, inter alia. “The civilian is no longer the anaemic construct of the past, defined in opposition to the heroics of military life. It is now built out of flesh and blood, having consumed the modernist principle of violence into its own body.”<sup>254</sup>



Figure 30. David Manley, *Mandalay Bay*, 2019, archival photographic print, 250mm x 250mm.

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<sup>254</sup> Ibid, 260.

*Mandalay Bay*, 2019, (see fig. 30) is a work that responds to the Las Vegas shootings that occurred on the night of 1 October 2017. Using a military grade assault rifle, Stephen Paddock opened fire from the 32nd floor of his Mandalay Bay hotel room on a crowd of patrons attending a concert at the Route 91 Harvest Music Festival. Paddock killed 58 people and wounded another 413 in the crowd. He was later found dead in his hotel room with a self-inflicted gunshot wound to the head. Imagery of the shooting was captured by surveillance video cameras on the roof of the hotel. *Mandalay Bay* appropriates a variety of image frames from different parts of the footage that were re-combined and arranged to create a static temporal mise en scène of the various harrowing moments of the night. The work explores the temporal repetition of media broadcasts of such imagery.

Our understanding of the implications of PTSD has shifted dramatically over the past 30 years. Legal avenues are now available for victims of trauma to seek compensation for psychological distress created through a variety of traumatic occurrences. There are a multitude of scenarios within a post-traumatic landscape whereby people can test the parameters of what is legally seen as PTSD. Hospital workers, police, paramedics and even dentists all exhibit higher levels of the illness than the general population, as evidenced through the increased incidences of substance use, relationship breakdowns and even suicides within such professions. PTSD has become a major health concern that has greatly influenced government services and private industry. Trauma management has become the new way of dealing with the prevalence of the complex symptoms of trauma. “A country’s mental health, like its water and mineral resources, is now seen as so complex that it can be tackled only in the context of a management culture.”<sup>255</sup>

Accumulative trauma in police personnel and health care workers has been identified as a subset of PTSD and can

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<sup>255</sup> Ibid, 253.

manifest as a gradual deterioration in a person's ability to deal with work-related stress. It is often referred to as burnout or compassion fatigue. It is true that even professionals whose role it is to deal with other professional's experiences of trauma also display a tertiary level of suffering. Front-line mental health clinicians, for instance, are routinely encouraged to undergo what is known in the industry as clinical supervision; that is to say, a form of therapy for the therapist that aims to build a buffer between the regular exposure to traumatic circumstances and the clinician's ability to sustain their practice in the long term. Clinical supervision has also been shown to enhance and maintain professional psychological health as a strategy for managing the traumatic stress associated with this line of work.<sup>256</sup>

Therapeutic "epistemologies" concerned with the treatment of trauma continue to grow at an unprecedented rate, countries such as the United States and Australia are currently in the process of developing "therapeutic infrastructures" in recognition of this recent phenomenon in order to assist communities to adjust to the traumatic implications of a society driven by competing markets which, as Jarzombek recognises, rely on "the presence of properly psychologised consumers."<sup>257</sup> (It remains unclear whether the management of social trauma en masse can be seen as a genuine need to help others or a cynical propagation of the tendency of pharmaceutical companies to encourage the use of anti-depressant medications.)

Contemporary discourse surrounding trauma within a socio-political context is driven largely by issues like terrorism, war in the Middle East, extreme poverty, #MeToo, historical abuses of the church and people in care, and the ecological collapse of the planet's various biological systems. Jarzombek argues that there is "confusion" between trauma and its discourse in as much as "the latter has been swallowed by the former."<sup>258</sup> Psychoanalysis is now preoccupied by the treatment of

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<sup>256</sup> Deborah Edwards, 'Clinical supervision and burnout: the influence of clinical supervision for community mental health nurses,' *Journal of Clinical Nursing* 15 (2006): 1007-1015.

<sup>257</sup> Jarzombek, 'The Post-traumatic Turn,' 253.

<sup>258</sup> *Ibid*, 254.

a vast array of traumatic states associated with contemporary life. The new era of psychiatry is coupled to the realisation that its historical development has left its own traumatic imprint on those who sought treatment in the past. This has undoubtedly encouraged a “split” from more scientific epistemologies as a reaction to a crisis in confidence in psychoanalytical practice. Trauma is now being seen in light of the traumatic coercion of institutional settings that sought to examine, control and master its social manifestations. Health professions, religious groups, government agencies and investigative bureaus are now scrutinised through this lens of past traumatic provocations that were sustained for many years through an often coercive and punitive model of care.<sup>259</sup>

It is instructive at this point to consider whether PTSD has some form of redemptive capacity by enabling its victims to address our instinctual capacity for survival. This notion currently holds weight within therapeutic strategies for supporting those experiencing PTSD. We now seek to develop therapeutic alliances with consumers of the mental health system through a model of trauma informed care that encourages collaborative interventions considered within the context of the lived experience of the consumer. This is a relatively new theory, but I would argue that it is actually best practice and has been incorporated into the delivery of mental health to some degree by a more informed cohort of clinicians since the 19th century. Trauma informed care incorporates therapeutic alliances that help to empower consumers to move beyond maladaptive coping strategies that may have come to define their lives.

This approach is a far cry from the risk adverse, paternalistic models of psychiatric care that have been used in the past. This more enlightened form of service delivery may be partly due to a desire for better outcomes for the consumer, however, it may also stem from an increased recognition that therapy needs to be more broad and adaptive, incorpo-

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<sup>259</sup> Ibid.

rating a recognition of the effects of contemporaneity on the lives of people experiencing mental illness. Current approaches to treatment incorporate an understanding of trauma informed therapy that is collaborative and aimed at supporting the consumer through an ongoing recovery process towards a more meaningful position in which to make sense of the world. Could the experience of PTSD operate as a motivator to encourage an engagement with therapeutic support in order to move beyond pathology? Through this lens, trauma may be viewed as a transformative experience and not necessarily just a by-product of an economy driven by desire and market imperatives. As Jarzombek notes in relation to philosophical and artistic practice, “it is precisely here – between the historiographic structure of psychotherapy and the aesthetic processes that are to some extent just outside of its control – that our philosophical energy must dig in its heels.”<sup>260</sup>

The changing nature and perceptions of trauma suggest that we may need to reconsider our relationship with its histories in light of the current post-traumatic context. Art allows us to probe trauma and consider it through a variety of lenses, but it is all too easy to trivialise its reality. Unpacking this idea further by looking at the Chapman brothers’ *The Sum of All Evil, Hell*, 2012-2013, to illustrate the complexities encountered by artists who address the traumatic, it is easy to consider how interpretations of work such as this can be contentious. The piece consists of a series of large-scale dioramas comprised of roughly 60,000 toy soldiers, many of whom are Nazis, which are arranged in a variety of apocalyptic scenarios within nine separate vitrines installed into the gallery setting to form a *swastika*. The use of vitrines encourages a voyeuristic reading of the works, while the grotesquely mutilated figurines add to the impossibility and pathos of what they are attempting to support. According to Jake Chapman, many spectators view the piece as a comment on the Jewish genocide. This contributes to the controversy surrounding the work, as some

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<sup>260</sup> Ibid, 260.

viewers feel that it trivialises the Holocaust and that the work is somehow sympathetic to Nazi atrocities committed against the Jewish population.<sup>261</sup>

Jake Chapman points out that this reading of the piece is actually the complete inverse of their intentions, which was to subject the Nazi regime to genocide on an “industrial scale.”<sup>262</sup> As Jarzombek puts it, the violence of modernity “lurks within the post-traumatic drive that is at once everywhere and nowhere” and may be difficult to see on a superficial level.<sup>263</sup> This controversy reminds us of concerns when artists attempt to explore trauma, but this is the point of *Hell*. The thousands of Nazi toy soldiers are performing a myriad of gruesome atrocities on themselves; something Jake Chapman argues is a direct mirror of how hell should operate. He suggests that the work reminds us of the inadequate nature of art’s capacity to engage with events of such magnitude and their apocalyptic dioramas of “ultra-violence” respond in part to our need for high levels of stimulation through imagery of atrocities as they may present opportunities for viewers to place greater value on our own lives.<sup>264</sup> The signifiers in the work conversely draw attention to the human propensity for violence. “This design is the iconic residue of humanity after science and technology has had its wicked way: a multi-nucleated progeriac, an inflamed encephalitic Cartesian organ fighting for survival in an increasingly hostile non-organic world,” said a reviewer from *The Independent*.<sup>265</sup> Perhaps what the Chapman brothers are describing here is a contemporary rationale for the new post-traumatic civilian? At the very least, the work demonstrates the complexities of dealing with historical trauma on such a grand scale and understandably draws criticism because of this.

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<sup>261</sup> Kate Abbott, ‘Jake and Dinos Chapman: How we made Hell,’ *The Guardian*, 16 June 2015, accessed 19 February 2020, <https://www.theguardian.com/artanddesign/2015/jun/16/jake-and-dinos-chapman-how-we-made-hell>

<sup>262</sup> Ibid.

<sup>263</sup> Jarzombek, ‘The Post-traumatic Turn,’ 256.

<sup>264</sup> Abbott, ‘Jake and Dinos Chapman.’

<sup>265</sup> Paul Valley, ‘The Brothers Grim: Jake and Dinos Chapman,’ *The Independent*, 16 September 2000, 2, accessed 19 February 2020, <https://www.independent.co.uk/news/people/profiles/the-brothers-grim-jake-and-dinos-chapman-701078.html>.



Figure 31. Jake and Dinos Chapman, *The Sum of All Evil (East)* (detail), 2012 -13, glass-fibre, plastic, mixed media, 2150 x 12870 x 24880 mm. Courtesy: Serpentine Sackler Gallery, London. Photography: Todd White Art Photography.

Art continues to play an important role in the discourse of trauma through its use as a therapeutic tool for understanding its impact. In the 1980s artists questioned the historical monopoly psychotherapy had on trauma within a clinical oeuvre. In his book *The Cult of the Avant-Garde Artist*, Donald Kuspit argued that many of artists during this period used art as a form of treatment or therapy that addressed their own “inner deadness.”<sup>266</sup> In his review of Kuspit’s book, Bradley Collins described this process as a form of “rejuvenation” in response to the “spiritual desolation” of the post-modern era.<sup>267</sup> Now that trauma has to some degree been liberated from the historical control of institutions, how do we investigate its imprint within the visual arts? Perhaps art needs to consider

<sup>266</sup> Donald Kuspit, *The Cult of the Avant-Garde Artist* (Cambridge: Cambridge University Press, 1993), 14.

<sup>267</sup> Bradley Collins, ‘Review: Cult of the Avant-Garde,’ *Art Journal* 52 (1993): 91.



the experience of trauma between the juxtaposition of “regulated” realities of a modern condition that has produced a new context for the civilian and the “repressed private stories” of those who have experienced traumatic circumstances?<sup>268</sup> Artists such as Krzysztof Wodiczko create work in an effort to “normalise” therapy through a public consideration of “repressed issues.”<sup>269</sup> Wodiczko’s installation projections incorporate architectural buildings that symbolise the objective hidden embodiment of institutional violence by day. By night the same structural edifices are reconfigured, illuminated by projections that provoke repressed realities of trauma.

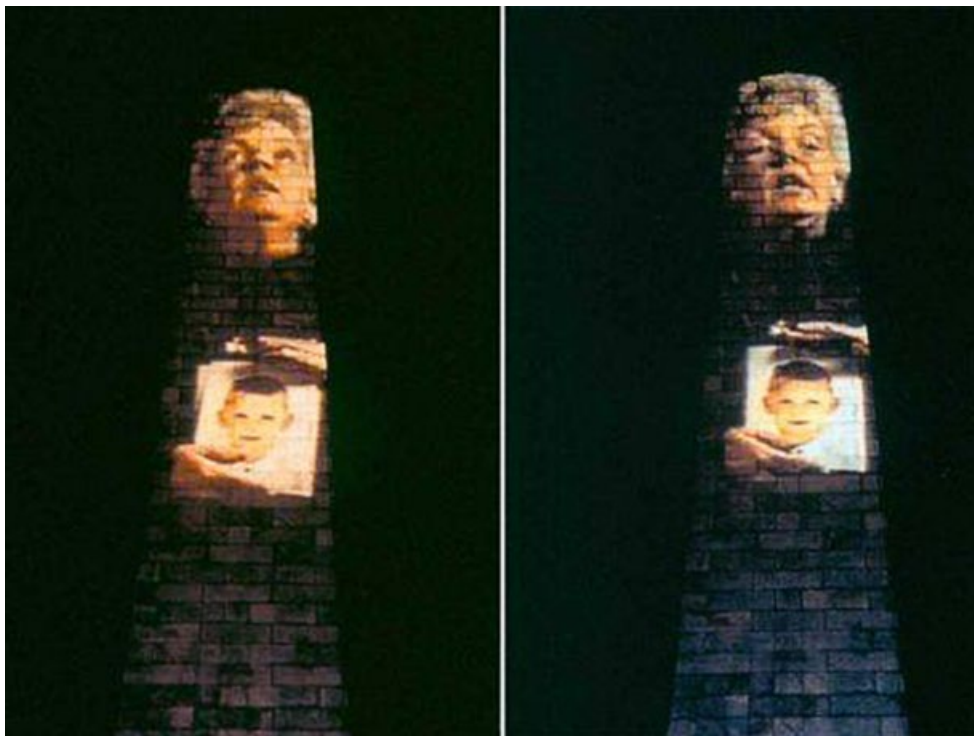


Figure 32. Krzysztof Wodiczko, *Public Projection at Bunker Hill Monument*, 1998, single channel video projection. Courtesy: Galerie Lelong, New York.

<sup>268</sup> Jarzombek, 'The Post-traumatic Turn,' 264.

<sup>269</sup> Ibid, 265

A most visceral and poetic embodiment in the discussion in relation to a contemporary context of trauma that is heavily influenced by technology can be drawn from Godfrey Reggio's film *Naqoyqatsi – Life as War*, 2002, which has a soundtrack by Phillip Glass. The motion picture is comprised of predominantly sourced images that have been manipulated digitally through a process of non-linear editing and then combined with digital imagery in an attempt to demonstrate the progression of society from a natural environment towards one based in technology. The end credits are translated from the Hopi Indian language and describe the foundation of the work as “civilised violence.”<sup>270</sup> Interestingly, its production took place in close proximity to the World Trade Centre, which was destroyed during the making of the film.



Figure 33. Still from the film *Naqoyqatsi, Life as War*, Miramax Films, 2002.

My own visual practice response to the above ideas can be seen in the work *Untitled*, 2017 (see fig. 34), which is a photographic appropriation and reconstitution of a work by William Tucker named *Prometheus (for Franz Kafka)*, 1989–1990.

<sup>270</sup> Godfrey Reggio, *Naqoyqatsi, Life as War*, Miramax Films, 2002.

This work references Prometheus the mischievous Greek god who gives fire to humanity; a gift that enabled the progress of civilisation yet may also encourage its ultimate demise.



Figure 34. David Manley, *Untitled*, 2018, from *The Post Traumatic Urbanist* series, 2017 - 2020, archival photographic print, 1000mm x 1270mm.

This chapter has considered the historical connections between trauma and psychiatry. In a post September 11th world we have seen a decoupling of this relationship. These events encouraged new discourse surrounding the theoretical conceptualisation of trauma that had been emerging for some time and the experience of trauma and its effects are now considered within a more mainstream context. A new paradigm of world conflict has ensued post 9/11 in which public space morphed into a potential combat zone. This anxiety has been partly driven by the power of the image as well as the intense media coverage of traumatic events.

## Chapter 7. Decelerative Architecture

This chapter considers the potential for architecture to operate as a counterpoint or antidote to the traumatic imprint of modernity. Here architecture is reclaimed within a more purist context where speed and acceleration are counterbalanced by a slipstreaming of architectural design that rejects its sublimation into a culture of speed and immediacy.

We have become the instruments of surveillance through the new digital optics: the objects of a voyeuristic gaze in a vast neural network of integrated algorithms designed to funnel the power of the lens and the cinematic image towards the economic dominions of the new digital oligarchs, as argued in Chapter 4. The lens and its accompanying mediation have broken down life into the “moment” where architecture becomes a signifier of the ever-pervasive Virilian speed-scape of modern life now reduced to a vector of consumption. Architecture’s qualities have shifted towards the functionality of space and process that is dominated by an efficiency of workflow and production. In this context the objective qualities of this accelerative violence are incorporated into predictability and an ongoing need for progress through a culture defined by the optics of the lens.<sup>271</sup> The same qualities that have influenced the speed of modernity are at play in the design and development of architecture. Software modelling and the incorporation of lens and computer-based technologies have created “instant” architecture that can be visualised three-dimensionally through computer generated virtual fly-bys. “As architectural imagination arguably becomes more kinetic, so its anticipations become more cinematic.”<sup>272</sup> Within a Virilian context, architecture has thus become another vector of acceleration within the relentless engine of modernity.

The works *Decelerative Architecture #1*, 2017, and *#3*, 2018, (see figs. 35, 37) intend to bring together some of the ideas that informed the research through a series of images that effectively bookend the practice-based work. Using similar practice-based processes to those outlined in Chapter 3, this work attempts to situate architecture conceptually within a more purist context in

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<sup>271</sup> Adam Sharr, ‘Burning Bruder Klaus: Towards an Architecture of Slipstream,’ in John Armitage (ed.), *Virilio and Visual Culture* (Edinburgh: Edinburgh University Press, 2013), 51.

<sup>272</sup> Ibid, 53.



which it may potentially act in opposition to the vector of speed. Using visions of brutalist architecture sampled from various urban terrains, the structures are placed into non-urban landscapes emphasising their formality and physical presence. *Decelerative Architecture #1* depicts a staircase that offers an imaginative view of the surrounding countryside. The second work in the diptych uses a similar landscape to draw out the timeless – if not alien – qualities of the structure; its triangular shape intimates a physical opening or psychological conduit that allows passage into a subterranean space of refuge.



Figure 35. David Manley, *Decelerative Architecture #1*, 2017, archival photographic print 1250 x 1000mm.

Can architecture act as a vector for deceleration? In *Burning Bruder Klaus: Towards an Architecture of Slipstream*, 2013 Adam Sharr meditates on its power to potentially disrupt the accelerating pace of modernity through construction and design, drawing on the architectural work of Peter Zumthor and in particular his Bruder Klaus Field Chapel, constructed in 2007 on the edge of a field in Germany (see fig. 36).<sup>273</sup> Sharr argues that Zumthor's structure may offer a counterpoint to the accelerating trajectory of contemporary society by offering what he describes as a "pocket of least acceleration" which confounds our contemporary expectations of architecture.<sup>274</sup> The chapel is windowless and constructed from moulded cement poured over a wooden framework which is itself comprised of over a hundred tree trunks that were laid out in the shape of a wigwam. On completion of the structure, the wooden support beams were deliberately set alight to cure the cement. While architecture will often meet a violent end, the Bruder Klaus Field Chapel was forged through a violent beginning; born from the heat and intensity of an inferno that burned for weeks through a controlled process and deliberate design. The heat from the intense blaze cured the cement in the interior of the chamber blackening its walls and leaving behind an imprint of the wooden framework. After the fire dissipated, the charred remains of the ash from the wooden formwork were encased in molten lead that was used to create the floor of the chapel. Prior to the ignition of the fire, hundreds of small holes were cut into the walls of the structure. These holes allowed oxygen to penetrate the inner chamber of the building, fuelling the fire and sustaining its intensity. These holes subsequently became light vectors that illuminate the chapel by way of glass spheres that were placed over them. The chapel has no roof and the ocular zenith of the building remains open, exposing its interior to the elements.

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<sup>273</sup> Sharr, 'Burning Bruder Klaus' 64.

<sup>274</sup> Ibid.





Here the research considers the opportunity for architecture to retreat from a contemporary paradigm of speed while encouraging a decelerative pocket of resistance that is timely and even necessary. The timeless aesthetic qualities of the Zumthor's chapel stand in defiance of Virilio's explanation of a contemporary society in which "dromology" (a term used by Virilio to describe the science and logic of speed) is integrated into every facet of life through the optics of war and market driven imperatives.<sup>278</sup> As Sharr puts it, "Virilio has charted a vector of speed gathering force from the 'techno-cultures' of the military industrial complex," a contemporary life dominated by an ever-developing terrain of domesticated technologies designed from war.<sup>279</sup> Through a myriad of digital platforms and optics, the gathering of data has become the new modality for concentrating capital and power into the hands of a few. Meanwhile the real-time immediacy of the technology has condensed the physical and temporal landscape so that the narrative arc of daily life is in a constant state of disruption through the ever evolving capacity of technology to encroach on our lives. "We have been propelled by war into the service of the internal combustion engine, the camera, the micro-chip, robotics and biotechnologies."<sup>280</sup> Architecture is caught up in the vector of this speed through the integrated and integral role it plays in almost every facet of human existence.

Zumthor's Bruder Klaus Field Chapel acts to slow this speed though its concept and design, encouraging an eddy of contemplation within the torrent of modern-day life with its seemingly simple design conjuring the minimalist lifestyle of Bruder Klaus himself. The structure commands a similar initiatory power over its surroundings as the bunker, and their aesthetic qualities are closely aligned through the use of cement casting and an emphasis on form. Comparisons with the bunker subvert the chapel's iconography through the consideration of alternate vectors that pay attention to a presence within the landscape. The chapel is "static" in a world

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<sup>278</sup> Virilio, *Speed and Politics*, 8.

<sup>279</sup> Sharr, "Burning Bruder Klaus," 51.

<sup>280</sup> *Ibid.*

of speed, but perhaps it too, at some level, may have its own trajectory, implicating the accelerative nature of the media landscape juxtaposing its objective violence through design and aesthetic qualities, slowing the visitors' motions in a less "predictable" way.<sup>281</sup> This impression may be due in part to the location of the building, which means that it is accessible only by foot. The gravel on the path leading up to the structure, along with its slight incline, acts to limit the pace of visitors as they approach the building. This deceleration is enhanced further by the heavy steel doors that enable entry into the small space inside where the leaded floor directs the visitors' eyes up along the chapel walls, which are in turn illuminated by the hundreds of jewelled glass baubles that glow throughout its interior. These lights draw attention up towards the oculus of the chamber. The building's cramped interior makes photography difficult; a deliberate design ploy to force visitors into a more considered experience of the interior of the building. Indeed, a discreet sign discourages such pursuits as you enter the chamber, enhancing the visitors' temporal experience of the space and its physicality.<sup>282</sup>

The lifespan of the Bruder Klaus Field Chapel could also operate as an alternate vector, as the integrity of the structure has been fashioned by the architectural "echoes" of the "atomic age," a design that putatively references the molecular half-life of radioactive material.<sup>283</sup> The materiality and design of the building ensure its longevity and influence over its surroundings – a reminder of the complexities of speed. The point at issue here is precisely how the building affects the motion of an accelerative culture. The building's decelerative pace reminds us of Virilio's concerns in regard to the ocular trappings of daily life in which the image and cinema have come to define a culture of the lens that encourages the "disintegration" of physicality; horizons collapse into the immediate and present through an increasing trajectory of velocity.<sup>284</sup> Buildings like the Bruder Klaus Field Chapel do not stop or even slow

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<sup>281</sup> Ibid, 57.

<sup>282</sup> Ibid, 59.

<sup>283</sup> Ibid, 61.

<sup>284</sup> Ibid.

this motion, but they may help to offer a pocket of resistance within this trajectory. They also do not reject contemporary life or even offer some impossibly naive alternative, but rather achieve their accelerative “drag force” through a momentary “slipstream” that has the capacity to slow the experience of a culture defined by speed if only in a momentary way.<sup>285</sup> As Sharr says, “The architecture of slipstream allows, perhaps the beginning of an architecture of resistance.”<sup>286</sup>

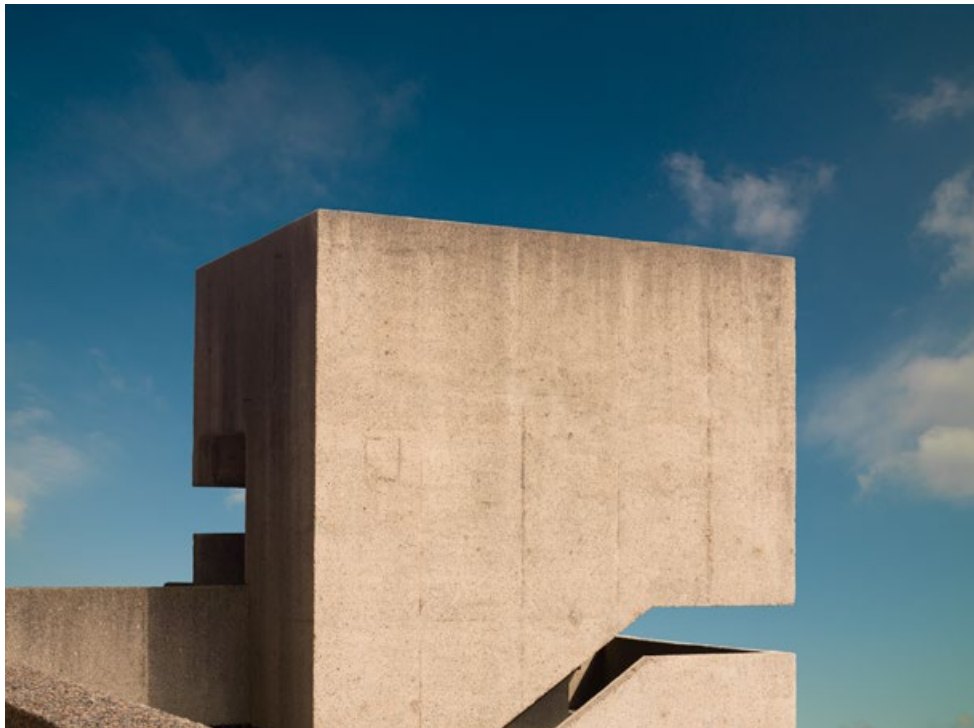


Figure 37. David Manley, *Decelerative Architecture #3*, 2018, archival photographic print, 1000 mm x 1033mm.

It would be important to return to Lahiji’s defence of architecture here (Chapter 6). If defended and reclaimed, architecture has the potential to act as a potent force for contemplation and reflection. Just like Virilio’s analysis of the Atlantic bunkers that were designed and constructed to absorb and deflect projectiles, the Bruder Klaus and similar architectural

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<sup>285</sup> Ibid, 63.

<sup>286</sup> Ibid.

structures can operate through their capacity to deflect the vector of speed, slowing its pace ever so slightly.<sup>287</sup> As Virilio argues, “No matter how efficient the form being tested, there are always pockets of slower movement, eddies in the swirling vortex of speed,” the structure is part of an accelerating world, but may operate as a “fragment” that offers an alternative pace.<sup>288</sup> Virilio’s dromospheric world demonstrates how power and capital are concentrated into the hands of the few through the sustained encouragement of technological development where contemporary life is plagued by extreme “time poverty” and the possibility of the interruption of the “status quo” through “intellectual or contemplative endeavours” becomes ever more unlikely and seemingly out of reach.<sup>289</sup> Architecture can thus act in principle as a disrupter of this vector, not only through its obvious aesthetics of physicality, such as places of worship, but also through design that encourages similar opportunities for a contemplative stance.

In a consideration of the architecture of slipstream and its contemplative tempos, one might also look towards the work of James Turrell. Many of Turrell’s works combine architecture, light and temporal shifts that prompt a far deeper relationship with time, a relationship that perhaps existed long before the advent of measured time and the current chronoscopic time of the instantaneous. Turrell himself believes that humankind is capable of sensing a type of time that is far greater than that which we are immersed in on a day-to-day basis.<sup>290</sup> One might describe this as a celestial or cosmic time, a time that has a profoundly greater breadth and depth than the mechanism of a clock. Turrell’s work reminds us of the rhythms of the natural world, its curious tempos, its growth and inevitable decay. The visible shifts and entropic nature of the work is played out within the confines of architectural structures that will one day succumb to the same inevitable forces that even determine the fate of light itself.

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<sup>287</sup> Paul Virilio, *Bunker Archaeology* (New York: Princeton Architectural Press, 1994), 45.

<sup>288</sup> *Ibid.*, 61.

<sup>289</sup> *Ibid.*, 63.

<sup>290</sup> Arden Reed, *Slow Art: The Experience of Looking, Sacred Images to James Turrell* (Oakland: University of California Press, 2017), 228.

Arguably the grandest theatre of attention that Turrell has embarked on is the Roden Crater, which is a work in progress situated in the Arizona desert (see fig. 38). Constructed from the natural volcanic geology of this landscape, the architecture maps the movement of celestial light in the many chambers that have been carved out of a volcano that has existed in the desert for millennia. Turrell himself describes the work as “a stage that performs itself with you as the central character. It’s a tableau performed by the beholder.”<sup>291</sup> In her book *Slow Art: The Experience of Looking, Sacred Images to James Turrell* Arden Reed says that *Roden Crater*, not unlike Zumthor’s chapel, “enacts the coordinates of slow art; flatness gives way to depth, stillness verses motion, illusion verses reality. The crater generates its own theatrical stillness that is never truly still.”<sup>292</sup>

In a similar way to Hiroshi Sugimoto’s images of seascapes, Turrell’s draws our attention into an experience of a time that is slower and far deeper, an immersive experience that is perhaps paradoxically magnified by the accelerative pace of modern life. Reed describes such works as art that makes us aware of a far deeper and enriching experience of time that connects us to the natural world.<sup>293</sup> Turrell’s architectural constructions may also remind us of the redemptive qualities of humankind’s attempts to understand the celestial universe through the creation of astronomical observatories such as the Stonehenge megaliths, which are imbued with a redemptive quality that enables a journey from darkness into light. *Roden Crater* is no different. Its presence in the landscape offers a meditative counterpoint to the immersion of progress by reminding the beholder of the natural rhythms of existence. Its chambers and apertures stretch time through chromatic and diurnal shifts in the cycle of the heavens. Through the application of physics and the imagination the crater has been programmed to highlight particular celestial events such as planetary eclipses and equinoxes. The domes and oculus of

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<sup>291</sup> Ibid, 232

<sup>292</sup> Ibid.

<sup>293</sup> Ibid, 236.

*Roden Crater* trap light from distant stars, a light that is older than our solar system. Just like the Bruder Klaus Field Chapel, Turrell's work offers an architecture of purity that may encourage a more considered understanding of existence; an architecture of slipstream that acts to deepen our perceptive awareness of true time and the entropic nature of the universe.

Time as a concept, however, is far more complex than such physical representations can convey. Chronological time is a human construct and chronoscopic time has emerged on top of it through our relationship with technology. Both experiences have an underpinning that is external and quantified and ignores what Purser describes as the "central role of human consciousness" in which time is external and exists as an independent arbiter or phenomenon that is not constrained by the human need for order.<sup>294</sup> It is a concept that is more nuanced and takes into consideration the complex influence of time on all things, both animate and inanimate. When we accept the true nature of the complexities of time we must, as Barbara Adam notes, rediscover its sensual qualities through the power of our imagination.<sup>295</sup> Humans have not evolved an organ that can sense time. However, when we employ a variety of sensory perspectives and combine them through our imaginations, we can perhaps experience time at a far deeper level. If we are to navigate a world defined by speed and the immediate, we must tap into this perceptive sensorium and recommit to a much deeper understanding of what time may actually represent.

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<sup>294</sup> Purser, 'The Coming Crisis in Real Time Environments.'

<sup>295</sup> Barbara Adam, *Timescapes of Modernity, the environment and visible hazards* (London: Routledge, 1998), 160.



Figure 38. James Turrell, *Roden Crater*, Crater's Eye, 2003. 2019 Skystone Foundation; images © James Turrell.

Our interaction with the landscape of the new media technologies has seen a decoupling of our senses away from the phenomenological environment towards the networked environment, this has in turn has led to a separation from the physical world that encourages participation through the perceptive senses that inform and shape our imagination. It is no wonder that notions of real-time go uncontested as it has developed and overlaid the construct of chronological time, a measurement that is grounded in physicality and order yet remains ultimately superficial and cumbersome within the context of creativity and imagination. An understanding of time that currently dominates Western experience is based in a spatial engagement within a hyper-connected tele-visual world of the instantaneous mediated through the pervasive nature of technology, which is something we are becoming more and more hard-wired to interact with. When we stop to consider the importance of participation in the physical world through our perceptive senses, senses that when combined inform the imagination, we recognise other temporal textures, possibilities and topographies, and engage with a temporality of the infinite.

Art can play a role in propagating a recalibration of how we conceptualise time as its fluid nature can encourage engagement with a multi-temporal sensorial experience in which disruption gives way to contemplation, fragmentation to sensory orientation. Such responses to the speed of contemporary life may operate as a form of deceleration, a counterbalance to the landscape of immediacy, a cognitive response through the coupling of the senses and imagination: an antidote to speed. My visual practice is a form of diagnosis and treatment that deliberately attempts to create such decelerative spaces through the process of staging events linked to the violence of modernity. The physical process of this re-staging allows for a more contemplative position from which to decompress; a meditative opportunity that operates against acceleration.



Construction and postproduction of the work demonstrates this diagnosis and promotes my own therapeutic treatment in order to make sense of the violence attributed to modern life. This treatment manifests for me as a decelerative space within that brings together the sensorial and imagination to re-enact the traumatic through a creative process. The production of the work is a meditative act of contemplation and indeed redemption, a decelerative vector or pocket of resistance in the tumult off technological encroachment.

## Conclusion

This research project has primarily been concerned with how digital imaging technologies are implicated within the changing landscape of our temporal experience. The shift towards chronoscopic time and the disruption associated with it, something I have argued is the by-product of the immediate nature of a globalised tele-visual culture, acts to fragment the temporal rhythms of daily life disrupting the way memory is stored in a way that is comparable to the experience of traumatic stress. This process in turn encourages a state of perceptual hyper-vigilance, a physiological response to the pervasive nature of the visual media cycle. It has been demonstrated that this response is not just related to images that depict violence per se but also includes the violence associated with the intensity and pervasive nature of such intrusions.

The historical evolution of aerial photography was outlined as a precursory influence in regards to the concerns raised in this thesis with particular attention paid to its military use that helped to drive not only the development of this form of photography but also the way in which war was waged (Chapter 1). The development of aerial vision was specifically used to demonstrate the influence of the image in shaping the trajectory of societies, and architecture was introduced as a staging ground and signifier of the traumatic through a consideration of the aerial bombing of German cities during the WWII. This was undertaken through an analysis of the literary works of W.G. Sebald whose novels posit that post-traumatic stress may operate at a societal level, while incorporating the relationship between image and memory in the processing of trauma on a mass scale. This discussion linked the bombing of Germany to the way in which trauma can be addressed within a creative context.

The temporal implications of photography were discussed and traditional perceptions of time and space were

considered in light of changing media technologies and their impact on the individual. The intrusive nature of the image was interrogated and linked to the irrational violence of modernity. The notion that image violence – not only its content, but also that its speed and intensity have traumatic imprint – was developed through an examination of Virilio and Good's theoretical ideas. An argument was developed that contemporary image speeds have the capacity to disrupt narrative timelines in a way which is similar to the experience of trauma at the level of the psyche.

The ideas above were addressed through the emerging theoretical paradigm of chronoscopic time, a time of the instantaneous that is driven by contemporary imaging technologies. This was discussed within the context of an immediacy of vision; a vision that reduces the perception of the physical world into an instantaneous array of tele-visual fragments. In light of this the traumatic imprint of photography was considered through an historical investigation of Charcot's flash imagery of cataleptic patients. This discussion was used as a metaphor that helped to unpack Virilio's concerns. Here the image is seen as the great disrupter of contemporary life, its influence not only shaping events but also the temporal landscape.

The power of the image in influencing and shaping the socio-political milieu was also considered in light of these issues. It was argued that the image continues to define and shape events through its complex interplay within the matrix of societies. Such complexity helped to drive events such as the 2001 terrorist attacks on New York and the Pentagon, which represents an unparalleled image spectacle that continues to influence world politics. Bauman's theory of technological ambivalence was considered in order to further situate these concerns within a theoretical framework. Here technology is seen as the driving force of modern cultures in which the faults of complex systems can only be addressed through the develop-

ment of ever more complex technology, which in turn retains its own faults that need to be addressed.

Proximal and remote imaging technologies were explored through a consideration of Weizman's discussion regarding imaging thresholds and their use as a form of civilian censorship that enhances a lack of information. The way that military imaging technologies are appropriated by artists and political activists in order to shed light on the violence associated with this technology was also explored further demonstrating the ambivalent nature of such systems. Žižek's structural analysis of violence was discussed and linked to architecture, and in particular the way in which it is codified through its historical institutional underpinnings and present-day image culture to attract violence through its symbolism. The destruction of the World Trade Centre was considered in order to demonstrate these ideas within the context of their symbolic power. This analysis informed the production of the practice-based research through the development of a series of works that explored how the media is implicated in the propagation of the traumatic. Architecture is implicated here as it operates at a variety of social-political levels that are enmeshed within the contemporary media. A detached prism for exploring trauma within a creative context was introduced and developed with links drawn to a variety of literary and contemporary artists. The practice work explored how photography may represent a subject in order to create a distance between the spectator and an event that, paradoxically, may encourage greater empathy when considering issues around the traumatic.

The civilian was considered as a new quasi-combatant within the post September 11th world in which the anxiety of terrorism and the contemporary paradigm of war continues to be played out through the media and within public spaces once considered safe. The use of the term trauma was considered within a post September 11th world in which notions of public and military space were challenged. Events such as the

attacks on the World Trade Center have encouraged a new paradigm of world conflict, which to a degree is now determined and driven by the image and the varying platforms used to disseminate it. The practice work evolved through a thematic investigation into the potential psychological and temporal dissonance encouraged by this new contextualisation of the urban terrain in which the citizen has become a potential soldier in a diffuse and arbitrary conflict.

Architecture and the image are implicated in light of the above investigations, as they are key signifiers and drivers respectively of public perceptions and anxieties around the new theatre of conflict that include public spaces and cyberspace. We have seen the erosion of architecture's capability as an essential form of human expression to transform and connect. Within this context its ability to operate as a potential antidote. Here, architecture is reclaimed within a more purist notion, and may act as a potential counterbalance to Virilio's concerns regarding the speed and accelerative pace of modern life in which the image defines a culture of the lens and a disintegration of physicality into the immediate and virtual. This discussion explored the way in which particular structures disrupt the velocity of image culture through their design and presence in the landscape. The studio practice developed in response to these investigations, which were deliberately broad in scope given the complexity and impact of visual technologies on contemporary cultural, social and political dynamics. Grappling with this complexity and attempting to make some sense of it through the act of creativity is ultimately the point of *The Post Traumatic Urbanist*.



Figure 39. Installation view of the *Post-Traumatic Urbanist Series* as part of the *Synthetic* exhibition at the Australian Centre for Photography, 21st July 2017- 26th August 2017.



Figure 40. David Manley, *The Post-Traumatic Urbanist*, installation view, Galerie Pompom, Sydney, 13th May - 9th June 2019 .

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## Appendix

### Measures of Esteem

#### Publications

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#### Solo Exhibitions

##### 2019

*The Post-Traumatic Urbanist*, Galerie Pompom, Chippendale, Sydney, May 19 – June 3, 2019.

##### 2018

*The Post-Traumatic Urbanist*, 220 Creative Gallery, Potts Point, Sydney, October 4 – 18, 2018.

##### 2016

*Brutes*, Verge Gallery, The University of Sydney, September 1 – 24, 2016.

