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What are the visible and invisible archaeologies of conflict in the Irish landscape of Donegal and how may these be contextualised and represented through arts practice?

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PhD Submission.



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July 2012.

Abstract:

What are the levels of cultural visibilities of past conflict that can be discerned in the landscape and how may these be approached through arts practice? Addressing this question begins with a selected chronology of sight and its mediations through early optical technologies and the later emergence of photography. The evidential base for the constructed nature of vision has been traced through the history of the camera obscura and the stereoscope as examples of optical technologies, each reflective of the cultural distinctions of previous epochs that were characterised intellectually and empirically, by monocular and binocular perspectives. The entwined narratives of photography and territorial appropriation are made evident through discussion of examples selected from topographical survey images of the nineteenth century American west. The influence of the visual and the landscape genre in the formations and study of cultural landscape are explored through its origins within the geographical discipline, including the study of militarised landscape. The approach of contemporary archaeology to concerns with recent conflict provided the framework through which to discuss an interdisciplinary approach between artistic and academic practices. Therefore, the visible and the invisible have been identified and interpreted as co-existent functions in the operations of vision, exemplified through the models of empirical apparatus as studied, active in the ideological and instrumental characteristics of photography, and analysed as evidence of an aspect of geopolitical strategy, as signified within selected landscapes. From this, it is argued that the dominance and epistemology of seeing is ambiguous and contradictory, and that the strategies of the visible and the invisible, in the practice based research of an Irish landscape marked through the preparedness for conflict, may be usefully informed and interpreted through a cultural framework. And that, in conclusion, through the re-appropriation of strategies of visibility and of lens-based technologies, the institutional gaze of photography may be destabilised by a critical and redemptive use of photographic arts practice.

Keywords:

Cultural visibilities, arts practice, photography, landscape, the archaeological, cultural geography, militarism, conflict, Ireland, neutrality, World War Two.

Declaration:

I certify that this thesis which I now submit for examination for the award of PhD, is entirely my own work and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my own work.

This thesis was prepared according to the regulations for postgraduate research study by research of the Dublin Institute of Technology and has not been submitted in whole or in part to any other University.

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Candidate: Mhairi Sutherland

Date: 8 July 2012

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Thesis Introduction:

The research question – “What are the visible and invisible archaeologies of conflict in the Irish landscape of Donegal and how may these be contextualised and represented through arts practice?” has been addressed through textual and historical research and through arts practice, using lens-based media in the exploration of an historic series of military circumstances, in the contemporary Irish landscape of County Donegal. The research undertaken and the resulting outcomes are presented as a textual narrative and as visual arts practice. The thesis material is composed of five chapters, each of which discusses selected arguments in the fields of, respectively; the modification of human sight through opticality and the emergence of modern photography, origins of the geographical discipline and the visual influence on formations of cultural landscape, a contemporary archaeological approach to sites of conflict and examples of relevant artwork, and a characterisation and discussion of Ireland’s position of neutrality during the Second World War, including a critical review of the images produced on this topic. This fourth chapter is intended to function as context and framework for the fifth chapter, the re-imagining of the landscape through the arts practice, shown in the *Arc of Fire* website, which is composed of selected visual material from the live research phase and the site-specific exhibition installed in Fort Dunree in the Inishowen peninsula. The conclusions form the final part of the thesis. Photography and lens based processes, explored as a critical history and employed as a working method of my professional arts practice, is fundamental to the research project. Within the body of the work, one of the ways in which photography functioned was to act as the gatekeeper of the methodology and the practice, establishing the parameters of the engagement through the contested arguments of the early history of vision and optical aids, critically reflecting on the landscape and the archive, and concluding with a presentation of findings as a

photographic series. The research has been informed by current thinking that is re-examining the political and social evidence for Irish neutrality, which has involved evaluating the cultural effects, material legacies, and reconsidering former acts of legislation. Both the textual and practice elements are interdependent, and together constitute the methodology and series of approaches that have been followed in order to address issues of cultural visibility of the remains of recent conflict in the landscape. Although the artwork produced has an independent identity as an exhibition¹ the written and visual narrative of the thesis form a connected discourse, created through the contextualisation of the textual arguments, and interpretation of the visual arts practice.

The research undertaken in the thesis has been motivated by a long standing interest in the ways in which arts practice, particularly photography, may approach issues and traces of conflict, and in so doing, create a series of interpretative representations that invite reflection and critique on issues of visibility, landscape and photography. My interest in landscapes that have been shaped by political forces has been a feature of my personal and professional life for many years. Growing up, living, working and travelling across the Irish Sea between Scotland, Donegal and Derry, a circuitous loop between the east and west coasts, the North Sea and the western Atlantic seaboard was established at an early age. So too was exposure to events such as the Hunger strikes and border disruptions of 'The Troubles' in Northern Ireland in the early 1980's, whilst attending secondary school in Letterkenny, Donegal's largest town, and where tension and fear marked life on both sides of the border. Subsequently, my arts practice was informed by the experience of living and working in Derry during the late 1980's, where as an artist member of the Orchard Gallery's public art team, 'Sitework,' we undertook acts of cultural intervention and the installation of artwork addressed the political and civic climate of the city. Later, having returned to live and work in Scotland, I created a series of projects that engaged the military agency directly, and where the processes of negotiation and access required for interaction with the Royal Navy at Faslane and the Royal Air Force at Leuchars became part of the fabric of the artwork itself. Throughout, it has been my ongoing connection with

¹ The exhibition was first shown as a site-specific installation in Fort Dunree, Inishowen, Donegal, May 2010, and as an exhibition in the Regional Cultural Centre, Letterkenny, Donegal, February-March 2011.

the landscape of Donegal itself, Ireland's most northerly county, geographically, historically and politically positioned on a particular axis with the other counties of Ulster as a result of Partition that has compelled the work, and acted as a catalyst for the research. The faultline of the border and the powerful beauty of the landscape within which it is marked, now territorially almost invisible in a post-conflict climate, but in place as more than a metaphor separating the jurisdictions. So from an initial awareness of elements of political and military influences that had shaped and influenced this landscape, and as an artist working with visual media and lens-based processes, the choice was made to research the condition of human vision and photographic representation, and the role played by opticality in constructions of landscape as territory and as genre.

As it is part of my argument that in order to understand landscape as discussed within the thesis, it is also necessary to understand vision. Within the research framework therefore, both human vision and presence in the landscape have been explored as revelatory of cultural influences which mediate and impact upon seemingly 'natural' states. Firstly, the act of seeing itself, and the historical and empirical efforts which have generated debate and knowledge on the subject of human sight and how we see, and secondly, the practice of looking at landscape, whether as a subject of geographic study, or as a medium for artistic expression, have each been investigated in terms of factors which have influenced understandings of what is being looked at, and the images which might be produced as a result. These factors include the creation of optical technologies such as the camera obscura, the stereoscope, and the emergence of photography, and correspondingly, the subsequent influence of opticality and the visual upon representations of landscape as a medium for cultural and territorial forms of appropriation and impress.

In Chapter One 'Constructing Vision,' even a necessarily short investigation into the nature of human vision reveals not only our fascination with the eye, the image and how we understand what we see, but also the radical history of many optical propositions, which were subsequently overturned and replaced with new empirical concepts and philosophical thought. From the early classical theories of 'intromission', which suggested that objects somehow mimetically entered the eye and enabled sight, to the nineteenth century understanding of the 'retinal afterimage'

and the embodied nature of sight, the study of opticality is a dynamic and contested field which has shown that, far from being only a physiological process, the act of vision and its representation as image, is highly codified and culturally mediated. The 'visible' and the 'invisible' explored here, therefore, correspondingly reflect this bias, and these conditions are to be understood, not in literal terms, but in the codes of cultural concealment and recognition that adhere to the signifiers of conflict that have been traced in the archive and the landscape.

In W.J.T. Mitchell's proposition of the counter-theses of visual culture, he suggests a "...meditation on blindness, the invisible, the unseen, the unseeable and the overlooked..."² as part of the spectrum of visibility, the use of which for military purposes can be seen as part of the ideological and instrumental arsenal of conflict, deploying the covert and the overt equally in tactical and political measures. The passage from Descartes most often quoted from his seventeenth century treatise, *Optics*, on sight being the noblest of the senses, and the usefulness of inventions which magnify this power,³ is the foundation upon which 'Cartesian perspectivalism' rests, and which contemporary theorist, Martin Jay, has traced in the 'ocularcentrism' of twentieth century philosophical thought.⁴ Instead of reiterating this dominance of the eye within the thesis (although the influence of perspective on formations of landscape is discussed) the argument has focussed on the axes of difference and similarity between the apparatus and cultural origins of the camera obscura and stereoscope, and the shift from monocular to binocular vision. The arguments of contemporary theorist Jonathon Crary, and photographer and historian Joel Snyder, both of whom problematise the assumed lineage of photography in different ways, will be drawn upon in order to show not only the origins of the dominance of the scopic regime, but also the disruptions and convergences of empirical and representational fields of vision.

² W.J.T. Mitchell, "Showing Seeing: A Critique of Visual Culture," 170. *Journal of Visual Culture*, August 2002, Vol. I, No.2. <http://www9.georgetown.edu/faculty/irvinem/theory/Mitchell-ShowingSeeing.pdf> Accessed 30 October 2009.

³ Rene Descartes, *Discourse on Method, Optics, Geometry and Meteorology*, translated by Paul J. Olschap (Indianapolis, IN, 1965), 65.

⁴ Martin Jay, *Downcast Eyes: the Denigration of Vision in Twentieth Century French Thought* (Berkeley: University of California Press, 1994)

In 'Narrating Landscape,' the second chapter of the thesis, a correspondingly similar approach to the constructed nature of the concept of 'landscape' as a representational form and as an art historical genre, is explored. Here the relationship between geographical landscape and the genre of 'landscape' will be shown as deeply intertwined, with the formation and study of cultural landscape having been shaped by representation and the pictorial image. The legacy of the painted, pictorial image is evident in the composition of early landscape photography, as it was in the scientific and cartographic territorial agenda in the topographical survey photography of the American west of the nineteenth century. The major expeditions that surveyed the landscape have been selected for discussion as an example of an ideological, historical and geographical set of circumstances that incorporated and utilised the emergence of photography as a form of institutional appropriation. Specifically, this has been explored through the work of the survey photographer, Timothy H. O'Sullivan, whose photographic images of the time have been later claimed as expressive of the values of artistic modernity, and the critical debates over which exemplify the positioning of photography in both aesthetic and analytical discourses.

The third chapter 'Conflicted Territory,' explores the means by which landscape may be shaped through the diverse impacts of conflict, and is an area of interest engaged by many artists, selected examples of which have been researched in support of the claims of the enquiry. These works can be understood as valuable barometers of social and civic fears and anxieties, an imaginative focus for the interpretation of experiential events and circumstances. Broadly, this research focuses on the potential for arts practice to act as a form of witness, alongside other models of characterising and interpreting the complexities of conflict through its traces and remnants in the landscape. This is undertaken through a survey of how these same themes are treated in the disciplinary models of cultural geography and contemporary archaeology, with a thematic focus on Cold War landscapes. By expanding the field of enquiry, whilst focussing on the primacy of arts practice as a lens, my aim was to situate the enquiry within a wider frame of reference, and to demonstrate a connectivity and relevance to other contexts, all of which are collectively linked to social and civic concerns. Specifically, the work of the artists selected and discussed is in two sections within the chapter; 'Landscapes of Conflict' presents examples of arts projects from the perspective of their contribution to the discourse of contemporary archaeology, and as

part of a cross-disciplinary approach as proposed by archaeologists and related specialists in the field; and 'Artistic Landscapes,' which explores the work of three contemporary artists, and has been selected in order to show the potential of photography, as an institutional and documentary medium, to also function in a redemptive and critical way, and to present a diverse range of artistic approaches and concerns, reflecting and mirroring the diversity and scale of modern conflict in the twentieth and twenty-first centuries.

In Chapters Four and Five, 'Re-Imagining the Donegal landscape,' and 'Arc of Fire' the final, arts practice chapter of the thesis, the landscapes are situated on the western Atlantic seaboard of the Irish coast, and have been researched through the archive and through photographic practice. The historical record of analysis is set within the global conflict period of the Second World War. A study of these landscapes has been undertaken in support of my claim that photographic arts practice has an interpretative role in contextualising aspects of modern conflict. This study, through the written narratives and within the landscape itself, has been made through a survey of the remnants of preparedness for conflict elsewhere, and the spectrum of visibility spans the intangibility of a former secret air corridor, to the tangible materiality of the military bunker as a coastal observation post. The survey also includes the inscribing of the landscape with text and code, ranging from site-specific memorials to individuals lost in conflict, to signifiers of the ambivalence and contradictions of the position of neutrality, and an exploration of subsequent connections to contemporary events in a conflicted, and post-conflict Irish landscape. *Arc of Fire* is accessible on <http://www.mhairisutherland.com> and a DVD copy is enclosed, and whilst it should be encountered closely as Chapter Five, I also suggest viewing after this introduction, in order to contextualise the primacy of arts practice to the overall enquiry.

The territories that have been characterised are not those of the sites or battlefields of active warfare and conflict. These landscapes have all the qualities that are considered 'scenic' and are part of a geography that is known for being distinctively rugged and windswept, exemplifying the 'unspoilt' notion of a remote landscape as previously indicated. The areas that have been the objects of study, therefore, are part of the preconception of remote 'wilderness' and, as geographical entities, are in the 'invisible' end of the spectrum of warfare, one a military secret, and the other a place

of preparedness for potential conflict. These are not traditional theatres of combat, and the remnants, markings and memorials surveyed all signify the tension maintained between the acknowledged and the unacknowledged, and their connections to contemporary political and civic events. As with the problematising of photographic history, so too may the narratives of national neutrality be troubled by more nuanced and textured accounts. In her study of the ubiquity of territory connected to the acts of war in other places, my concerns chime with those of the cultural geographer Rachel Woodward, in that closer scrutiny of the covert and overlooked geographical scenarios to the theatres of war fought more visibly elsewhere, can provide new understandings of the complexities of landscapes shaped by political forces and marked by traces of conflict.

1. Chapter one: Constructing Vision

1.1 Introduction

The aim in this chapter is to explore the proposition that human vision and the act of seeing is as much a culturally and technologically mediated process as a physiological one. Much of what we now accept about how sight operates came about as a result of the empirical discoveries and optical technologies of the nineteenth century, and this chapter will trace some of the pre-history and milestones of these discoveries, exploring the origins of the constructed nature of vision and culminating in the emergence of early photography. The phenomenon that is the sense of human eyesight has been a focus for invention and technology over many epochs, as attempts to define, mediate and control vision have resulted in the production of apparatus ranging from the camera obscura of antiquity to the satellite images of the twentieth and twenty first centuries. As will be shown, these relationships between sight and technology have been the source of vigorous claim and counter-claim, and are emblematic of the historical dominance and fascination with the visual in western philosophical thought.¹ There are two primary historical mechanisms that have been selected for discussion; the camera obscura and the stereoscope. Within the context of nineteenth century modernity and the revolution in sight which took place during that time, a number of other optical devices will also be considered. The rationale for the selection is that each mechanism has been significantly influential, both in the scientific history of optics and in the mediation of vision, and each have had a considerable impact in the history of representation through the medium and development of photography.

Although the camera obscura was not originally conceived as a device for the creation of images, by the time of the Renaissance in the fifteenth century the fundamental principles of linear perspective, light rays, the eye, and distance as a framework for the construction of representational painting, for example, was enabled symbolically and practically by the operations of the camera obscura. Although there were other

¹ Martin Jay, *Downcast Eyes: The Denigration of Vision in Twentieth Century French Thought* (London: University of California Press, 1994), Jay discusses this fascination, which he terms 'ocularcentrism' in his study of the influence of the visual on twentieth century French philosophy.

mechanisms created in order to extend and amplify vision, including the camera lucida as a drawing aid, and later modifications made with mirrors and lenses, the image 'fixed' by the chemical photographic processes of the nineteenth century was essentially the same image made possible through the camera obscura model of the fifteenth century. The camera obscura operated as a model of illumination whereby a single ray of light entered through a small aperture penetrating the darkness, therefore theories of vision in antiquity were regarded as external to the viewing body and emblematic of rationality and order, a 'God's eye' classical view of the world from outside and above. First recorded in 350BC the influence of the camera obscura continued up until the late eighteenth century, when its dominance was eventually subsumed by the rise of the stereoscope and other devices of the nineteenth century. In the stereoscopic experience the apparatus for viewing was brought to the body and held up to the eyes, as binocular vision reconciled the duality of dissimilar planes and rendered the viewing experience unstable and embodied. A stimulating illusion of depth and tangibility was created through the matrix of eyesight, apparatus and image. The respective technologies, however, are separated by more than a temporal gap, each arising out of distinct cultural epochs and sensibilities and consequently supplanting previous dominant theories and supporting new formulations of vision. I will argue that these complex optical devices, which are connected by mimetic operations that reflect the functioning of the eye, are also signifiers of divergent cultural and societal modes of thought, with each occupying a distinct literal and metaphorical space within the photographic discourse.

This chapter offers a selective chronological survey of the field of opticality beginning with the initial recording operations of the camera obscura in 350BC, and culminating with the emergence of the stereoscope and photography in the nineteenth century. As part of the argument that these mechanisms are distinct yet related in terms of their respective influence on the construction of sight and its representations, it will be shown that the empirical study of optics impacted on the development of human vision, and that this relationship was instrumental in the emergence of photography in the nineteenth century. Furthermore, I will argue that this construction is both instrumental and ideological, and specifically addresses issues of visibility and invisibility in the photographic print. This will begin with an exploration of the early genesis of the camera obscura, and the milestones in development and influence of the

apparatus, dating from the work of the Islamic scholar Alhazen (ca. 966-1039) in the eleventh century who produced the first written description of how the camera obscura functioned. The work of Alhazen was to be a major influence on subsequent European philosophical and empirical thought over the coming centuries: from Roger Bacon (1214 -1294), who recounted experiments on light and optics in his *Opus Majus* in the thirteenth, to da Vinci (1452-1519) in the fifteenth, using the camera obscura as almost an artificial eye in order to explore the limits of vision. In the sixteenth century Kepler's work with the device addressed the question of the projection of the upside-down image in the eye, and in 1558 with the publication of *Magiae Naturalis* by Giovanni Della Porta the operations of the camera obscura began to shift from the empirical to the pictorial, as the dramatic potential of the projected image was explored. The camera obscura as integral to the European project of linear perspective will be referenced through the work of Leon Battista Alberti (1404-1472) who published the first seminal account of perspective in art, *De Pictura*, in 1435.² A number of recent and contemporary theories on the role of the camera obscura, and later the stereoscope, will be discussed in support of the argument for the constructed nature of vision. In a broad and general understanding of the history of photography, optical aids, particularly the camera obscura, are generally conflated together in a seamless history of photographic reproduction. Beaumont Newhall, (1908-1993), the influential curator and art historian who was appointed as the first Director of Photography at the Museum of Modern Art, New York, in 1940, begins his essay 'The Pencil of Nature' on the inventions of Louis Daguerre and William Fox Talbot by asserting this position.

Ever since the Renaissance, artists and craftsmen had used the simple box camera – then called the camera obscura – as an aid to drawing. They traced the image formed by the lens on the ground glass of the camera. In the early years of the nineteenth century this skill of hand was replaced by what was picturesquely called 'the pencil of nature;' the capturing of the camera's image by photochemical means.³

² Joel Snyder "Picturing Vision" in *The Language of Images*, ed. W.J.T. Mitchell (Chicago: University of Chicago Press, 1980), 235.

³ Beaumont Newhall, "The Pencil of Nature," in *The Art of Photography 1839-1989* (London: Royal Academy of Arts, and Houston: Museum of Fine Arts, 1989), 12. The catalogue was published to accompany a touring exhibition.

This concept of the camera 'replacing' the 'skill of hand', rather than extending the scope and scale of hand crafted skills and tools for the creation of images, has sometimes allowed the chronology and design of the camera to be placed adjacent to the mainstream history of artistic representation. The argument here is that although the camera obscura is certainly part of the evolution of the modern camera and photography, this was not a seamless and natural process, as suggested by the 'pencil of nature' standpoint. Rather, its origins as a scientific device and later decline in influence, commensurate with the invention of the stereoscope and the transformation in ways of seeing that this heralded, are part of a continuum of methods through which human sight, and consequently its representations, are mediated and constructed. This constructed nature of the device will be discussed through the argument of photographer and theorist Joel Snyder, who claims that the history of the camera has been reversed and generally misunderstood in the history of representation, and maintains the centrality of the camera as part of the technological evolution of image-making rather than tangential and at a remove from more traditional and preceding processes. The date of optical influence in representational painting of devices such as the camera obscura is the subject of debate through the Hockney-Falco thesis. The argument of artist Charles Hockney and physicist Charles Falco is that opticality has been a significant feature of representational painting for a considerably longer period than its more accepted origins during the Renaissance. Their claim is that optical aids were in widespread use, although covertly, from around the 1430's⁴ almost a century before the later date of the early 1500's, and that consequently the 'photographic' is an integral element of pre-Renaissance history of painting.

The arguments of visual theorist Jonathon Crary in relation to the social and empirical divergence between the camera obscura and the stereoscope, and the impacts of the mechanisms on optical theory and philosophical thought is perhaps one of the most intensive and radical exploration of ways of seeing through photography, and of the construction of sight as an influential shaper of nineteenth century modernity. As Snyder identifies a misunderstanding of the artistic bias in the design of the camera,

⁴ Charles M. Falco, "The Hockney-Falco Thesis" <http://www.optics.arizona.edu/ssd/art-optics/index.html> Accessed 6 July 2009.

so Crary argues that the camera obscura, far from being the genesis for photography, was a model for an entirely different social, philosophical and visual culture than that signified by the stereoscope and the emergence of photography. Furthermore, he claims that it was the decline of the monadic camera obscura and the rise of the binocular stereoscope within the context of modernity that was instrumental in these empirical and societal shifts.

Although the stereoscope is the main focus of discussion of the second section of the chapter there were a number of similar 'philosophical toys' created throughout the 1800's in order to prove various optical theses and subsequently produced as popular entertainments that will also be considered. The work of scientist Joseph Plateau (1801-1883) produced his thesis and evidence for the 'persistence of vision' theory, which he demonstrated through an apparatus which was later adapted into the zoetrope, a pre-cinematic device. Physicist Michael Faraday (1791-1867) and mathematician Peter Mark Roget (1779-1869), contemporaries of Wheatstone, similarly each produced mechanisms that developed the proposition of the 'retinal afterimage' and which also became popular social entertainments. These optical discoveries and subsequent technologies had profound implications for understanding of the eye and the experience of sight, and when produced as social entertainments, functioned as part of the new preoccupations of modernity, with its emphasis on consumption and serial production. A decisive shift from the monadic perspective of earlier epochs to the binocular view of modernity was signalled by the invention of the 'stereoscopic viewer' designed and built by Charles Wheatstone in 1838 in order to demonstrate his proposition of a 'new fact of vision'. Almost simultaneously, in 1839 William Fox Talbot and Louis Daguerre each presented scientific papers in London and Paris respectively, on their 'fixing' of the ephemeral image projected by the camera obscura process and the emergence of the photographic print.

As photography developed rapidly during the first half of the nineteenth century a number of critical issues also emerged, which have been addressed by contemporary, and later, commentaries. A number of these issues have a bearing on the photographic discourse that will be unfolded throughout the thesis, and will here begin to establish the foundation for the claim of the instrumentality of arts practice in the exploration of the visibility of conflict within the landscape. Philosophers such as Benjamin and

Foucault, and art historian John Tagg have addressed aspects of visuality and early photography on particular issues. Benjamin most notably on the loss of authenticity and the 'aura' of the original through the serial production of many, Foucault on the panoptic potential of the medium and a role in regimes of surveillance, a theme which has been developed by Tagg through his theorising of regulation and disciplining of vision, and the institutional use of photography in the service of state interests.

2. Camera obscura and opticality

1.2.1 *Origins of device*

The operation of focussing light through an aperture into darkness was known as early as Aristotle (350BC), who described perhaps one of the earliest examples of the origins of the camera obscura as a naturally occurring phenomenon, and the effect of projected light through an aperture reflecting onto another surface.⁵ Noting the patterning of multiple crescent-shaped images of the sun through the leaves of trees during a partial eclipse, creating natural 'pinhole' images on the ground, the philosopher built a device to mimic this effect. Although a description of how the camera obscura effect actually functioned is attributed to later natural philosophers, Aristotle's observation and description of this natural effect and his subsequent construction of a dark chamber punctuated by an aperture to allow a light source to enter is amongst the earliest writings in western culture of the mechanism of the camera obscura.⁶ The question of how human vision works has been a challenge for philosophers for millennia, with some of the first recorded investigations occurring in the works of Greek philosophers Aristotle and Euclid. In their discussion of the historical influences on visual perception, contemporary optical theorists Wade and Swanston frame the opposing theories of philosophers Aristotle and Euclid,⁷ each of whom was producing theories of vision from circa 300BC. Euclid's theory of

⁵ Derrick Price and Liz Wells, "Thinking About Photography: Debates, Historically and Now" in *Photography: A Critical Introduction*, ed. Liz Wells. (Oxon: Routledge, 2009), 50; Michael John Gorman, "Art, History and Optics: New Light on the Hockney Thesis," *Leonardo*, Vol.36, No.4 (2003), 296. MIT Press <http://www.jstor.org/stable/1577325> Accessed 11 October 2008.

⁶ David Hockney, *Secret Knowledge: Rediscovering the Lost Techniques of the Old Masters* (UK: Thames and Hudson, 2006), 205. Hockney refers to Chinese scholar Shen Kua recording observations of a camera obscura process in 1086.

⁷ Nicholas J. Wade and Michael Swanston, *Visual Perception: An Introduction*. (London: Routledge, 1991), 16.

'extromission' proposed that vision occurred as light was emitted from the eye onto the object to enable sight, whereas Aristotle's theory of 'intromission' instead proposed that vision took place as impressions of the physical forms themselves entered the eye. As each philosopher had followers and schools of thought which supported their theories and differences in position, the result was that scholarly activity on optics was culturally and geographically diverse and sustained over comparatively long time periods. The cultural range and extent of this thinking is referred to by the contemporary artist David Hockney in his discussion of the influence of optics on the history and use of the camera obscura in Western image-making.

Optics formed part of a cultural thread that extended from antiquity, through Hellenistic and Islamic scholars to Western Europe, via Moorish Spain, in the twelfth and thirteenth centuries. Euclid's *Optics* was the foundation on which Arab opticians were to build. The translation of Greek and Arabic texts into Latin led to a flowering of intellectual activity...⁸

A particularly significant early Arabic text is the *Book of Optics* (*Kitab al-Manazir*), which was translated into the Latin *Perspectiva* or *De aspectibus*, in the late twelfth and early thirteenth centuries, and began to supplant centuries of previously held classical theories on optics and instead proposed scientific theories on vision and light that are still valid.⁹ The author, Ibn al-Haythem, known as Alhazen, was a Muslim natural philosopher, astronomer and mathematician born in Basra (965-1039). Alhazen's observations and studies have contributed much to the established body of knowledge about how the eye functions and the role of light in vision. His research established the empirical foundation of many of the significant optical technologies in contemporary use, and formulated theories of vision that were connected to the physiology of the eye, so based on a corporeal rather than an external source, including the experience of an 'afterimage,'¹⁰ later to be theorised by Joseph Plateau in the nineteenth century. Working in the eleventh century, Alhazen recorded some of

⁸ Hockney, *Secret Knowledge*, 238.

⁹ Roshdi Rashed, "A Polymath in the 10th Century"

<http://www.sciencemag.org/content/297/5582/773.full.pdf> Accessed 10 November 2010.

¹⁰ James S. Ackerman, *Distance Points: Essays in Theory and Renaissance Art and Architecture* (Massachusetts: MIT Press, 1991), 62-63.

the first experiments with the camera obscura in order to test a number of propositions, including the theory that light travels in straight lines, and is not 'mixed' by travelling through air.

The proof that light and colour are not mixed in the air or in transparent objects is that when many candles are in one place in distinctly separate positions and they have all been placed in front of one hole that goes through to a darkened area and there is opposite to the hole a wall or an object that is not transparent there will appear on that object or wall the light of those candles, clearly representing the number of them and each one appears opposite one candle going in a straight line through the hole. If one candle is covered over only the light of the candle opposite is put out and if the cover is removed the light returns...¹¹

Although it is generally accepted that Aristotle's observations are an earlier description of the effects produced by a camera obscura, it is this account of an experiment by Alhazen that accurately detailed its working functions. Alhazen's innovation was to base his conceptual theories on a foundation of common observation and repeatable experiments, the process of which arguably formed the basis of scientific empiricism by establishing the value of consistent and verifiable conclusions. His prodigious output is remarkable not only because of the legacy of his theories,¹² but for his overturning of the earlier canons of antiquity, the optical propositions of 'extromission' and 'intromission' of classical philosophers Aristotle and Euclid. Beginning with acts of simple observation, noting how the eye responded to sources of light (blinking when dazzled) and understanding the logic of being able to see objects that were very far away (like stars) without any delay, led Alhazen to hypothesise correctly that it was the entry of light into the eye from the sun or some form of light source, that materially enabled vision. This was a form of intromission, as light penetrates the eye, but was radically different from the earlier classical beliefs in the mimetic ability of an object to physically interject into a field of vision. The legacy of Alhazen writing in the tenth century, through the translation of the *Book of*

¹¹ Alhazen, *Opticae Thesaurus* quoted in Hockney, *Secret Knowledge*, 205.

¹² James S. Ackerman, *Distance Points*, 104. Ackerman comments that Alhazen's work influenced subsequent optical theory and later medieval and Renaissance writers and scientists such as Ptolemy, Kepler, Descartes and Helmholtz.

Optics into Latin as *De aspectibus* from Arabic in the late twelfth and early thirteenth centuries, was to influence the optical research of many later European scholars grappling with the problems of vision and optics.

1.2.2 Optical empiricism

Introducing the 'Camera Obscura and its Subject,' Jonathon Crary comments on the breadth of empirical enquiry and the work of philosophers and scientists over centuries.

It has been known for at least two thousand years that when the light passes through a small hole into a dark, enclosed interior, an inverted image will appear on the wall opposite the hole. Thinkers as remote from each other as Euclid, Aristotle, Alhazen, Roger Bacon, Leonardo and Kepler noted this phenomenon and speculated in various ways how it might or might not be analogous to the functioning of human vision.¹³

Leonardo da Vinci (1452-1519), one of the best known Renaissance exponents of optical experiments, undertook many observations concerning the human eye and the problems of vision, using the camera obscura almost as an 'artificial eye' in order to investigate the functioning of vision. The architectural art historian James S. Ackerman, in an analysis of Leonardo's optical legacy in his essay 'Leonardo's Eye' argues that it seems conclusive that it was his work with the camera obscura and experiments with projections that led Leonardo to abandon an earlier hypothesis of an "Euclidian point-within-the-eye"¹⁴ at which light rays come to a point, rather than to a planar surface within the eye. Instead, Leonardo's writings and drawings comparing the process of how light rays projected through a camera obscura are inverted as they pass through the aperture develop the same concepts with which Alhazen and earlier

¹³ Jonathon Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (Massachusetts: MIT Press, 1992), 27.

¹⁴ James S. Ackerman "Leonardo's Eye" in *Journal of the Warburg and Courtauld Institutes*, Vol. 41 (1978): 128, <http://www.jstor.org/stable/750865> Accessed 9 February 2011. Ackerman refers to the Martin Kemp essay "Leonardo and the Visual Pyramid" in *Journal of the Warburg and Courtauld Institutes*, Vol. 40 (1977), 135. Kemp argues that Leonardo abandoned his earlier hypothesis of light rays converging to a point, and instead developed Alhazen's theory of intersection and inversion, through experiments with the camera obscura. <http://www.jstor.org/stable/750993> Accessed 9 February 2011.

theorists would have been familiar, although according to Ackerman, this function is developed and made properly explicit through the drawings of Leonardo. Ackerman describes a series of experiments by Leonardo in which the operations of the eye are shown to be clearly analogous to the operations of the camera obscura, and the rays of each are shown to enter, intersect, and are cast on a surface or screen behind the eye. Ackerman suggests that, "It must have been work with the *camera obscura* and other applications of projection that persuaded him that the rays have to cross."¹⁵ In Irma A. Richter's edited selection of the notebook materials of Leonardo da Vinci, his description of the operations of the camera obscura support this contention.

This is shown when the images of illuminated objects penetrate into a very dark chamber by some small round hole. Then you will receive these images on a white paper within this dark room rather near to the hole; and you will see all the objects on the paper in their proper forms and colours, but much smaller; and they will be upside down by reason of that very intersection. These images, being transmitted from a place illuminated by the sun, will seem as if actually painted on this paper, which must be extremely thin and looked at from behind. And let the little perforation be made in a very thin plate of iron.¹⁶

From the standpoint of contemporary knowledge about the physiology of vision, whereby the inverted image projected onto the retina is translated neurologically, Leonardo's experiments and drawings can be viewed as illustrating this way of seeing correctly (fig.1.1), yet as Ackerman comments "It may seem a simple step from observing the function of the *camera obscura* to assuming that the images passing through the pupil are sensed on the *rear* inner surface of the eye. But Leonardo was not able to move that far from tradition: he, too, could not believe that an inverted image could be righted by the brain."¹⁷ Ackerman makes the argument for considering the contribution made by Leonardo and his study of vision, not on the basis of his answers to some radical questions, many of which were not translated or understood correctly, but for his vigorous attitude in challenging conceptions; "In the

¹⁵ Ackerman, "Leonardo's Eye," 128. (original Italics)

¹⁶ Irma A. Richter, ed. *The Notebooks of Leonardo da Vinci* (Oxford: Oxford University Press, 1952),

115.

¹⁷ Ackerman, "Leonardo's Eye", 128.

sphere of art, as in science, the significance of Leonardo's studies of vision must be sought more in the point of view and in the approach to problem-solving rather than in specific solutions and hypotheses."¹⁸ The experimental methods and restless empiricism of Leonardo da Vinci laid the foundations for others to develop his fields of enquiry, and to provide correct answers to the challenge of understanding the constructed nature of human vision.



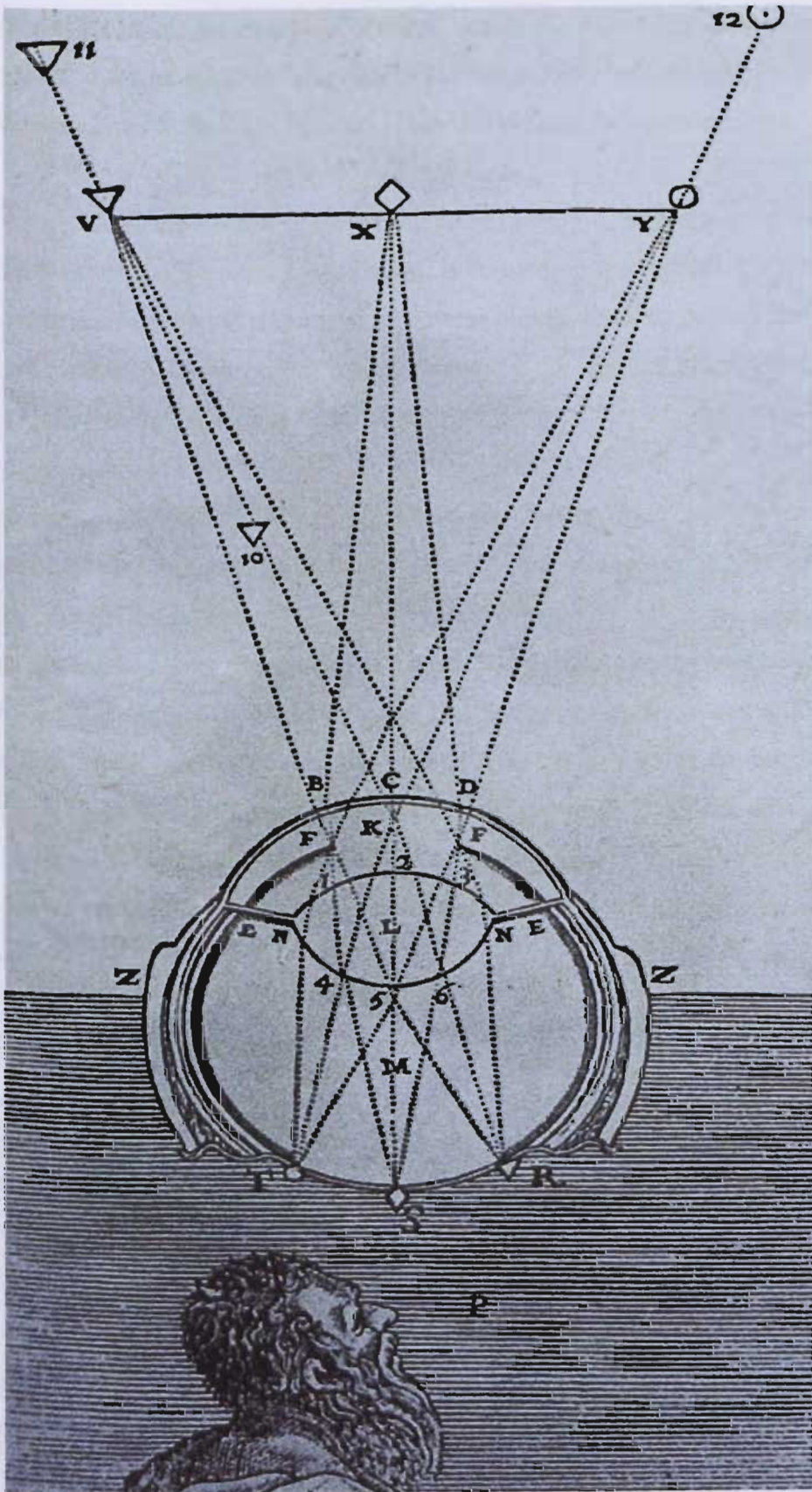
¹⁸ Ibid., 142. Ackerman notes the irony of Leonardo being the only known scientist to write from left to right, and to read his notes without a correcting mirror, a literal act which proves the ability of the human brain to correct an inverted image, whilst being culturally unable to grasp the visual significance.

1.1 Leonardo da Vinci, reception of light rays by the eye (top) and by the camera obscura (middle). Paris, Institut de France, MS. D, fol.10v. *Distance Points: Essays in Theory and Renaissance Art and Architecture*. Massachusetts: MIT Press, 1991.

These foundations can be seen in the work of German astronomer and mathematician Johannes Kepler (1571-1630) who also made extensive use of the camera obscura in his calculations, via 'observation posts' where he created a room-sized camera obscura in his home in Prague in order to observe the solstice: "...From the floor of the cellar I used to aim an astronomical tube, described in my Optics, through an opening at the top toward the noonday sun on the days of the solstice."¹⁹ Writing on Kepler's observations, Israeli scientist and author Raz Chen-Morris comments that the principles of inversion explored through his use of the camera obscura allowed Kepler to formulate his theories on lunar astronomy "The optics of the camera obscura as well as other instruments of observation supply accurate knowledge even of objects and phenomena not available to direct experience."²⁰ The mathematician solved the optical challenge of the camera obscura, the projection of the upside-down image and hypothesised that the eye works in a similar way, advancing on earlier theories of Alhazen and da Vinci. Kepler correctly compared the mechanism with the eye, and the relationship between the lens and the retina in receiving an image projected through light. Although we now know that the image is not 'seen' on the retina but through a process of neurological transmission via the optic nerve to the brain, this revelation in resolving Leonardo da Vinci's earlier experiments and translating the optical process of the camera obscura as mimetic with that of the eye, was the most optically significant innovation since Alhazen's original writings were made available to European scientists in the thirteenth century.

¹⁹ Johannes Kepler, "Somnium", quoted in Raz Chen-Morris, "Shadows of Instruction: Optics and Classical Authorities" in *Journal of the History of Ideas*, Vol. 66, No. 2 (Apr., 2005), 223-224. <http://www.jstor.org/stable/3654248> Accessed 6 March 2011.

²⁰ *Ibid.*, 242.



1.2 Horizontal section of the eye, R. Descartes, *La dioptrique* after Kepler (Leiden 1637).

In his theorising of the mechanics of the eye, where the retina acts as a receptor for transmission of an image Kepler correctly formulated that an inverted image could indeed be translated neurologically, and it was this process that enabled sight.

I say that vision occurs when the image of the whole hemisphere of the world in front of the eye, and a little more, is formed on the reddish white concave surface of the retina. I leave it to natural philosophers to discuss the way in which this image or picture is put together by the spiritual principles of vision residing in the retina and in the nerves...²¹

In these examples from da Vinci and Kepler concerning their work on a related problem of vision and the pivotal role of the camera obscura in the respective methods, the cultural context in each case determined the outcomes of the experiments as much as the empirical imperatives. Even in the mapping of the functions of the camera onto the function of the eye, as in the construction of de Vinci's hypothesis, the evidence was framed in such a way as to be culturally inadmissible until Kepler, centuries later. This theory was later further developed by René Descartes (1596-1650) who described his experiments with the camera obscura in *La dioptrique* (1637)²² and illustrated the same conclusions after Kepler, shown in the drawing of fig 1.2.

1.2.3 Advent of the optical image

So, from its inception the camera obscura was devised as an instrumental tool of science, a deceptively simple apparatus of great malleability that was central to conceptual and technical understanding of light and vision, and that enabled advancements in human physiology, optics and astronomy. Throughout its genesis to date however, and although images may indeed have been generated when the device was used in planetary measurement and optical experiments, the making of images had not yet been recorded as created independently of empirical needs. The recognition and recording of images produced through the camera obscura began to emerge around the mid fifteenth century with the introduction of a lens to the

²¹ Translation from Kepler, *Ges. Werke*, ii, 151ff. by Crombie, "The Mechanistic Hypothesis," .55. quoted in Ackerman, "Leonardo's Eye," 122.

²² Crary, *Techniques of the Observer*, 47.

mechanism by Girolamo Cardano in 1550.²³ This was followed by one of the first recorded uses of the camera obscura as a pictorial device in the work of Italian polymath Giovanni della Porta Battista (1535-1615). In 1558 della Porta Battista published *Magiae Naturalis*, a mercurial collection of optical illusions, magic tricks and spells, interspersed with scientific experiments, which publicised the dramatic and visual potential of the camera obscura throughout Europe of the time.²⁴ Kepler, in his later publication of *Astronomiae pars optica* in 1609, was interested enough in Della Porta's description of the projections of the camera obscura to use it as the basis for his "...account of image formation in the eye and used his own rotating camera obscura to sketch landscapes."²⁵ The impact of *Magiae Naturalis* was enhanced by the activities of the flamboyant Giovanni della Porta Battista himself and his demonstration of the theatrical qualities of the camera obscura by means of a public performance of projected, real-time images to an audience seated inside a room-sized 'camera.' The performance outside by an actors' troupe complete with exotic animals was projected inside, apparently causing uproar amongst the audience and led to the arrest of della Porta on a charge of sorcery. Crary describes Della Porta's 'indifference' to whether what is shown by the camera obscura is real or illusory, "...those that are in the Chamber shall see Trees, Animals, Hunters, Faces, and all the rest so plainly, that they cannot tell whether they be true or delusions: Swords drawn will glister in at the hole."²⁶ By 1569 the Venetian scholar Daniel Barbaro had capitalised on the potential of the image-making properties of the camera obscura, and added the modifications of a more refined lens, mirror and an adjustable diaphragm to the aperture, which allowed for a correction of the focal lens distance so that accurate drawings and reproductions could be made of the projected image. Barbaro detailed

²³ Girolamo Cardano, *De Subtilitate Libri XXI* (Nuremberg, 1550), bk. 4 quoted in Joel Snyder, "Re-Picturing Vision" W.J.T. Mitchell, ed., *The Language of Images* (Chicago: University of Chicago Press, 1980), 232.

²⁴ Giambattista Della Porta Giambattista Della Porta, *Magiae Naturalis, sive de miraculis serum naturalism* Libra III (Naples, Italy: Apud Matthiam cancer, 1558) in Gorman, "Art, Optics and History: New Light on the Hockney Thesis," 297. Leonardo, Vol.36, No. 4 (2003), <http://www.jstor.org/stable/1577325> Accessed 16 March 2011.

²⁵ Johannes Kepler, *Optics: Paralipomena to Witelo and Optical Part of Astronomy*. Trans. William H. Donahue. (Santa Fe, NM: Green Lion Press, 2000), pp.224-226 in Gorman, "Art, Optics and History," 299.

²⁶ Giovanni Battista della Porta, *Natural Magick*, (London, 1658), pp. 364-365, quoted in Crary, *Techniques of the Observer*, 38 (n26)

one of the first recorded instructions on the use of the camera obscura as an aid to drawing.

Close all the shutters and doors until no light enters the camera obscura except through the lens, and opposite hold a piece of paper which can move forward and backward until the scene appears in sharpest detail. There on the paper you will see the whole view as it really is, with its distances, its colours and shadows and motion, the clouds, the water twinkling, the birds flying. By holding the paper steady you can trace the whole perspective with a pen, shade it and delicately colour it from nature.²⁷

Here Barbaro elegantly describes the process of observation enabled through the camera obscura and its implied verisimilitude to the world outside its enclosed environment. This description details pictorial application, however, preceding this the device was part of the origins of perspective. The camera obscura was famously used by the architect Brunelleschi at some point between 1410 and 1420 at the Piazza Duomo Florentine church in order to demonstrate its application in linear or single-point perspective.²⁸ The emergence of linear perspective as an aid to representational painting emerged during the Renaissance with a theorised account of perspective in art by Leon Battista Alberti, *De Pictura* in 1435.²⁹ The *costruzione leggitima* as conceived by Alberti was a detailed set of instructions for painters and artists which harnessed mathematical and geometric approximations of space in the rendering of naturalistic painted images. The starting point is that of a single, immobile eye, looking towards a vanishing point of orthogonal rays, allowing the construction of a form of visual triangle from the eye which will allow the painter to represent things in a naturalistic manner. Although in a cultural sense we are aware that perspective does not represent things ‘naturally’ rather it represents a particular point of viewing, literally, ideologically and visually, from which a spatial area may be mapped out

²⁷ This description is attributed to Barbaro and is cited in a publicly authored website, so whilst not claiming it as an authoritative version, it is a technically accurate, and poetic, description of how to use the camera obscura as a drawing device. <http://www.bbc.co.uk/dna/h2g2/A2875430> Accessed 16 March 2011.

²⁸ E. H. Gombrich, “Standards of Truth,” in *The Language of Images*, ed. W.J.T. Mitchell (Chicago:University of Chicago Press, 1980), 193-4.

²⁹ Leon Battista Alberti, *On Painting and on Sculpture: the Latin Texts of “De Pictura” and “De Statuta,”* ed. and trans. Cecil Grayson (London, 1972). Joel Snyder, “Picturing Vision,” in *The Language of Images*, ed. W.J.T. Mitchell (Chicago:University of Chicago Press, 1980), 235.

according to rules of projective geometry, its apparent simplicity as summarised by Gombrich; "All that is needed for the understanding of this method is the fact, already known to the ancients, that light travels along straight lines through a uniform medium and is stopped by opaque objects."³⁰ Perspective in art can be described as the means whereby an image of three dimensions can be rendered in two dimensions, giving the impression of distance, weight and solidity of the original object or scene when viewed from a particular point. A sensation of receding space is created on a plane through the horizon line and the 'vanishing point' in the distance, and the implicit notion that space can be mapped and rationalised through the operations of linear perspective.

In his discussion of the influences of pre-modernity, theorist David Harvey describes the fixed viewpoint and framing of perspective as a philosophical and pictorial influence which came about as a result of the fusion between the science of optics and vision, and the art of image construction.

Fundamental rules of perspective – rules that broke radically with the practices of medieval art and architecture, and which were to dominate until the beginning of the twentieth century – were elaborated in mid-fifteenth-century Florence by Brunelleschi and Alberti. This was a fundamental achievement of the Renaissance; it shaped ways of seeing for four centuries.³¹

In linear perspective the artistic vision and the authority of the naturalised image was allied to the ethos and practices of scientific verification, creating a 'natural' representation underpinned by the authority of empiricism. In his discussion of the legacy of the connection that linear perspective forged between the artistic imaginative license and the authority of scientific verification, art historian and photographer Joel Snyder discusses the legacy of *De Pictura*, describing Alberti's text as the first attempt to connect scientific theories of vision to a rationale about the construction of picture-making, and of its enduring legacy.

³⁰ Gombrich, "Standards of Truth," 195.

³¹ David Harvey, *The Condition of Postmodernity* (Massachusetts: Blackwell, 1990), 244. Harvey discusses the spatial and schematic differences between medieval maps and the use of perspective in Renaissance paintings and maps.

The grounding of depiction in contemporary science has both an immediate and a long-lasting impact. Painters were quick to adapt linear perspective to their own needs. The system continues to be used today in its purest form in many kinds of handmade illustrations and, of course, in nearly all applications of photography, including motion pictures and television. We remain strongly under Alberti's influence.³²

He continues by commenting that there was a willingness on the part of the Renaissance audience to accept a fusion of visual depiction and optical theory, much of which had been gained through the operations of the camera obscura as an authoritative scientific model during the preceding century. Snyder observes that this fusion which emerged in Renaissance imagery gave a "rhetorical assurance to the audience that what they saw in paintings was related by the sure methods of science to what they saw when looking at the world."³³ Although we are now generally aware of the cultural bias of perspective as an idealised construction, which not only represented three dimensional space in two dimensions, but was intrinsic to a cartographic appropriation of actual, geographical space, its cultural dominance is still very prevalent in western European representations and ways of seeing the world. This influence is described by visual theorist John Berger, in his publication *Ways of Seeing* as follows:

The convention of perspective, which is unique to European art and which was first established in the early Renaissance, centres everything on the eye of the beholder. It is like a beam from a lighthouse – only instead of light travelling outward, appearances travel in. The conventions call these appearances reality. Perspective makes the single eye the centre of the world. Everything converges onto the eye as the vanishing point of infinity. The visible world is arranged for the spectator as the universe was once thought to be arranged for God.³⁴

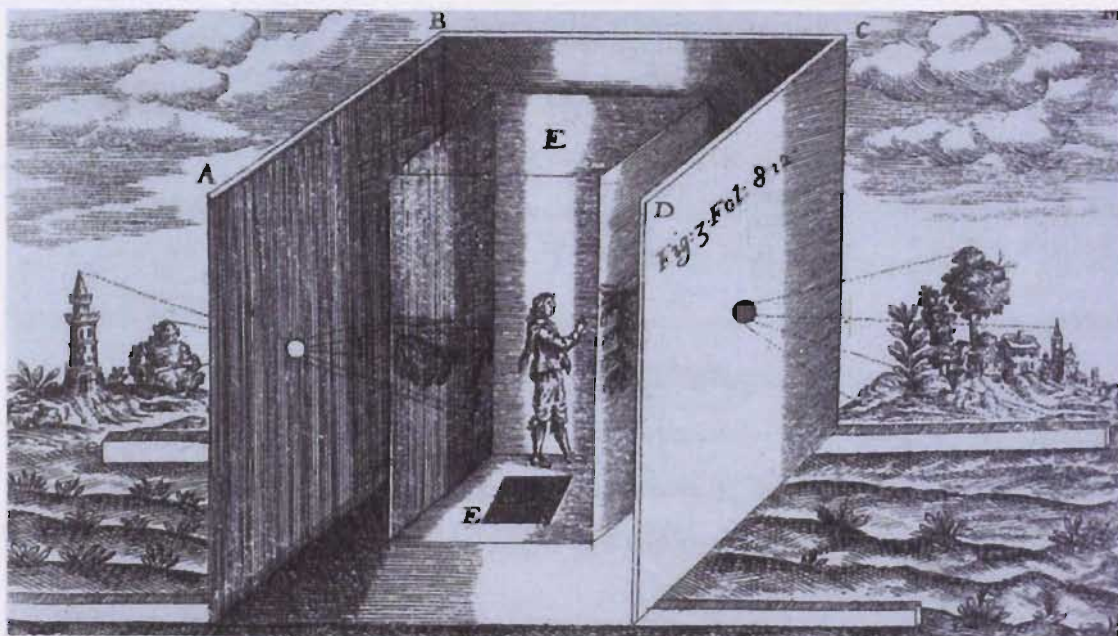
³² Snyder, "Picturing Vision," 235.

³³ Ibid.

³⁴ John Berger, *Ways of Seeing* (London: Penguin, 1972), 9.

1.2.4 Optical image and pictorial vision

As indicated in the introduction, the notion that the camera obscura is more central to the history of photography than to the history of representational painting is the commonly held view. As we have seen, the image making properties of the camera was not the impetus for its invention, nor did it involve the pictorial for many centuries after its first appearance as an apparatus for analysing planetary movement. By the seventeenth century however, the camera obscura was evolving into a mechanism that enabled a pictorial and perspectival way of seeing and, consequently, of representation (fig.1.3).



1.3 Large portable camera obscura, engraving by Athanasius Kircher (1646).

The claim that the evolution of the camera is indeed central to the history of representation, and is another way of mediating vision and constructing images is theorised by Joel Snyder, in his essay "Picturing Vision". The essay explores the privileging of realistic representation in art and proposes that vision itself can be characterised as pictorial.³⁵ In his argument Snyder considers the role of linear perspective and the early history of the camera obscura in order to demonstrate that this development was part of the history of western image-making, rather than a tangential process capable of 'mirroring' nature as a newly emergent technological

³⁵ Snyder, "Picturing Vision," 223-4.

looked like the image produced by the camera, it was how to make a machine that produced an image like the one they painted.³⁹

As in the earlier indication of visual projections and *Magiae Naturalis*, Snyder also refers to an account published by Giovanni Battista della Porta in 1558, as being one of the first pictorial applications of the camera obscura,⁴⁰ although it was not until later in the seventeenth century that cameras were in wider production as aids to artists in drawing and representational painting.⁴¹ He continues by saying that the modifications evolved with the addition of initially crude lenses and mirrors, and with artists themselves working with camera makers in order to refine and produce the best pictorial results that could be achieved through the camera. Specialised lenses began to be produced, with artists making specific demands on lens makers about the focal length of lenses, in relation to the demands of different subjects, such as landscape and portraiture. This relationship and early collaboration between artists and manufacturers in “relation of purpose to design”⁴² is significant, as it demonstrates that the camera makers of the later seventeenth and eighteenth centuries were modifying the empirical apparatus of the camera obscura in order to meet the specific, spatial demands of artists and the depiction of realism through the painted image.

1.2.5 Optical influence - the Hockney-Falco thesis

The significance of the camera obscura in the production of representational painting is also the proposition of the Hockney-Falco thesis on the influence of opticality in European painting pre-dating the Renaissance. Although it is not within the scope of this enquiry to discuss the Hockney-Falco thesis in detail,⁴³ the crux of the argument is a controversial account of how optical aids may have been introduced at an earlier stage, and as such are more influential to the history of art than previously acknowledged. The principle argument by artist David Hockney in collaboration with physicist Charles Falco is the claim that artists were using optical devices – the

³⁹ Ibid., 232.

⁴⁰ Giovan Battista della Porta, *De I miracoli et maravigliosi effetti dalla natura prodotti libri IV* (Venice 1560), bk. 4, pp.139-45) Snyder in ‘Picturing Vision’, 233.

⁴¹ Ibid.

⁴² Ibid.

⁴³ For more information on the details of the Hockney-Falco thesis, including counter-arguments from Dr David Stork, and website of physicist Charles Falco <http://www.optics.arizona.edu/ssd/art-optics/index.html> and <http://www.webexhibits.org/hackneyoptics/post/stork.html>

camera obscura, camera lucida and concave mirrors – as aids in the rendering of naturalistic painted imagery. They propose that this was taking place from around the 1430's,⁴⁴ more than a century before the 1558 recorded use of the camera obscura in projections by della Porta, and the 1569 description of the optical aid as a drawing device by Barbaro. The argument is presented through a body of research that includes textual evidence in the form of notes and observations from antiquity, such as Alhazen, Roger Bacon (1214-1294), the Chinese scholar Shen Kua (1086) who was writing of the properties of the camera obscura during a similar timeframe as were European peers. However, of the descriptions that detail experiments in the creation of images and representations, as opposed to empirical experiments concerned with the vision and light, these do indeed date from the later period of the sixteenth century, and includes the observations of della Porta and Barbaro.⁴⁵ The publication cites selected correspondence with contemporary artists, historians, scientists and curators as further examples of argument for use of optical aids, mirrors and lenses.⁴⁶ This includes an extensive and detailed correspondence with art historian Martin Kemp, who here responds with some general observations in response to queries on the use of lenses and the camera obscura from David Hockney.

The eye itself (or what was thought to be the working of the eye) has been a kind of model for painting since the time of Alberti's *On Painting* in 1435, in which representation is founded on a simple notion of 'how the visual pyramid' works and its relationship to things in space using light, shade, colour. The camera obscura as the specific model for the eye is inherent in Leonardo's treatment of the eye's optics, though he increasingly realised that the complexities of the eye and the intellectual acts of seeing meant that any simple model that the eye simply see what is 'out there' does not work. The fully fledged notion of the eye as a camera obscura with a focussing lens does not become apparent until Kepler in (16??).⁴⁷

⁴⁴ Hockney, *Secret Knowledge*, 13.

⁴⁵ *Ibid.*, 202-25.

⁴⁶ *Ibid.*, 228-86.

⁴⁷ Martin Kemp to David Hockney, fax dated 28 September 1999, *Secret Knowledge*, 232. Although Kemp does not complete the date, he is clearly referring to the seventeenth century. Kepler, as previously discussed, was influenced by Galileo's use of lenses in his construction of the telescope in 1609, which he incorporated into his experiments with the camera obscura as a means of astronomical measurement.

Although Kemp is supportive of Hockney's passionate interest and research in the subject, and there is a volume of correspondence that testifies to a mutual intellectual excitement over the questions of opticality, Kemp stops short of agreeing with the hypothesis, saying that; "There will always be some measure of problems in relying upon the pictures as your main (and in some cases, only) evidence. The means are inferred from the pictures and then made to account for effects – which is potentially circular."⁴⁸ Another section details the visual evidence through the documenting of artistic experiments, mainly undertaken by David Hockney, in the painting and drawing of images using optical aids and restaged scenarios with a camera obscura.⁴⁹ The hypothesis is contentious in its potential to disrupt an assumed sense of cultural investment in notions of western painting and authenticity, originality, a particular skills set and the notion of an individual artistic vision. If correct, the influence of opticality and the camera obscura as a pictorial influence on the history of painting, pre-dates its more accepted emergent use during the Renaissance by taking place earlier than previously thought. The notion that the camera may be a historical painting tool in a similar way as are a set of brushes has generated academic and artistic debate and controversy, with a number of counter-arguments focussing on the claims for reconstruction and restaging of scenarios which are culturally distant in time. The art historian James Elkins, in his contribution to the Hockney-Falco debate in his essay "Optics, Skill and the Fear of Death," argues that the "optical procedures posited in Hockney's book are all radically undertested" as he comments on the reconstruction of a camera obscura large enough to sit inside and draw.

The ease with which a camera obscura can be turned into a model of subjectivity (as in Crary's *Techniques of the Observer*), or construed as the source for a given painting (as in Hockney's book), depends on exactly what kind of seeing, drawing, and painting it enables. They were cramped and probably stuffy; they might have been almost anything but a metaphor or an efficient machine.⁵⁰

⁴⁸ Martin Kemp to David Hockney, fax dated 28 September 1999, *Secret Knowledge*, 233.

⁴⁹ Hockney, *Secret Knowledge*, 18-198.

⁵⁰ James Elkins, "Optics, Skill and the Fear of Death" Art Institute of Chicago.

<http://www.webexhibits.org/hockneyoptics/post/elkins.html> Accessed 3 February, 2010.

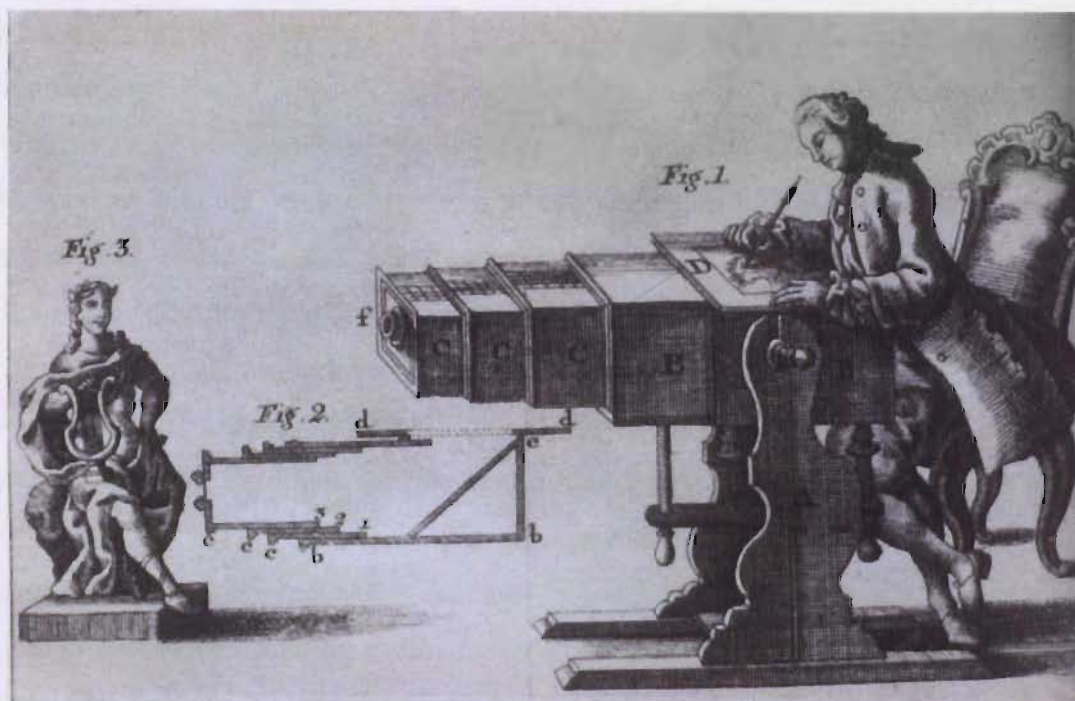
Here Elkins has touched on one of the key characteristics of the camera obscura; its permeability as a conceptual and instrumental device, due to its serial modification over the centuries. Although the tension between the hybrid functions and cultural specificity of the camera obscura to particular eras and discourses is what makes the device significant to an account of the construction of vision, it is also what makes the influence and legacy a challenge to definition. There is a sense that photography has shaped and redefined our post-nineteenth century vision and ways of creating images, as suggested by Henning in her discussion of the embodiment of the camera since the nineteenth century, and hence the omnipresence of the optical “Seeing through the camera is different from seeing without it and, since photography, seeing is a changed practice.”⁵¹ Therefore, the implication of this pervasiveness is that when examples of historical representational images are analysed, the experience is inevitably approached through the frame of our accumulated cultural influence of ‘photographies’, as art historian John Tagg termed the multiplicity of modern photography, rather than the hegemonic ‘photography.’ Given the impacts of such ‘photographies’ and our cultural predisposition to the optical when viewed from the vantage of the twentieth and twenty first centuries, and considering the temporal distance from the empirical and philosophical position occupied by the camera obscura prior to the sixteenth century, the claim of the Hockney-Falco thesis that this began a century earlier, is not as conclusive as the established evidence. Giovanna Battista della Porta’s alchemical approach to the visual possibilities of the apparatus, enabled through the modifications and additions of lenses and mirrors by Cardano and Barbaro for projection and drawing, provides more conclusive evidence of the timeframe of the cultural shift from the initial, empirical use of the camera obscura as it began in the tenth and eleventh century, continuing as a astronomical and optical device thereafter, until the pictorial transformations of the sixteenth century. If we accept Snyder’s argument on the challenge for post-Renaissance painters as being “not how to make a picture that looked like the image produced by the camera, it was how to make a machine that produced an image like the one they painted,”⁵² and given the pre-eminence of linear perspective during the Renaissance and its entwining with the operations of the camera obscura, it seems more plausible that it was during

⁵¹ Michelle Henning, “Technological Bodies: the Camera as Mechanical Eye” in *Photography: A Critical Introduction*, ed. Liz Wells et al. (Oxon: Routledge, 2009), 194.

⁵² Joel Snyder “Picturing Vision” in *The Language of Images*, ed. W.J.T. Mitchell (Chicago: University of Chicago Press, 1980), 232.

this later period that the cultural and technological demands made of the device now placed it centrally to the process of vision and artistic production. In his charting of the dominance and decline of camera obscura as an indexical model of rationality and metaphor for the intellectual assurance of the seventeenth and eighteenth centuries, Jonathon Crary writes on the depth and complexity of the device.

This highly problematic object was far more than simply an optical device. For over two hundred years...it stood as a model, in both empiricist and rationalist thought, of how observation leads to truthful inferences about the world, at the same time the physical incarnation of that model was a widely used means of observing the visible world, an instrument of popular entertainment, of scientific enquiry, and of artistic practice.⁵³



1.4 Table Camera Obscura George Brander (1769).

1.2.6 Declining influence - camera obscura

There are a number of reasons for the decline of the camera obscura, and these are intertwined with the emergence of the stereoscope, and the differences between them

⁵³ Jonathon Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century*, (Massachusetts: MIT Press, 1998), 29.

as exemplified by each device. In the nineteenth century scientific advances in knowledge of the physiology of the human eye and how sight worked, shifted the origins of vision from external and coherent, and from the camera obscura as a mechanism and metaphor for the rational intellect, to the stereoscope as embodied and irregular, no longer defined by principles of objectivity or the presence of an external referent in order to enable sight. The new consumers and participants of nineteenth century modernity were the market and audience for the circulation and popularity of a series of optical devices and the photographic print, in its many forms, created a new impetus for the consumption of vision as a form of social currency.

In Jonathon Crary's seminal publication *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century*, his principle concern is the formulation of the nineteenth century 'observer' a participatory and engaged model of a viewer who is actively involved with the new developments of sight and vision as popular entertainments and forms of social currency. Crary refers to the "corporeal subjectivity"⁵⁴ of the body of the observer, previously distanced by the positioning of the camera obscura, and which was becoming reconfigured as the new site for engagement within the embodied optical apparatus of the nineteenth century. Crary argues that this observer has been constituted by the ending of the previous age of Enlightenment and through the advent of modernity. This social model is exemplified by the decline of the surety of the monadic and distanced viewpoint of the camera obscura, and the simultaneous rise of the binocular and embodied apparatus of the stereoscope during the 1830' and 40's. He suggests that the decline in the status of the camera obscura was gradual but decisive, beginning in the 1790's and ending by the 1830's, and came about as a direct result of the empirical scientific advances that were transforming knowledge about human sight and the functioning of the eye. Crary describes the camera obscura and the stereoscope as "points of intersection" where "philosophical, scientific and aesthetic discourses overlap with mechanical techniques, institutional requirements and socioeconomic forces."⁵⁵ The popularity of the stereoscope was accompanied by the circulation of other, related 'philosophical toys', the name given to the popular optical devices that were originally created in order to similarly demonstrate new empirical advances in the understanding of how

⁵⁴ Crary, *Techniques of the Observer*, 69.

⁵⁵ *Ibid.*, 7-8.

vision works, and were subsequently mass produced as social entertainments. As will be discussed, devices such as the 'thaumatrope' and the 'zoetrope' made possible new ways of seeing that were radically different from the previous visual regime. Despite the historical dominance of the camera obscura in the classical, medieval and Enlightenment tropes of visuality over previous centuries, the transition, according to Crary's theorising of the decline of the camera obscura, was relatively swift. In his essay "Nineteenth-Century Visual Incapacities" Crary reflects on the social and empirical circumstances that contributed to the decline in influence.

Within the space of a few decades, dominant discourses and practices of vision effectively broke with a classical regime of visuality, and grounded the truth of vision in the operations of the human body...throughout the first half of the nineteenth century, an extensive amount of work in science, philosophy, psychology, and aesthetics was coming to terms in ways with the understanding that vision, or any of the senses, could no longer claim any essential objectivity or certainty.⁵⁶

This essentially shifted the certainty and objectivity of the exterior point of view as exemplified by the camera obscura, to the uncertain and subjective embodiment of viewing as a practice that was located within the body of the viewer.

1.2.7 *Camera obscura in view*

In her essay "Dark Wonder" the Dublin Gallery of Photography Director and writer Tanya Kiang describes her experience of a contemporary camera obscura, and in so doing makes an observation that is fundamental to its operations and distinct from other, constructed viewing events in that "...the camera obscura suggests the possibility of an entire dimension, running alongside our own, all the time, in *realtime*."⁵⁷

⁵⁶ Jonathon Crary, "Nineteenth-Century Visual Incapacities" in *Visual Literacy*, ed. James Elkins (New York: Routledge, 2007), 59.

⁵⁷ Tanya Kiang, "Dark Wonder", *CIRCA* 96, Summer 2001, 4.
<http://www.recirca.com/ackissues/v96/astk.shtml> Accessed 30 March 2010.

It's not entirely flat, but curves up at the edges, like a satellite dish. The guide explains the principles at work: light is reflected by an angled mirror in the top of the dome, and passes through a series of lenses, projecting an image of the scene outside onto the table. And sure enough, as the lights dimmed, live images emerge as if by magic: the city skyline, clouds, birds, Princes Street, cars, shops, people, all in full colour, and yet silent. The silence heightens the visuality of the scene; the colours fade and intensify as the clouds pass over the sun...⁵⁸



1.5 Camera Obscura, Edinburgh, exterior and interior views (2012).

Resonant with Barbaro's fifteenth century description, the camera obscura view, although presented as a dimension of 'realtime', is an useful example of the mediation and construction of visual experience. The image described by Kiang is evocative of the visible world, implying a proximity and frisson through the 'doubling' experienced in viewing the camera obscura image. Yet simultaneously the mirrored image is distanced and at a remove, an image presented to the eye more than an experience involving the body. Although this is an arbitrary division (a visual experience is always cognitive and embodied) it is at the crux of the difference between the externalised viewing activity offered by the camera obscura, and the embodied visual experience of the stereoscope. So although each device is mimetic of

⁵⁸ Ibid., 4.

ways of seeing within the physiology of the eye, their cultural positions were highly differentiated, and each was highly indexical of the historical and epistemological conditions within which they were produced.

3. The Stereoscope and Photography

1.3.1 Nineteenth century opticality – Retinal Afterimage and the Persistence of Vision

This section will begin an account of a series of empirical breakthroughs in the understanding of vision and the physiology of the eye that resulted in of a number of new optical apparatus, the social circulation of ‘philosophical toys’ and pre-cinematic devices such as the ‘zoetrope’ and the ‘Faraday wheel’ before addressing the emergence of the stereoscope and the photographic print. As mentioned in the introduction, some of photography’s most critical theoretical issues – loss of authenticity, regulation of vision, normalising and stereotypes, mimetic or indexical – were evident in its practices almost from inception in the nineteenth century and insofar as elements of these arguments have a bearing on the issues of visual appropriation and photographic practice which are to follow, will be discussed in this context at the culmination of the chapter.

Many of the physiological discoveries taking place from 1810 to the 1890’s were concerned with issues around the embodiment of vision and the subjectivity of perception. As discussed by Crary, new formulations of the eye as an internal conduit of multiple impressions were supplanting previous beliefs in the eye solely as a receptor of external realities. The Belgian scientist Joseph Plateau (1801-1883) published his thesis *The Persistence of Vision* in 1829, developing on earlier work of philosopher and scientist Johann Wolfgang Goethe (1749-1832) and his research on the ‘retinal afterimage’, based on the capacity of the eye to visualise without an external referent. Plateau’s research extended the scope and scale of the ‘afterimage’, concluding that the image produced reacts differently according to variations in stimulus and does not dissipate uniformly, but instead passes through positive and negative states before disappearing. Joseph Plateau’s brief but influential thesis included a succinct description of his intensive research into the persistence of vision.

If several objects which differ sequentially in terms of form and position are presented one after the other to the eye in very brief intervals and sufficiently close together, the impressions they produce on the retina will all blend together without confusion and one will believe that a single object is gradually changing form and position.⁵⁹

Preceding Plateau's research was the invention of the 'thaumatrope' in 1825, attributed to the astronomer Sir John Herschel (1792–1871), who also coined the term 'photography'. A simple device which consisted of a card with corresponding images on either side, (fig.1.6) which, when spun by attached threads, optically merged both images into a single image; for example the bird into the cage, the rider onto the horse.⁶⁰



THAUMATROPE,
1825



1.6 Illustration of thaumatrope (ca.1825).

Other related optical devices contributing to the evidence for the 'retinal afterimage' and the 'persistence of vision', and which later metamorphosed into popular

⁵⁹ Joseph Plateau, *Dissertation sur quelques propriétés des impressions*, thesis submitted at Liège, May 1829. Quoted in Crary, *Techniques of the Observer*, 109.

⁶⁰ Attributed to astronomer Sir John Herschel. www.earlycinema.com/technology/zoetrope.html
Accessed 20 July 2010.

entertainments were being produced by physicist Michael Faraday (1791–1867) and mathematician Peter Mark Roget (1779–1869). Roget apparently observed the spokes of a railway train passing behind a fence and subsequently created the ‘anorthoscope’, around 1825, an instrument to demonstrate the mathematical properties behind the illusion of the spokes appearing motionless or moving backwards whilst in forward motion.⁶¹ Michael Faraday was responsible for the ‘Faraday wheel’ in 1831, a device composed of two slotted wheels mounted on the same axis, one with a series of identical images, that when spun in opposite rotation to the other produced a similar illusion of movement. Joseph Plateau constructed various devices in order to demonstrate his theories, notably the phenakistoscope, developed in order to optically demonstrate his theories on the ability of the eye to blend separate images together in series as part of an uninterrupted flow of visual impressions. Plateau’s ‘phenakistoscope’ of 1832 was a straightforward but radical improvement on the Faraday device, in that it used a series of dissimilar, rather than identical, images on one of the disks, so that when each disk was rotated and viewed in a mirror the images appeared to be in continuous and uninterrupted motion.⁶² (fig.1.7)

⁶¹ James L. Hunt, “The Roget Illusion, the Anorthoscope and the Persistence of Vision,” 774. *Am.J.Phys.*, Vol.71, No. 8, August 2003. www.physics.uoguelph.ca/phyjlh/morph/Roget.pdf Accessed 21 July 2010.

⁶² J. Plateau, *corresp. Maths.Phys.* 1832 VII, 291. Museum of Ghent, <http://www.mhghent.ugent.be/engl-plat5.html> Accessed 26 July 2010.



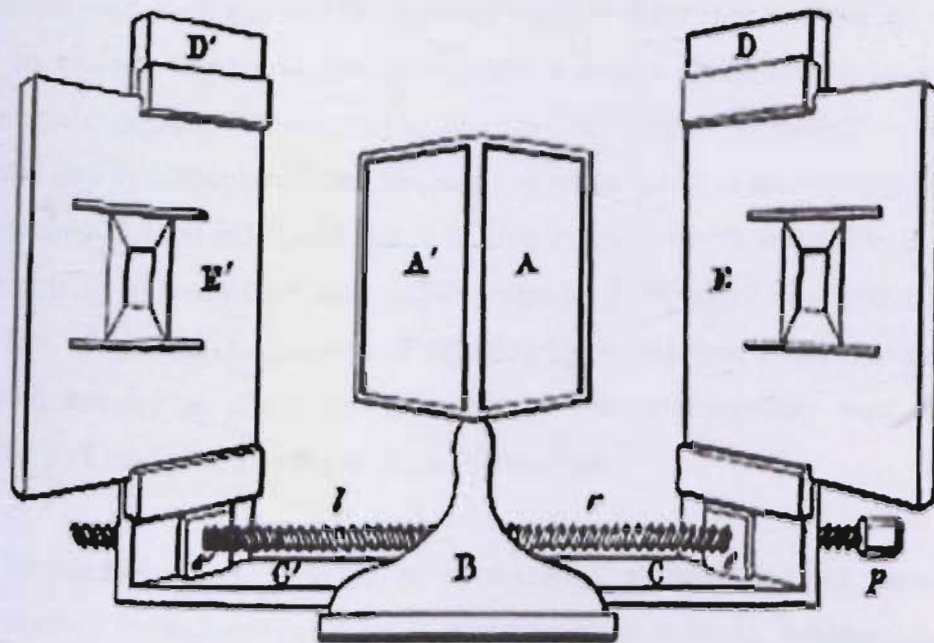
1.7 Illustration of phenakistiscope and disc, published by Alphonse Giroux, c. 1830's.

By 1887 the 'zoetrope' had been developed and patented from Plateau's original phenakistiscope into a form that dispensed with the need for a mirror, and allowed for a number of viewers at one time.

1.3.2 *Invention of the stereoscope*

The stereoscopic viewer originally evolved as a mechanism for the demonstration of an academic thesis and was presented as part of a paper given by Charles Wheatstone

(1802-1875), to the Royal Society of London in June 1838.⁶³ Wheatstone's apparatus was a mirrored and angled device which he had constructed in order to show how a series of paired and slightly dissimilar drawings may be viewed in order to produce a single optical image that had the appearance of depth. (fig.1.8)



1.8 Illustration of the Wheatstone Stereoscope (1838).

Wheatstone was considering the question of perceiving in three dimensions a dissimilar, projected image “What would be the visual effect of simultaneously presenting to each eye, instead of the object itself, its projection on a planar surface as it appears to that eye?...”⁶⁴ In his paper he made reference to the studies of Leonardo da Vinci on a similar question and noted that da Vinci failed to note the significance of the different appearance which would be presented to the eye if he had perhaps used a cube, instead of a sphere, in his deliberations. Aware that no one else had corrected this in the intervening centuries, Wheatstone significantly concluded thus:

⁶³ Nicholas J. Wade, “Guest Editorial Charles Wheatstone (1802-1875),” 269. *Perception*, 2002, Vol., 31. <http://www.perceptionweb.com/perception/perc0302/editorial.pdf> Accessed 13 August 2010.

⁶⁴ *Ibid.*, 265. Wheatstone 1838, pages 372 – 373.

The projection of two obviously dissimilar pictures on the two retinae when a single object is viewed, while the optic axes converge, must therefore be regarded as a new fact in the theory of vision.⁶⁵

Binocular vision is the physiological basis for human sight, whereby vision is balanced through each eye and the distance between them is reconciled, through the ability to visually bring divergent planes into a single, continuous field of vision. Wheatstone's positing of this 'new fact in the theory of vision' was not a demonstration of binocular vision, but engaged this process in order to illustrate that the projection showed a different image to each eye, and that it was this convergence of dissimilarity that resulted in a single image of pronounced depth, and hence a (new) fact of vision. The experience afforded by Wheatstone's stereoscope of the nineteenth century is essentially the same as our contemporary versions, here described by Lisa Spiro, a writer in digital humanities.

Stereographs (also known as stereograms, stereoviews and stereocards) present three-dimensional (3D) views of their subjects, enabling armchair tourists to have a 'you are there' experience. The term 'stereo' is derived from the Greek word for 'solid' so a stereograph is a picture that depicts its subject so that it appears solid. Stereographs feature two photographs or printed images positioned side by side about two and a half inches apart, one for the left eye and one for the right. When a viewer uses a stereoscope, a device for viewing stereographs, these two flat images are combined into a single image that gives the illusion of depth.⁶⁶

As the camera obscura mirrored the operations of the eye in that the entry of light through an aperture projected an upside-down image on a planar surface, so the stereoscope similarly reflected the process of binocular vision and the reconciling of different viewpoints in the human eye.⁶⁷ The design of each device, and their mimetic

⁶⁵ Ibid.

⁶⁶ Lisa Spiro, "A Brief History of Stereographs and Stereoscopes," *Connexions*. October 30, 2006. <http://cnx.org/content/m13784/1.5/>.

⁶⁷ Although the stereoscopic viewing experience is condensed into a device, the ability to 'see' stereoscopically is an embodied visual function of the eyes, and with practice the skill of dissociating 'convergence' from 'association' means that slides can be viewed in stereoscopic relief without a

qualities in relation to the process of human sight and the operations of the eye, is an indication of the axes of similarity and of difference between the distanced and reversed experience of the camera obscura, and the tangibility and depth of the stereoscope.

1.3.3 Emergence of the photographic print

The invention of photography resulted from a complex period of empirical experimentation and advance which engaged a series of scientists, artists, chemists, mathematicians and physicists in Europe and England during the 1830's.⁶⁸ The history of optical processes involving experimentation with light, aperture and image, as we have seen, was an integral foundation of the pre-photographic history over the preceding centuries. Jonathon Crary, whose argument is that the camera obscura and the photographic camera are fundamentally different "assemblages, practices and social objects,"⁶⁹ and that the dominance of the connection between modern photography and the camera obscura has resulted in "the emergence of photography and cinema in the nineteenth century (is) the fulfilment of a long unfolding of technological and/or ideological development in the West whereby the camera obscura evolves into the photographic camera."⁷⁰ Crary's argument for a more discontinuous model of development is indicative of the fractured and contradictory history and practices of a medium that articulates both empiricist and artistic vision. The 'invention' of photography in the first decades of the 1800's therefore, can be understood as a synthesis of previously established optical technologies with newer chemical methods and which emerged as different but related photochemical processes. The Daguerreotype of artist Louis Daguerre in Paris and the 'photogenic

device. Some individuals can do this easily, as was reputedly Charles Wheatstone, a facility which may have assisted his research. Wade, "Charles Wheatstone," 265-266.

⁶⁸ Oscar N. Solbert, Beaumont Newhall, James G. Card, eds. 'Portrait of the Inventor,' *Image: Journal of Photography of the George Eastman House* Vol.1, No.4 (April 1952), 1-4. In addition to Daguerre and Talbot, whose photography is discussed, other selected contributions during the 1800's included Nicéphore Niépce (1765-1833), who was a business partner of Daguerre, and who made a direct positive print before 1829, Joseph Bancroft Reade (1801-1870), claimed first use of sodium thiosulphate as fixative in 1837, Sir John Herschel (1792-1871), discovered sodium thiosulphate in 1819, and coined the term 'photograph', Josef Petzval (1807-1891), who designed the first lens for photography in 1840, Niepce de St-Victor (1805-1870), invented the albumen glass negative technique in 1848, and Frederick Scott Archer (1813-1857), who invented the collodion, or wet plate process in 1851. http://www.eastmanhome.org/files/GEH_1952_01_04.pdf Accessed 24 September 2011.

⁶⁹ Crary, *Techniques of the Observer*, 32.

⁷⁰ *Ibid.*, 26.

drawings' of scientist William Fox Talbot in London were announced within weeks of each other in January 1839.⁷¹ According to Ackerman, in his discussion of the choice of directions opened up by these processes, this marked a unique occasion in the history of representation and; "...was one of the very rare moments in history when an entirely new form of representation became available to practitioners of visual imagery."⁷² The Daguerreotype was a singular and finely detailed image created on the silvered surface of a light-sensitive copper plate, which after exposure to light, was fixed as an image on the metal through this direct, positive process. As there was no corresponding 'negative' each daguerreotype was a unique image/artefact. The 'photogenic drawings'⁷³ of Talbot, in contrast, were produced through a negative-positive process, originally through the placing of objects directly onto paper sensitised to light through a salt solution, whereby an image then appeared when exposed to light. By 1841 this technique was chemically improved, allowing an invisible, latent 'negative' image on paper to be created, so that when brought into contact with other sensitised paper and then developed, produced a 'positive' print, which Talbot named a calotype. Beaumont Newhall comments on the significance of this latent quality "This principle of the development of the latent image is basic to all current photographic processes and is Talbot's greatest contribution to photographic science."⁷⁴ In a paper to the Royal Society of London in 1841, Talbot describes the improvements made to his photographic methods, with an account of the working process used to create a calotype, and his description of this 'latent' quality.

Take a piece of paper, and having covered half of it, expose the other half to daylight for the space of *one second* in dark cloudy weather in winter. This brief moment suffices to produce a strong impression upon the paper. But the

⁷¹ Mike Weaver, ed. *The Art of Photography 1839-1989* (New Haven: Yale University Press, 1989), 4. Chronology: 1839 The invention of the daguerreotype on silver-coated paper was announced by Arago to Académie des Sciences, Paris, and Talbot presented his photogenic drawings on paper at Royal Society, London.

⁷² James S. Ackerman, "The Photographic Picturesque" *Artibus et Historiae*, Vol. 24, No. 48 (2003), 73. <http://www.jstor.org/stable/1483732> Accessed 15 February 2012.

⁷³ These images would now be known as 'photograms,' photographic prints made through the process of direct contact printing.

⁷⁴ Beaumont Newhall, "The Pencil of Nature," in *The Art of Photography 1839-1989*, 14.

Fox Talbot showed his photogenic drawings at the Royal Institution in London on 25 January 1839 and described the full process at the Royal Society six days later.

impression is latent and invisible, and its existence would not be suspected by anyone who was not forewarned of it by previous experiments.⁷⁵

This instrumental capacity of the photographic process that reveals both the visible and the invisible within the photograph is mirrored in the ideological functions of the resulting image, and can be seen as inherent in even the earliest examples. Between 1844 and 1846 Fox Talbot displayed his invention and collection of original calotype prints in the publication *The Pencil of Nature*,⁷⁶ a commercially produced book illustrated with original photographs and accompanied by Talbot's observations on his methods, and which was published in a series of six editions. An image from the *Pencil of Nature*, is of interest both for its captioning – a subject which will be returned to in the 'Manifest Destiny' of the expansionist project imagery of the American west in the next chapter – and also for the display of the photographic image as taxonomic, a stage that extends beyond the indexical to the inventory, the assemblage of visual 'proof' through the medium. In the caption for 'Articles of China' (fig.1.9) Talbot describes the photographic potential for the visualising of evidence.

From the specimen here given it is sufficiently manifest, that the whole cabinet of a collector might be depicted on paper in little more time than it would take him to make a written inventory, and would a thief afterwards purloin the treasure – if the mute testimony of the picture were to be produced against him in court – it would certainly be evidence of a novel kind. The articles represented on this plate are numerous: but, however numerous the objects – however complicated the arrangement – the camera depicts them all at once.⁷⁷

⁷⁵ William Henry Fox Talbot, "An Account of Some Recent Improvements in Photography" *Abstracts of the Papers Printed in the Philosophical Transactions of the Royal Society of London*, Vol. 4 (1837 – 1843), 313. <http://www.jstor.org/stable/110751> Accessed 9 February 2012.

⁷⁶ *The Pencil of Nature* was produced by Fox Talbot in six volumes between 1844 and 1846 as the first commercial photographic publication, containing 24 original photographic prints and captions by Fox Talbot. <http://special.lib.gla.ac.uk/exhibns/month/Feb2007.html> Accessed 28 September 2010.

⁷⁷ *Ibid.*, Fox Talbot, *The Pencil of Nature*, "Articles of China," Plate 111, 1844.



1.9 William Henry Fox Talbot, *The Pencil of Nature*, 'Articles of China,' Plate 111 (1844).

Both Talbot and Daguerre claimed the referent as integral to their respective processes and distinct to photographic imagery, as noted by Snyder in his discussion of the indexical; "Daguerre's description of photography as "the spontaneous reproduction of the images of nature" and Fox Talbot's claim that it was "the process by which natural objects may be made to delineate themselves" are nothing if not appeals to the idea of indexicality."⁷⁸ The index, or referent within the photographic image is that dimension of the image that is commonly understood to refer to 'the real', that premise, or promise of a form of reality mirrored in the features of the image.

In France the announcement of the invention of Louis Jacques-Mandé Daguerre, as mentioned, (1787-1851) was made at a joint session of the Académie des Sciences and the Académie des Beaux-Arts in 1839, presented by François Arago, a supporter of Daguerre and a member of the French legislature. Immense popular interest,

⁷⁸ Joel Snyder, "Assessments" in *Photography Theory: the Art Seminar Series*, ed. James Elkins (New York: Routledge and University College Cork, 2007), 245.

acclaim and governmental support for the Daguerreotype meant that the process became public property very quickly.⁷⁹ The emergence of photography is described in the Paris newspaper *La Gazette de France* in 1839 as follows:

This discovery seems like a prodigy. M. Daguerre has discovered a method to fix the images which are represented at the back of a camera so that these images are not the temporary reflection of objects but their fixed and durable impress, which may be removed from the presence of those objects like a picture or an engraving.⁸⁰

Before daguerreotypists established themselves across the globe as a result of the invention, and in the process experimenting with the chemical procedures and reducing the exposure times, which in the initial works were prohibitively lengthy, Daguerre produced what is often referred to as the first photograph to include the detail of a human figure. *The Boulevard du Temple*, executed in 1838 (fig.1.10), is an image of a Parisian boulevard, full of clearly defined details of urban architecture and where in the tree-lined pathways even the shadows appear purposeful and delineated. What is missing from a busy street, however, is the usual passage of traffic and people going about their business, made all the more obvious by the presence of a solitary, lone figure in the foreground.

⁷⁹ Malcolm Daniel, "The Daguerreian Age in France 1839-1855," in *Helibrunn Timeline of Art History*. (New York: The Metropolitan Museum of Art, 2000)

http://www.metmuseum.org/toah/hd/fdag/nd_fdag.htm Accessed 16 February 2011.

⁸⁰ Beaumont Newhall, "The Pencil of Nature" the *Literary Gazette*, (13 January 1839) quoted in *The Art of Photography 1839-1989*, 12.



1.10 Louis Jacques Mandé Daguerre *Boulevard du Temple*, (1838).

The author Rebecca Solnit, in her essay “Visibility”⁸¹ refers to this image as part of her illustration of the “tangled history”⁸² between photography and visibility, and recounts the explanation for the empty city streets and the inclusion of the solitary figure who, when the photograph was being taken, was stationary as his shoes were being shined.

The shoe shiner is a blur at his feet, but the rest of the people are invisible because they were in motion and the exposure was slow. The photograph is usually described as failing to show the people who were on the boulevard. It could also be described as a different way of seeing...⁸³

This image of a Parisian boulevard by Daguerre reveals absence equally as it indicates presence, and in this, one of the very first photographs, the absence of presence as a characteristic of the process, regardless of differences in technique and temporalities,

⁸¹ Rebecca Solnit, “Visibility,” in *Invisible: Covert Operations and Classified Landscapes*, Trevor Paglen (New York: Aperture, 2011), 13-14

⁸² *Ibid.*, 13.

⁸³ *Ibid.*, 14.

is encapsulated. From these origins, comments Solnit, "Photography has ever since represented various kinds of visibility and invisibility."⁸⁴ Therefore a dimension of lens-based imagery as both constructed and elusive was evident from its inception, the processes of Daguerre and Fox Talbot each demonstrative of different aspects of the photographic potential; uniqueness and reproducibility, negative and positive, the visible and the invisible. These contradictory characteristics of the photographic medium are commented on by art historian Sabine T. Kriebel in her essay "Theories of Photography: A Short History," "Therefore a clear definition of intrinsic, universal qualities of a photograph would be, at the very outset, hampered by its dependence on technological change. To speak of "the photograph" would be to speak of its multiplicity and malleability."⁸⁵ These qualities are present not just in the practices and images of photography, but in the ideological imperatives which may be visually discerned within the medium.

1.3.4 *The photograph as stereoscope*

Charles Wheatstone soon realised the potential of the new process of photography and its suitability as a medium in stereoscopic viewing (fig.1.11), as he fully understood the powerful visual effects of two dissimilar images when merged in the stereoscopic viewer. As a peer and fellow scientist, Wheatstone was in contact with William Fox Talbot, here in correspondence with regard to the making of photographic prints specifically to his instructions for stereoscopic viewing.

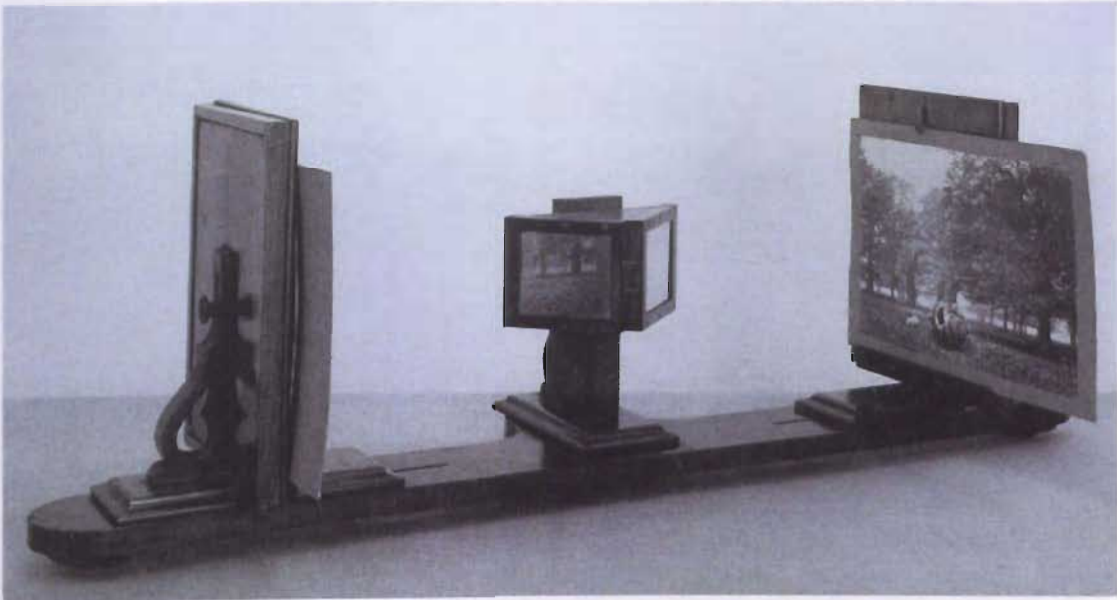
There is one precaution necessary to be taken to ensure the proper result; the two pictures should not be taken at times when the shadows of the object fall differently; they should either be taken one immediately after the other or, which would perhaps be better, at the same time on two successive days. A bust will be a good binocular object, but a carriage or a piece of machinery would, I think have an excellent effect.⁸⁶

⁸⁴ Ibid.

⁸⁵ Sabine T. Kriebel, 'Theories of Photography: A Short History' in *Photography Theory*, ed. James Elkins (U.S: Routledge and University College Cork, 2007), 5.

⁸⁶ Professor Larry J. Schaaf, Director, Talbot Correspondence Project. Transcript of original letter from Charles Wheatstone to W.H. Fox Talbot at Lacock Abbey, 15 December 1840.

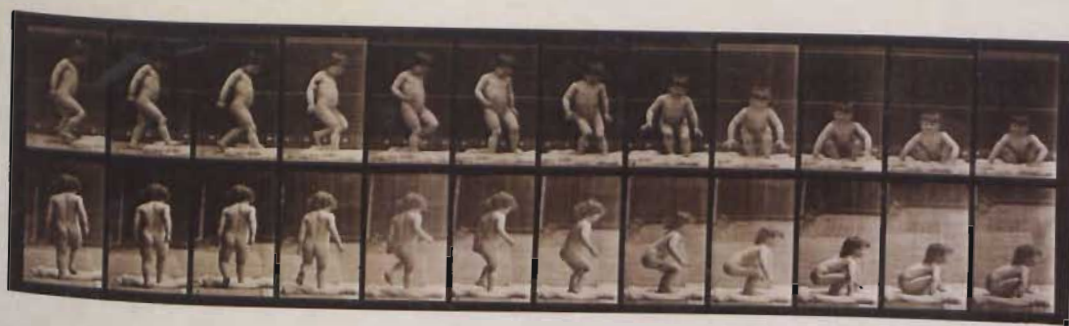
<http://foxtalbot.dmu.ac.uk/> Accessed 20 July 2011.



1.11 Reflecting Stereoscope with two stereoscopic photographs viewer by Charles Wheatstone, 1838.

The emergence of photography in the late 1830's rapidly became one of the defining motifs of modernity, beginning, as discussed, with the unique daguerreotype and the popularity of the calotype print by the 1850's, and gaining social popularity and dissemination through activities such as studio portrait photography, the pictorial 'carte de viste' and the later publication of photographic series such as Eadweard Muybridge's *Animal Locomotion* studies of animals and people in the 1880's.⁸⁷ (fig. 1.12)

⁸⁷ Eadweard Muybridge, *Animal Locomotion: An Electro-Photographic Investigation of Consecutive Phases of Animal Movement*, 1872-1885. 11 vols. 781 plates. Philadelphia: University of Pennsylvania, 1887. Philip Brookman, *Eadweard Muybridge* (London: Tate Publishing, 2010), Selected Biography, 337.



1.12 Eadweard Muybridge *Child, sitting down on the ground*, (ca.1884 – 1887)
Collotype print. Image size 15.2 x 45.7 cm. George Eastman House.

As photography began to become widespread and socially established, the photograph as a stereoscopic image, with its illusion of tangibility and sensations of depth, was emerging as a radical and dynamic experience of vision. The social popularity of the stereoscopic viewer and its swift translation from empirical tool to ‘philosophical toy’ of nineteenth century drawing rooms is indicated here by art historian Rosalind Krauss “As early as 1857 the London Stereoscopic Company had sold 500,000 stereoscopes and, in 1859, was able to claim a catalogue listing more than 100,000 different views.”⁸⁸ In her discussion of the nineteenth century photographic tropes of early modernism in her essay “Photography’s Discursive Spaces: Landscape/View,” Krauss describes the particular visual appeal of the stereoscopic image as a reason for the popularity of the activity.

Stereoscopic space is perspectival space raised to a higher power. Organised as a kind of tunnel vision, the experience of deep recession is insistent and inescapable. This experience is all the more heightened by the fact that the

⁸⁸ Edward W. Earle, ed., *Points of View: The Stereoscope in America: A Cultural History* (Rochester, N.Y.: The Visual Studies Workshop Press, 1979), 12. Quoted in Rosalind Krauss, “Photography’s Discursive Spaces: Landscape/View,” *Art Journal*, Vol. 42, No.4, *The Crisis in the Discipline* (Winter, 1982), 314. <http://www.jstor.org/stable/776691> Accessed 8 April 2011.

viewer's own ambient space is masked out by the optical instruments he must hold before his eyes.⁸⁹

Stereoscopes were part of this new, exciting and socially consumable contract of vision, with its implicit acceptance of disturbance and disjunction and engendering belief in the tangibility and veracity of the illusory image. Whilst the popularity of the stereoscope was intense, it was also relatively shortlived, beginning in the 1850's and reaching a peak around the 1880's. During this period, however, the volume and production of stereoscopic views were part of a regime dominated by the serial object and new capitalist modes of manufacture, and helped to establish the photographic medium as one of the most visible and emblematic expressions of nineteenth century modernity.

Oliver Wendall Holmes (1809 - 1894) a nineteenth century writer and editor, was an avid collector and promoter of the stereoscope, and instrumental in popularising the new medium to a middle-class American audience through his three-part essay in the journal *Atlantic Monthly*, beginning in 1859.⁹⁰ In this serialisation Holmes also gives an account of the rise of 'The Photograph' and the decline of 'The Daguerreotype' which by the late 1850's, although still being used for portraits, was a much less popular form, whereas the paper print and the stereoscope were becoming the preferred format for landscape, still life, architecture and genre painting. The illusionistic effects of the stereoscopic space are evoked in Holmes's enthusiastic accounts, exemplifying the impact on the popular imagination.

I look into the chasms of Alpine glaciers, and on the rush of wasteful cataracts.
I pass, in a moment, from the banks of the Charles to the ford of the Jordan,
and leave my outward frame in the arm-chair at my table, while in spirit I am
looking down upon Jerusalem from the Mount of Olives.⁹¹

⁸⁹ Krauss, "Photography's Discursive Spaces: Landscape/View," 314.

⁹⁰ Martha Sandweiss, *Print the Legend: Photography and the American West* (New Haven: Yale University Press, 2002), 140.

⁹¹ Oliver Wendall Holmes, "The Stereoscope and the Stereograph," *The Atlantic Monthly*, Vol. 3, (June 1859), 8. <http://www.theatlantic.com/magazine/archive/1859/06/the-stereoscope-and-the-stereograph/3361/> Accessed 9 February 2012.

Stereoscopic photographs and the social habits of viewing seemed to have a particular resonance with landscape imagery "Circulating in multiple copies and exchanged amongst friends, the stereos could provide a common topic of conversation even amongst people who had not studied them together."⁹² Yet even in the detailing and drama of the stereoscopic experience, Holmes notes the same partial visibility in the image as was evident in the first daguerreotype "A perpetual stream of figures leaves no definite shapes upon the picture"⁹³ and in speaking of this partiality evident in images of landscape the observation is even more marked "There may be neither man nor beast nor vehicle to be seen. You may be looking down on a place in such a way that none of the ordinary marks of its being actually inhabited show themselves."⁹⁴ As we know, this 'absence' was instrumental, a consequence of the long exposures of the time, which were suited to stillness and stationary detail but unable to register movement at speed, thereby excluding moving subjects from the composition of the image.⁹⁵ However, my argument is that this instrumental and indexical characteristic of partial visibility is also reflective of an iconic and ideological register, and as such a study of aspects of photography has a particular stake in approaching the issue of cultural visibilities within photographic practices and images. This will be traced through a narrative of photography, militarism and landscape over the following chapters, and a development of the claim that photographic representations of landscape reveal a strategy of appropriation identifiable through the characteristics of visibility and invisibility.

1.3.5 Conclusions

By the mid-nineteenth century, it can be seen that the schematic of visual regulation and authority provided by the camera obscura had become disassembled through the revelations around the embodiment of sight, and the empirical and social impacts of the stereoscope and photography. The intellectual certainties and guiding principles of

⁹² Sandweiss, *Print the Legend*, 140. Discussing the viewing of stereoscopes at home, which was overtaking the previously popular social entertainment of attending a moving panorama show.

⁹³ Wendall Holmes, "The Stereoscope and the Stereograph," 8.

⁹⁴ *Ibid.*

⁹⁵ Marta Braun, "Animal Locomotion," *Eadward Muybridge*, 272. This was soon to be spectacularly corrected in Eadward Muybridge's time and motion studies of animal and human subjects, beginning with Muybridge's photographs of Leland Stanford's racehorses, published in the popular journal *Nature*, in December 1878.

rationality and objectivity of the Enlightenment in the previous seventeenth and eighteenth centuries were being overtaken by new discoveries about the body and the known and unknown world. Scientific empiricism was generating new knowledge about biology and human physiology, and debates around Darwinism and theories of evolution proliferated. In his discussion of modernity and modernism, the geographer David Harvey refers to its emergence as also being prompted in response to the rapidity of change in the social and economic climate.

It is important to keep in mind, therefore, that the modernism that emerged before the First World War was more of a reaction to the new conditions of production (the machine, the factory, urbanisation), circulation (the new power systems of transport and communications), and consumption (the rise of mass markets, advertising, mass fashion) than it was a pioneer in the production of such changes.⁹⁶

With this shift to new modes of production, circulation and consumption, a new disciplinary regime was also required. Mass employment and industrialisation required new work practices and methods of regulation for the efficiency of a workforce to produce volumes of serial commodities demanded by an emergent capitalist consumer. The serial production and mass circulation of photography meant that it had an emblematic role in exemplifying modernity, as a socially available and infinitely reproducible image and artefact. Jonathon Crary claims that photography was central to the new canons of consumption and circulation "Within this new field of serially produced objects, the most significant, in terms of their social and cultural impact, were photography and a whole host of related techniques for the industrialisation of image making."⁹⁷ Crary goes further in his assertion of photographic labour in the service of modernity, stating that although photographic images were superficially similar to traditional painted and drawn representational imagery, this resemblance was insignificant compared to the ideological positioning. "To understand the "photography effect" in the nineteenth century, one must see it as

⁹⁶ David Harvey, *The Condition of Postmodernity* (Massachusetts: Blackwell, 1990), 23.

⁹⁷ Crary, *Techniques of the Observer*, 13. Crary refers to the argument of Manuel De Landa in his publication, *War in the Age of Intelligent Machines* (New York, 1990), that the most significant model for serial industrial production at this time was ammunition and military spare parts, and that the demand for similarity and exchangeability arose equally from the demands of warfare, rather than solely economic and commercial requirements.

a crucial component of a new cultural economy of value and exchange, not as part of a continuous history of visual representation.”⁹⁸ However Cray’s argument presupposes that more orthodox representations from earlier periods, were not also equally capable of being exemplars of ‘a new cultural economy of value and exchange.’ As will be discussed in the following chapter, for example, the Dutch landscape painting school of the sixteenth century was a genre that was both part of a ‘cultural economy’ of a newly independent, secularised Netherlands, whilst contributing in no small part to the ‘history of representation.’ Therefore, although the camera obscura and modern photography may not form part of a seamless, ‘continuous’ history of visual representation, in that they equally derive from an alternate history of scientific empiricism, they constitute part of the history of representation in arguably a more interestingly contentious and diverse way than is suggested by a continuous chronology.

This capacity for mimetic, serial reproduction of the work of art in the nineteenth century is the subject of German philosopher Walter Benjamin’s (1892 – 1940) seminal 1936 essay “The Work of Art in the Age of Mechanical Reproduction.” The crux of the argument is that the authority of the original artwork is fundamentally altered when divorced from previous relationships established on ritual and tradition, which have been supplanted by mechanical methods of reproduction of artwork.

But the instant the criterion of authenticity ceases to be applicable to artistic production the total function of art is reversed. Instead of being based on ritual, it begins to be based on another practice – politics.⁹⁹

This radical change to the unique nature of the cultural artefact has been famously theorised as a loss of ‘aura’ by Benjamin, which he describes thus: “that which withers in the age of mechanical reproduction is the aura of the work of art”¹⁰⁰ Benjamin concentrates on photography and film as particular motifs of capitalist manufacturing systems, “By making many reproductions it substitutes a plurality of

⁹⁸ Ibid.

⁹⁹ Walter Benjamin, “The Work of Art in the Age of Mechanical Reproduction,” *Illuminations*, trans. Harry Zohn (London: Fontana Press, 1992), 213.

¹⁰⁰ Ibid., 215.

copies for a unique existence.”¹⁰¹ Although he concedes that technical reproduction also “...enables the original to meet the beholder halfway, be it in the form of a photograph or a phonograph record,” and by so doing, “reactivates the object produced.”¹⁰² However he notes that these twin processes lead to a destruction of traditional methods, and consequently, “Both processes are intimately connected with contemporary mass movements.”¹⁰³ Benjamin’s view of the uniqueness of a work of art was in its connection to the traditions from which it was produced, and here he argues that even a reproduction of a ‘unique’ image, in some sense degrades the original.

Every day the urge grows stronger to get hold of an object at very close range by way of its likeness, its reproduction. Unmistakeably, reproduction as offered by picture magazines and newsreels differs from the image seen by the unarmed eye. Uniqueness and permanence are as closely linked in the latter as are transitoriness and reproducibility in the former. To pry an object from its shell, to destroy its aura, is the mark of a perception whose “sense of the universal equality of things” has increased to such a degree that it extracts it even from a unique object by means of reproduction.¹⁰⁴

Benjamin’s positioning of photography as an artistic medium unconnected to others however, is also a reductive description which evokes the more common assumption of the form of ‘mechanical reproduction’, a process separated from the tradition and history of image-making by its technological bias, “For the first time in the process of pictorial reproduction, photography freed the hand of the most important artistic functions which henceforth devolved only upon the eye looking into a lens.”¹⁰⁵ As discussed, ‘the lens’, as a metaphor for ‘camera’, was an integral part of the design and construction process which evolved over centuries in efforts to modify and improve on representational painting, and was indeed part of the tradition and ‘process of pictorial reproduction’ alluded to by Benjamin. The hegemonic, homogenous implied nature of photography suggested by in Benjamin’s argument

¹⁰¹ Ibid.

¹⁰² Ibid.

¹⁰³ Ibid.

¹⁰⁴ Ibid., 217.

¹⁰⁵ Ibid., 213.

concerning photography and film, is belied by an expressive and contrasting range of experiential images, even at an early stage of photographic development. Consider, for example, the singular quality of a daguerreotype, which presents an image that may be reproduced, but which exists as a unique and unrepeatable artefact, with the difference of the curiously private/intimate viewing experience afforded by the illusory deep space of the mass-produced stereoscopic viewer.

In Michel Foucault's (1926-1984) iconic description of the architectural model of the Panopticon, the philosopher describes an ideological model of regulation through which the disciplinary authority of the state and its institutions was enabled by practices of surveillance. A schematic form of state penitentiary, the purpose of the model was: "to induce in the inmate a state of conscious and permanent visibility that assures the automatic functioning of power."¹⁰⁶ According to Foucault, in his identification of the privileged role of the eye in the operations of surveillance, visibility was fundamental to these procedures of regulation.

In short, it reverses the principle of the dungeon; or rather of its three functions – to enclose, to deprive of light and to hide – it preserves only the first and eliminates the other two. Full lighting and the eye of the supervisor capture better than darkness, which is ultimately protected. "Visibility is a trap"¹⁰⁷

Foucault continues to describe the reciprocity of this relationship between visibility and invisibility, "He is seen, but does not see; he is the object of information, never a subject in communication"¹⁰⁸ and of the role of the panoptic in the severing of the individual from the collective, through an arrangement of accommodation opposite the central tower that permits visibility to the guards but not to other prisoners "...but the divisions of the ring, those separated cells, imply a lateral invisibility. And this invisibility is a guarantee of order."¹⁰⁹ This 'guarantee of order' as a function of "...surveillance that is permanent in its effects, even if it is discontinuous in its

¹⁰⁶ Michel Foucault, *Discipline and Punish: The Birth of the Prison* (London: Penguin, 1977), 201.

¹⁰⁷ *Ibid.*, 200.

¹⁰⁸ *Ibid.*

¹⁰⁹ *Ibid.*

action”,¹¹⁰ was perfectly suited to the new modes of capitalist production engendered by nineteenth century modernity and the work practices that were required to ensure full productivity. The model could apply across the institutional activities, thus:

If they are patients, there is no danger of contagion; if they are madmen there is no risk of committing violence upon one another; if they are schoolchildren, there is no copying, no noise, no chatter, no waste of time; if they are workers, there are no disorders, no theft, no coalitions, none of these distractions that slow down the rate of work, make it less perfect or cause accidents.¹¹¹

The art historian John Tagg has developed these Foucaultian concepts in his publication *The Burden of Representation: Essays of Photographies and Histories*, through a discussion of nineteenth century photography from the standpoint of the institutionalisation of the emerging medium, and refuting the idea of a homogenous photographic narrative of ‘reality.’ Instead, Tagg has suggested that the history of the emerging ‘photographies’ of the nineteenth century present a fractured and politicised account of the medium and its impacts “for example, we are dealing with the instrumental deployment of photography in privileged administrative practices and the professionalised discourses of new social sciences,”¹¹² and where the use of photography was used to scrutinise social groups and extensively deployed as a form of regulation and surveillance in a manner historically unprecedented.

What I will go on to argue is that the coupling of evidence and photography in the second half of the nineteenth century was bound up with the emergence of new institutions and new practices of observation and record-keeping: that is, those new techniques of representation and regulation that were so central to the restructuring of the local and national state in industrialised societies at that time and to the development of a network of disciplinary institutions – the police, prisons, asylums, hospitals, departments of public health, schools and even the modern factory system itself.¹¹³

¹¹⁰ Ibid., 201.

¹¹¹ Ibid.

¹¹² John Tagg, *The Burden of Representation: Essays on Photographies and Histories* (Minnesota: University of Minnesota Press, 1993), 11.

¹¹³ Ibid., 5.

Tagg approached this status of the nineteenth century medium of photography by reviewing the documentary images of hospitals and courtrooms, passports and licenses, the imaging of the institutional stamp, thereby locating the photographic discourse within a wider social and political context than either a popularised or an aesthetic position. Tagg displaces a meta-narrative of early photography as a linear and unified account by insisting on a series of fractured and multiple stories "Imagine a history of photography as an insistent practice, inserted into the very heart of the modern social order and characterised by a double momentum..."¹¹⁴ His argument asks us to consider this dualism of photography, the discourse of "the space of the Imaginary and the Ideological."¹¹⁵ The author traces the visual attentiveness of photography to both the body and to the space of landscape, through methods of division, of observation and of supervision, as a means of exerting authoritative control.

On one side, time and motion studies, criminal records, sociological dossiers, humanist documentaries, medical photography, ethnographic records, reportage, sports pictures, pornography, identikit faces, all kinds of portraiture, and photographs in official documents, papers and files. On the other, the landscape tradition, aerial surveys, astronomical photography, micro-photography, topographical records, certain kinds of advertising images, and so on. Two kinds of longing. Two kinds of subjection. (The gaze has both passion and perspective)¹¹⁶

This mirroring of the appropriating practices to which nineteenth century photography served in relation to the body and the landscape illustrates both the scope of instrumental uses, and the ideological imperatives which prompted them. It is to this latter area of 'landscape tradition' through the 'imaginary and ideological' frameworks of survey and topographical photography that I will turn in the following chapter. There are two concluding remarks to be made on the material of the first chapter. Firstly, that vision has been shown to be both an empirically and culturally constructed practice, and that an understanding of the phenomenon of human sight is

¹¹⁴ Ibid., 203

¹¹⁵ Ibid.

¹¹⁶ Ibid.

as much determined and informed by discourse and philosophical enquiry as by the physiological process of embodiment. Although the cognitive act of sight takes place spontaneously, with no understanding of the process required, my observations on vision from Aristotle to Talbot have all been concerned with exploring 'ways of seeing' and understanding the nature of vision as a process which may be mediated and extended, philosophically and optically. It is clear that this process is both instrumental, as in the earliest examples of the camera obscura as a mechanism of astronomical measurement, and later, as an aid to representational painting, and ideological in the operations of the stereoscope and other 'philosophical toys,' exemplifying both the subjectivity and regulation of vision in the nineteenth century. As photography was 'invented' as a fixed image, serially produced and indexical of the culture of modernity from which it emerged, the potential for the instrumental image to also be an ideological carrier of meaning, began to be fully realised. As has been shown, far from being a mimetic 'pencil of nature' the medium was ideologically malleable and culturally constructed from its inception. The second analysis made has been in terms of the intrinsic characteristics of the medium, and that a series of contradictory elements, 'uniqueness and reproducibility, negative and positive, the visible and the invisible', function both as metaphor and as actual features of the photographic process. This issue of visibility, particularly in the service of institutional claims and the visually appropriating power of photography, will be developed through the discussion of a culturally specific nineteenth century landscape in the next chapter.

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Chapter 2: Narrating Landscape

2.1 Introduction

This chapter is an exploration of some of the narratives that may be culturally encountered and expressed through the term ‘landscape’, and of the role played by representation, particularly photography, in the framing of such encounters. The exploration will draw on formulations that have been created through the use of photography in nineteenth century landscape survey practices, and the legacy for the discipline and approaches of cultural geography and contemporary archaeology, including a treatment of the impacts of twentieth century militarism as a shaper of landscape. Through these related fields I will argue that the visual is a persistent thread of influence, and that “landscape is understood as being *always already* a representation.”¹ I hope to show that an experience of landscape is both defined and problematised through its visual and cultural representations and that in turn these representations both challenge and confirm our experience and ways of seeing landscape.

In the first section, it will be shown that institutional use of photography began with its emergence in the early part of the nineteenth century, and was increasingly developed through practices such as expeditionary photography in the latter part. As with the social role and popularity of the stereoscope from the 1830’s to the late 1850’s, the social circulation and legacy from the topographical survey photography of the American west produced during the 1860’s and 1870’s was profoundly influential, and instrumental in the transformed status of photography from the technological and scientific, to the aestheticism of the artefact. Beginning with a short introduction to the origins of sixteenth century landscape depiction in European art, and the ideological and pictorial influence which underpinned the imagery produced by the later nineteenth century western American surveys, this landscape has been

¹ John Wylie, *Landscape* (Oxon: Routledge, 2007), 68. Geographer Wylie discusses landscape as a specific “way of seeing.” (emphasis in original)

chosen for a number of reasons. The first of these concerns the rapid technological and impressionable development of the photographic medium itself, and its use as an instrument of scientific and territorial appropriation in the major surveys of Clarence King and Lieutenant Wheeler. These topographical expeditions directed survey teams across vast swathes of the western landscape, for the purposes of geographical and geological data gathering, and for reconnaissance and military expansion. Visual images and photography were an integral element of the final reports and albums initially commissioned by governmental and federal audiences of the time, and which were later to become part of the iconic imagery of the western landscape and its social consumption and popularity by the early twentieth century. Of the survey photographers, the work of Timothy O'Sullivan (1840-1882) has been selected for discussion, as an example of topographical photography that both reflected the twin aims of survey leaders – scientific investigation and military cartography – and whose work was later claimed as exemplifying the graphic values of modernism, in his uncompromising, singular method of creating 'views' and pictorial resistance to the picturesque tradition.

Photography, prior to its more widespread use after the 1850's, was just one pictorial method amongst many, and the more traditionally expressive mediums of painting, engraving, drawings and lithographs were extensively employed to both illustrate survey expedition reports and reproduced as popular images in periodicals and print media of the time. However, as photography became more technically proficient and visually expressive of the salient features of the western landscape through the major surveys of the 1860's and 70's, part of its legacy was later inclusion in the 'exhibitionality' of modernity in the twentieth century, as in Krauss's discussion of the reinvention of topographical photography: "Matted, framed, labelled, these images now enter the space of historical reconstruction through the museum."² This dichotomy between appropriation and the academy is another reason for the selection of this landscape for discussion, specifically in the connections between the work of Timothy O'Sullivan and the contemporary artist Trevor Paglen, whose work is discussed in Chapter three 'Conflicted Territory.' Many of Paglen's photographic works track the hidden military movements and covert operations which take place

² Krauss, "Photography's Discursive Spaces: Landscape/View," 313.

within the same landscape first documented by O'Sullivan, and he makes direct reference to the processes of survey/surveillance imaged by his predecessor.

The photographic legacies of the American west as a form of 'unspoilt' wilderness has a resonance with the Irish landscape of Donegal which is the subject of discussion in chapters four and five. Here too, a similar sense of 'wilderness' has been perpetuated through ideas and perceptions of remoteness, and the striking impact of a dramatic, rugged landscape at the edge of the northern Atlantic. However in Donegal, as in the American west, the landscapes have become depopulated because of specific factors, and are not the result of an unregulated rural state. Whereas in the west the Indian Wars and the expansion of the railroads decimated local native populations, in Donegal the effects of the Famine from 1846 to 1851, emigration and Landlordism³ similarly resulted in the loss of indigenous families and the dereliction of homesteads that can still be seen across the rural and coastal landscapes of the county.

From the legacy of these representations, the discussion will address some of the origins for the term 'cultural landscape' as another dimension of the narrative, specifically the arguments that consider the influence of the "visual bias"⁴ in the geographical study of landscape as an academic discipline. The final section will turn to an example of contemporary interpretation as framed through an archaeological lens, by focussing on the evidence of the recent past rather than a more traditional disciplinary emphasis on the archaic. The militarism of landscape through the diverse influences of twentieth century conflict is a theme that is of growing interest in both geographical and archaeological disciplines, and is the subject of shared research practices and interdisciplinary approaches. These approaches include an awareness of the value of arts practice, and the inclusion of the work of artists as a disciplinary strand when considering issues of contemporary conflict, and its social relevance. A discussion of this shared area of cross-disciplinary interpretation will be begun within this chapter, and further developed within the next, as a means of developing the

³ The most notorious example of a landlord's eviction of native people in Donegal was the Derryveagh evictions. Landlord John George Adair bought an estate of 28,000 acres, from which he proceeded to displace and make homeless 44 local families, a total of 244 people over three days in April, 1861.

⁴ Denis E Cosgrove, *Social Formation and Symbolic Landscape* (Wisconsin, University of Wisconsin Press, 1988), 27-33.

context for the engagement of artists with examples of recent conflict, and issues of cultural visibility within the landscape.

2.2 Re-presenting landscape

2.2.1 Pictorial landscape – early photography

The cultural image most immediately and broadly associated with the term ‘landscape’ is perhaps that of the genre of landscape painting. Landscape as a specific subject matter emerged through Dutch painting in the seventeenth century, with the naturalistic depiction and foregrounding of images of the natural world.⁵ The word ‘landscape’ was first recorded in 1598, and was derived from the Dutch word *landschap*,⁶ which had previously meant simply ‘region, tract of land’ but was becoming used as the descriptive term for paintings from the early seventeenth century that were dispensing with overtly religious content, and depicting instead naturalistic scenery and subject matter that focussed on the pastoral, as in the example of the image by Dutch painter Jacob van Ruisdael (fig. 2.1). Although the emergence and subsequent influence of Dutch seventeenth century landscape painting is often presented as a naturalistic and untroubled period of visual representation, art historian Ann Jensen Adams considers the other imperatives, and argues that the naturalism and drama of the iconography was also a critical and imaginative response to the simultaneous shifts in political, economic and religious conditions that were taking place during the era.

I argue here that the selection of identifiably Dutch land formations and sites, their dramatisation and physical manipulation, and above all their “naturalisation” appealed to the unique conjunction in seventeenth century Holland of three historical elements.⁷

⁵ “Making, Meaning and Market: 17th Century Dutch Painting from the Hunterian Art Gallery,” <http://www.hatii.arts.gla.ac.uk/dutch/landscape.htm> Accessed 15 September 2010.

⁶ John Wylie, *Landscape*, 21. The term *landschap* became identified with the image of a land as perceived, a pictorial depiction rather than as a unit of land measurement.

⁷ Ann Jensen Adams, “Competing Communities in the “Great Bog of Europe” Identity and Seventeenth-Century Dutch Landscape Painting,” in *Landscape and Power*, ed. W.J.T. Mitchell (Chicago: University of Chicago Press, 2002), 38.

These three elements were composed of the political declaration of independence from Spain made by the Seven United Provinces of Holland in 1579, economically, an unprecedented amassing of capital on the open market, sufficient to fund the world's largest land reclamation project, and religiously, as Protestantism replaced Catholicism as the nationally professed faith.⁸ These factors created a matrix of influences that were predicated around the significance of land and its national status. through national independence and the immigration which quickly followed, the territorial reclamation of peat bogs and marshes, and the removal of the requirement to depict landscape as merely a backdrop to religious symbolism in the religious transition from the iconic to the unadorned. With these factors at play it is not surprising that the Dutch population of the time had both the private means and fiscal ambition to celebrate and exemplify the motifs and emblems of seventeenth century Dutch expansionism and nationalism, buying more landscape genre paintings than any other form of painting.⁹



⁸ Ibid., 39.

⁹ Ibid., 40. Adams refers to the systematic study of the popularity of landscape painting in Delft inventories by economist Michael Montias between 1610 and 1679, where it rose as a subject from 25.6% of all painting subjects between 1610-19 to nearly 41% by the decade 1670-79.

2.1 Jacob van Ruisdael, *View of Haarlem from the Dunes at Overveen* (ca.1670).Canvas, 22 x 25. Mauritshuis, The Hague.

Considering this growth, the prevalence of the landscape genre and the legacy of naturalism in representational painting throughout Europe as a result, the influence on the later, emergent photography of the nineteenth century is perhaps unsurprising. In his caption for the photograph *Soliloquy of the Broom* (fig. 2.2), part of *The Pencil of Nature* portfolio, William Fox Talbot refers to the idealised naturalism of earlier Dutch painting as an influence on the emerging images of nineteenth century photography.

We have sufficient authority in the Dutch school of art, for taking as subjects of representation scenes of daily and familiar occurrence. A painter's eye will often be arrested where ordinary people see nothing remarkable. A casual gleam of sunshine, or a shadow thrown across his path, a time-withered oak, or a moss-covered stone may awaken a train of thoughts and feelings, and picturesque imaginings.¹⁰

¹⁰ Beaumont Newhall, "The Pencil of Nature" in *The Art of Photography 1839-1989*, 14.



2.2 William Fox Talbot, *Soliloquy of the Broom* (1843). Salt print from calotype negative. 16.1 x 18.8cm. Photographic Society of Great Britain.

So although the genesis of seventeenth century Dutch landscape imagery was ideologically prompted by the changing conditions of national, economic and religious life of the seventeenth century, it was the subject matter and naturalism of the genre that continued to develop as an influence over the coming centuries. Another early calotype image by Fox Talbot, *Haystack*, of 1844 (fig. 2.3), is captioned with his comment on the mimetic potential for realism as demonstrated by photography:

One advantage of the discovery of the Photographic Art will be that it will enable us to introduce into our pictures a multitude of minute details which add to the truths and reality of the representation, but which no artist would take the trouble to copy faithfully from nature.¹¹

¹¹ *Ibid.*, 14.



2.3 William Fox Talbot, *Haystack* (1844-5). Salt print, varnished, from calotype. 16 x 21cm.

Beaumont Newhall refers to the captions of Fox Talbot in his essay "The Pencil of Nature," invoking these descriptions of early photography from one of its originators in order to make distinct the arguments of the two most dominant positions in photographic debates throughout its chronology, "...the objective, highly detailed records of the world and the subjective, imaginative interpretations of the familiar, or even the commonplace."¹² The debates on photographic objectivity versus subjectivity, the indexical record or the imaginative interpretation, began with the very inception and appearance of photography in the 1840's. In his discussion of the landscape genre as an influence on American imagery of the mid-nineteenth century, art historian Joel Snyder refers to the pictorial conventions, particularly of painted European landscape imagery, which was pronounced in both the print media, lithography, engraving, etching, and early photography of the 1840's and 1850's.

¹² Ibid.

The tendency to fall back onto the inherited, customary, habitual conventions of subject matter selection and the manner of representation is especially apparent in the production of the early French and British photographers, who were for the most part educated by artists or were thoroughly familiar with a relatively broad and refined pictorial culture.¹³

In the latter half of the century, American photography began to develop as a medium within the broader visual culture due to factors such as increased technological virtuosity, an increasing number of entrepreneurial and commercial photographers, and the scale of governmental expeditionary survey. Photography as a popular means of fulfilling the demands of middle class culture, and exemplifying the veracity of technological progress began to be distanced from the fine art influences of its initial decade.¹⁴

2.2.2 Mapping the territory – landscape of the American west

From the 1840's to the late 1860's photography was just one of a portfolio of visual methods used to record and detail the topography and landscape of the nineteenth century American west. Through the practices of cartography and scientific survey, visual materials both ideologically and practically illustrated the ethos of territorial expansionism and immigration. The photographic historian, Martha A. Sandweiss, quotes the journalist E.L. Godkin writing in 1864, on how little the past had a hold on the future.

The West...has inherited nothing, and so far from regretting this, it glories in it. One of the most marked results of that great sense of power by which it is pervaded, is its strong tendency to live in the future, to neglect the past. It proposes to make history, instead of reading it.¹⁵

¹³ Joel Snyder, "Territorial Photography" in *Landscape and Power*, ed. W.J.T. Mitchell (Chicago: University of Chicago Press, 2002), 177.

¹⁴ *Ibid.*, 176. Snyder discusses the question of why photographic images began to appear as more mechanical, and less hand-made, and suggests it was in response to this growing commercial market interested in the culture of technological progress.

¹⁵ E.L. Godkin, "The Constitution and Its Defects," *North American Review*, vol. 99 (July 1864), 137; cited in Michael Kammen, *Mystic Chords of Memory: The Transformation of Tradition in American Culture* (1991; pbk. New York: Vintage Books, 1993), 51, in *Print the Legend: Photography and the American West*, Martha A Sandweiss (New Haven: Yale University Press, 2002), 180.

One of the ways in which this territory might be circumscribed and made stable for the purposes of development and settlement was through the social circulation of images and representations of place. This circulation often began with the federal and scientific audiences, who commissioned and funded the surveys, from which the information and images were then utilised in a politicised form and as part of economic measures. Often the pictorial results of the explorations were commercially printed and published and made available to the general public as part of the ever expanding narrative of the west. Depending on the purpose the image was intended to convey to the variety of potential audiences, methods of representation ranged from the production of printed lithographs and engravings, to drawings, paintings and illustrations. As we have seen from the popularity of the stereoscope in Victorian parlours,¹⁶ the general public were eager for visual entertainment and edification, ranging from stereoscopes which could be viewed privately at home, to the circulation in newspapers and journals, and through the purchase of books and bound, limited editions. And although the photographic medium was in extensive use, photographic images themselves were frequently modified as the basis for other forms of illustration, overlaid and reproduced more 'expressively' as prints and lithographs in order to fulfil ideological expectations and reinforce a populist perspective.

By the late nineteenth century, technology made possible photographic reproductions of photographic views, but there remained a broad preference for other sorts of images: images that could document fleeting dramatic moments, images that could document historical events. New reproduction technologies did not immediately create new ways of seeing.¹⁷

Sandweiss discusses this permeability between visual representations of western narratives and the reciprocity that connected the moral authority of landscape painting with the mimetic authenticity of landscape photography. In this period of the early to mid-nineteenth century, when photography was in a formative stage, photographic imagery still jostled for attention amongst the examples of genre and other, more

¹⁶ By 1856, two years after its founding, the London Stereoscopic Company alone had sold over half a million viewers. *The History of Photography*, Helmut and Alison Gernsheim, (London, 1969), 191. in *Techniques of the Observer: on Vision and Modernity in the Nineteenth Century*, Jonathon Crary, (Massachusetts: MIT Press, 1992), 118.

¹⁷ Martha A. Sandweiss, *Print the legend: Photography and the American West* (New Haven: Yale University Press, 2002), 323.

traditionally expressive representations. As a result, photographic images of this time were highly malleable and often intermingled with other forms of imagery. Sandweiss traces an example of this ideological and pictorial synthesis through a series of images, each with the common/generic title of 'Westward the Course of Empire Takes its Way', a line taken from a 1726 poem and a bittersweet reflection on Britannia's cultural decline and the rise of America.¹⁸ More than a century later the phrase was being associated with a call to patriotism and westward expansionism, and the agenda of 'Manifest Destiny.'¹⁹ The panoramic painting *Westward the Course of Empire Takes its Way* [*Westward Ho!*] by the painter Emanuel Leutze was painted at a time when the Civil War in America was splitting the nation. (fig. 2.4)



¹⁸ Anglo-Irish philosopher and bishop George Berkeley's poem *On the Prospect of Planting Arts and Learning in America*, 1876, for which the University of California and the Berkeley area are also named, includes the line: "Westward the course of empire takes its way, the first four Acts already past," <http://www.berkeleyhistoricalsociety.org> Accessed 02 March 2011.

¹⁹ The Origin of "Manifest Destiny", Julius W. Pratt in *The American Historical Review*, Vol.32, No.4, (July 1927), 795. (The University of Chicago Press) <http://www.jstor.org/stable/1837859> Accessed 4 March 2011. The phrase "Manifest Destiny" is often used as a statement that refers to the territorial expansion of the American west of the period. An early reference to the origins of the phrase is to be found in a House of Representatives speech on January 3, 1846, by Robert C. Winthrop of Massachusetts, on a debate regarding the occupation of Oregon: "I mean that new revelation of right which has been designated as the right of our *manifest destiny* to spread over this whole continent." (author emphasis).

2.4 Emanuel Leutze, *Westward the Course of Empire takes its way* (1861). Oil on Canvas. 33 ¼ x 43 ¼ inches. National Collection of Fine Arts (U.S.)

The imagery is an evangelical, pioneering evocation of the immigrant west and of triumph over adversity as the prospective settlers behold the prized and promised land of 'the West.' The painting is resolutely heroic and didactic, showing the potential rewards of perseverance, in an image that promotes only a visionary, ever-expanding future. There is an absence of reference to the contemporary present that included the Civil War (1861 - 1865) of the time, or to the past history of slavery that provoked it, and the imperial conquest of the indigenous lands which the settlers now behold with weary, but assured, conviction. The second image is a hand-coloured lithograph entitled *Across the Continent: "Westward the Course of Empire Takes its Way,"* 1868, by the English artist Frances Palmer (fig. 2.5). Palmer created a series of images for the company of Currier and Ives, a hugely influential print publisher company based in New York during the 1860's, that projected an ideology of Protestant, conservative culture, and the progressive modern life of nineteenth century America. This was exemplified through scenes of "frequent floral compositions, homely scenes of domestic bliss, hunting scenes of weekend sportsmen, improving moral and religious subjects, scenes of pioneer farming and portraits of modern ships and locomotives..."²⁰

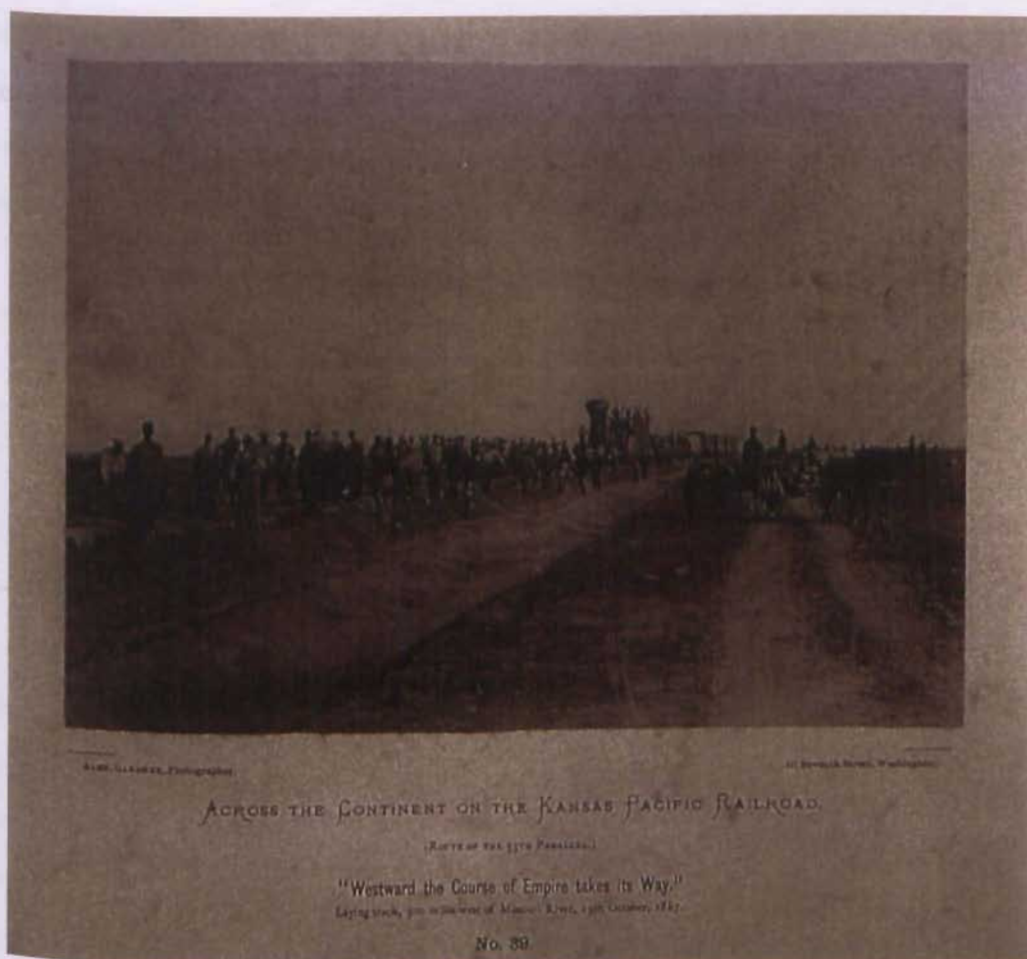
²⁰ Stephen Daniels, *Fields of Vision: Landscape Imagery and National Identity in England and the United States* (Cambridge: Polity Press, 1993), 179.



2.5 Frances Palmer, *Across the Continent. Westward the Course of Empire Takes its Way* (1868). Colour lithograph. 17 $\frac{3}{4}$ x 27 $\frac{1}{8}$ inches. Museum of the City of New York.

The absent past in the painting by Leutze is here present in Palmer's lithograph, and its absence/presence serves similar ideological purposes of conquest and expansion in both images. In the lithograph the past is referred to through the history of the lands depicted, politically and pictorially. Here the past is metaphorically banished from the future, neatly intersected and divided from it by the diagonal device of the railway line and the symbol of modernity, the locomotive. On the 'future' side is the busyness and activity of the settler community, and the motifs of education and industry. On the 'past' are two lone Native American figures on horseback, in a de-populated National Park-type landscape, watching the progress of the locomotive and caught in the wake of its billowing smoke. The implications of the image are that the modernity of the future will continue to advance, overthrowing the uncultivated cultures of the past, whilst retaining a selective 'wilderness' of the landscape in, as it turned out, the form

of National Parks.²¹ A third image to incorporate the symbolism of the phrase and affix it as a caption, is an albumen silver print photograph by photographer Alexander Gardner, (fig.2.6) “*Westward the Course of Empire Takes its Way.*” *Laying Track 300 Miles West of the Missouri River, 19th Oct. 1867.* The photograph depicts a scene of railway track laying where workmen pause in their progress, the relentless onward march of which is indicated by the soon to be obsolete horse drawn wagon to the right of the track. What is signified by the image and its patriotic captioning, however, are a number of interesting propositions.



2.6 Alexander Gardner, “*Westward the Course of Empire Takes its Way*”
Laying Track 300 Miles West of the Missouri River, 19th Oct. 1867.

²¹ Congress established the United States National Parks with an Act of 01 March 1872, making Yellowstone National Park in Montana and Wyoming “as a public park or pleasuring-ground for the benefit and enjoyment of the people” and placed it under exclusive control of the Secretary of the Interior. Subsequent Acts in the twentieth century created a National Parks Service with 20,000 employees and a system of 394 national parks, covering more that 84 million acres in 40 states.
<http://www.ourdocuments.gov/doc.php?flash=true&doc=45> Accessed 26 January 2012.

Firstly, that the juxtaposition of image and text situate the photograph on a similar metaphorical and symbolic register as the mural and the lithograph in the mythologising of western expansionism, thus showing the interchangeability of ideological imagery of the time, and the expressive potential of photography to be an amenable part of that process. Secondly, although the photographic image is entirely connected to the painted and printed images through this ideology as exemplified by the title and captioning in each case, I would argue that the photograph was ultimately more successful, both in its promotion and dissemination of this ideological position, as what it lacked in dramatic, hand-rendered detail, it compensated with through the mimetic quality and implied authenticity of the image. This is supported by Sandweiss's account of the wide ranging circulation of this particular image as part of a series that was reproduced to meet the demands of a number of audiences.

In simultaneously functioning as a expensive album print and a low-cost stereograph, a bound-in photographic illustration in a limited edition report, and a woodcut frontispiece in a popular adventure book, Gardner's *Westward the Course of Empire Takes its Way* pictures showed just how far photography had come as a medium capable of offering Americans a visual explication of the western landscape.²²

Gardner's *Westward* image was positioned on the cusp of photographic influence and, as will be discussed, was an indication of how the medium was to soon overtake the more traditionally expressive and symbolic forms of visual material in the narratives of the west.

2.2.3 Territorial imagination – development of photography

Although the wet-plate collodion process which emerged in the 1850's was to replace the unique and more cumbersome metal plate of the daguerreotype, it was not until

²² Sandweiss, *Print the legend*, 164-5. These included a luxurious 6 x 8 inch album format produced for Gardner's patrons, a less expensive stereoscope produced for mass circulation, and in two bound book formats, one an official report by William J. Palmer, who in 1867-8 led a survey of potential southwestern routes for the Union Pacific railway, and as a woodcut on the title page of *New Tracks in North America* (1869) a book by English doctor and photographer, William A. Bell.

the 1860's and 70's that paper photography came to dominate amongst the choice of visual formats. By this time, according to Sandweiss, the wet-plate process marked a crucial difference, in that photographs could now be integrated with more orthodox printed material and produced in publications, bound in albums and, significantly, become inscribed with narration.²³ This ease of integration meant that the photographic image had a wider social currency, and could be disseminated in various forms, nationally in newspapers and journals, domestically as bound albums, and commercially as cards and souvenir prints. The captioning or descriptive 'legend' could be much more easily written or printed onto paper than inscribed or affixed onto the metallic surface of a daguerreotype. Although 'legend' refers to the caption of the image, Sandweiss invokes its more common, symbolically understood meaning, in both the title of her publication and as an example of the power of the written word, particularly when linked to imagery that affirms cultural beliefs and values.²⁴ So, paradoxically, although advancing technology in the form of photography was increasing the apparent veracity and representational authenticity of the western subject, the use of captioning and imagery that confirmed ideological and popular ideas of the west meant that the more expressive, dramatic visual forms were, by contrast, still being reproduced more than the models of naturalism offered by photography.

Photographic imagery was still being used as the basis of other more expressive visual formats, such as prints and engravings, which allowed for the addition of colour and atmospheric modifications. In her discussion of the introduction of wet-plate photography into the field of survey illustration, Sandweiss recounts the example of the wet-plate technology as being initially most successful in Canadian surveys of the late 1850's, where, unlike in the United States surveys, a previously established model of expeditionary art and photography had not been established. Unlike the American expeditions, where a precedent of other illustrative forms had previously been in place, the photographers on the first commissioned Canadian western exploration expedition in 1858 embraced the medium through an effective technical training which enabled their confidence and ambition in the mastery of the process

²³ Ibid., 176.

²⁴ Sandweiss, *Print the Legend*, 324. Sandweiss quotes a classic tale of western belief in the power of the image, from John Ford's film *The Man Who Shot Liberty Valance* (1962) "This is the West, sir. When the legend becomes a fact print the legend."

and execution of the images.²⁵ Subsequently, "photography became a truly integrated part of expeditionary work, essential to field documentation and to the later dissemination of the field research."²⁶

The successful publicising of the survey imagery owed much to the efforts of Henry Youle Hind, a geologist and naturalist at Trinity College, Toronto, who was in charge of the recording processes on the expedition on 1858 Canadian survey. Hind first purchased a camera then contracted a photographer to undertake the survey, Humphrey Lloyd Hime, in order to "furnish a series of Collodion Negatives for the full illustration of all objects susceptible of photographic delineation, from which any number of copies can be taken to illustrate a narrative of the Expedition and a report on its results."²⁷ However, Hind also realised the popular and commercial potential of the reproduction value of the photographic results of the expedition, and shortly after writing to the provincial secretary on April 10, 1858, with the above account, he also requested permission from the secretary to contact the *Illustrated London News* in order to secure an agreement to publish 'views' from the expedition, either hand drawn or as photographs, to which Hind would affix his descriptive captions.²⁸

Hind, in his entrepreneurial marketing and publicising of the photographs produced by the survey photographer, through transatlantic outlets such as the *Illustrated London News*, and the production of a portfolio of thirty mounted expedition prints which went on public sale in 1860,²⁹ showed an awareness of the social power of the photographic imagery generated by the institutional survey process, and of the malleability and value of the visual image in the promotion of a particular ideology to a range of audiences. Of the forty-five photographic prints supplied by Hime to Hind in order to illustrate the survey report, a number became the source material for

²⁵ Sandweiss, *Print the Legend*, 141. Specifically the Canadian Assiniboine and Saskatchewan Exploring Expedition of 1858 and the British Royal Engineers' 1858-62 Northwest Boundary survey.

²⁶ *Ibid.*

²⁷ Richard Huyda, *Camera in the Interior*, 5-8. Henry Youle Hind to provincial secretary, April 10, 1858, copy in Hime Research file, Photographic Collections, National Archives of Canada, quoted in Sandweiss, *Print the Legend*, 142.

²⁸ Hind to provincial secretary, April 23rd, 1858, Hime Research File, Photographic Collections, National Archives of Canada, *Ibid.*

²⁹ *Ibid.*, 144. "Photographs taken at Lord Selkirk's Settlement on the Red River of the North, to Illustrate a Narrative of the Canadian Exploring Expeditions in Rupert's Land," printed portfolio list (London: J. Hogarth, [1860]), Hime Collection, Photographic Collections National Archives of Canada.

modification through the engraving process and the production of “chromoxylographs” in the two-volume printed narrative of the expedition.³⁰ This provided a template that would, according to Sandweiss, “anticipate in form and content the many albums and portfolios of western pictures that would be marketed in the United States in the following decades.”³¹ The portfolio is one of the earliest collection of photographic views of the North American prairie, and presents an imperial statement in support of the settlement agenda in its imaging and captioning of the extinguished, native past and looking to the expansionist, immigrant future. From the titling of the “Native Races” and “Indian Tents and Graves” to the “Churches of Selkirk Settlement” and “Forts and Stores of the Honourable Bay Company”, the supplanting of the native culture by the incoming settlement of another is signified through the juxtaposition of image and text, and in the captioning of ‘half-breed’ visualises the demise and eradication of the indigenous cultures. (fig. 2.7)

³⁰ Ibid. The expedition narrative was also printed in London in 1860, of which two prints were engraved for the London Daily News in October 1858. A group of photographs were exhibited in the Fine Arts Section of the Provincial Exhibition in Kingston, Ontario, September 1859, so the images were being circulated in both the ‘old’ and ‘new’ worlds.

³¹ Ibid., 145.



2.7 Humphrey Lloyd Hime, 'Letitia: A Plain-Cree Half-Breed' (1858) Albumen silver print. Yale Collection of Western Americana, Beinecke Rare Book and Manuscript Library.

In summary, Sandweiss contends that no previous photograph series from earlier United States survey expeditions promoted the political cause and evidence of settlement as effectively as this North American series. And that consequently, "Not until after the Civil War would photographs of the western United States so effectively serve the cause of conquest and expansion."³² From this point on, the process of wet-plate photography with its ease of literal and metaphorical access, rapidly became a significant feature of the survey expeditionary armoury and part of the federal strategies of territorial appropriation, and consequently, of the ideological imaging of the American west.

2.2.4 Transformative images – the potency of photography

³² Ibid., 146.

Within a wider commercial and social framework, the American photographers who were working in studios and on survey commissions during the decades from the 1850's through to the 1870's were also establishing early photographic history with innovations in the form of panorama, stereoscope, and large-plate photography. These included photographer Alexander Gardner, who was involved with documenting the Civil War, and was employed by Mathew B. Brady, whose studio included Timothy O'Sullivan as an apprentice. At the end of the Civil War, Gardner produced a two-volume publication that included one hundred silver albumen prints, *Gardner's Photographic Sketch Book of the War (1865 - 66)*, produced by a number of photographers, including O'Sullivan.³³ William Bell and A. J. Russell were employed as photographers on government surveys and the railways. Photographers, agents and studios were all engaged with the making of images for federal reports, exhibition, publication and parlour viewing in a competitive and dynamic early photographic industry that was fuelling the demand for dramatic imagery and monumental views of the western territories. From the 1850's onwards there was a photographic and publishing industry that was dedicated to fulfilling a demand for prints of travel, architectural and landscape interest that were sold as both unique prints and as photographic albums, as described by Joel Snyder.

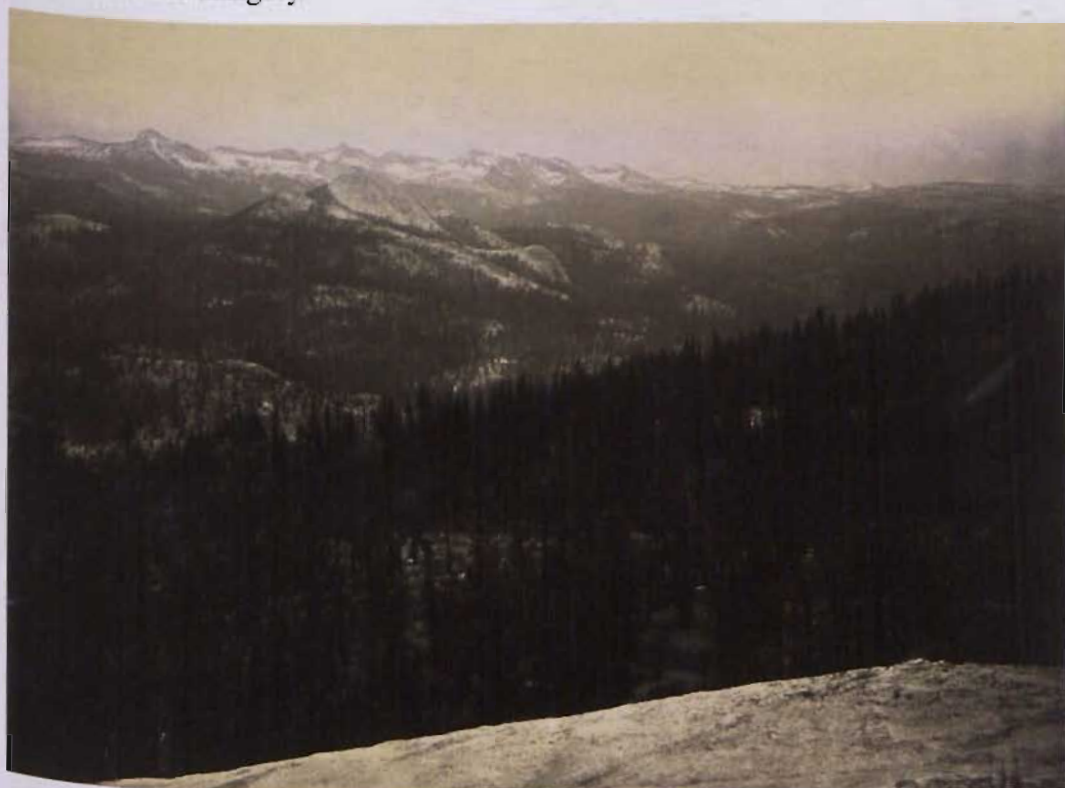
These photographic publishing houses first appeared in Europe in the 1850's and in the western United States by the early 1860's. In the United States, these houses extended their reach by selling each others' work and by selling to print and stationery shops, so that by early 1870's it was possible to visit, say, Denver and buy prints made in Yosemite Park by Carleton Watkins, landscapes made in Utah by Charles Savage, photographs of the land adjacent to the tracks of the Transcontinental Railroad by Andrew Joseph Russell, and so on.³⁴

Entrepreneurs in the field included commercial agents such as Charles Savage who managed a studio in Salt Lake City, and photographer William Henry Jackson who worked on U.S. Geological and Geographical Survey of the Territories in the Rocky

³³ "Photography and the Civil War, 1861 - 1865" *The Metropolitan Museum of Art*
http://www.metmuseum.org/toah/hd/phcw/hd_phcw.htm Accessed 5 March 2011.

³⁴ Joel Snyder, "Territorial Photography" in *Landscape and Power*, 179.

Mountain and Yellowstone regions (1869-1879).³⁵ Painters such as Albert Bierstadt accompanied expeditions to the Rockies as an independent artist, and subsequently began to produce stereoscopic images for middle-class parlour viewing, which in turn were promoted by advocates such as Oliver Wendall Holmes, through his 1859 essay series in *The Atlantic Monthly*. Contemporaries Carleton Watkins and Eadweard Muybridge were both producing photographs of the Yosemite Valley in California, and were outdoing each other's efforts in order to represent the landscape with ever-more dramatic imagery.



2.8 Carleton Watkins, *View from the Sentinel Dome, Yosemite* (1865 – 66). Albumen silver print from glass negative. 40.8 x 52.5cm. The Metropolitan Museum of Art, Purchase, Joseph Pulitzer Bequest, 1989.

³⁵ Toby Jurovics et al., *Framing the West: The Survey Photographs of Timothy H. O'Sullivan*, (Washington: Yale University Press, 2010), 10.



2.9 Eadweard J. Muybridge, *Valley of the Yosemite, from Rocky Ford* (1872). Albumen silver print from wet collodion negative. 43.1 x 54.8cm. The Cleveland Museum of Art Collection.

Following the international recognition of Watkins's large-plate images of Yosemite (fig. 2.10) in the 1860's,³⁶ in 1872 Muybridge travelled to similar locations with a mammoth-plate camera measuring 18 by 22 inches, the largest possible at the time. Muybridge produced a series of fifty-one mammoth plates of Yosemite (fig.2.11) for which he was awarded a medal at the 1873 International Exhibition in Vienna.³⁷ Factors such as the increased ease of social circulation of prints, photographers who were becoming more skilled with the processes of the medium, and the increased use of photographic documentation within the auspices of the surveys themselves, meant that photography began to achieve a particular social and cultural significance in its depiction of the American west. This significance began to be evident as the expeditions and their outputs began to take place again after the Civil War waged during the early years of the 1860's, as Sandweiss states:

This time there would be nothing tentative or disappointing about their photographs. The pictures made by photographers Carleton Watkins, William

³⁶ Jurovics et al., *Framing the West*, 10.

³⁷ *Eadweard Muybridge* exhibition, Tate Britain, 8 September 2010 -16 January 2011
http://www.tate.org.uk/britain/exhibitions/eadweardmuybridge_room2.shtml Accessed 13 April 2011.

Henry Jackson, Timothy O'Sullivan, John K Hillers, and William Bell would find their way into every corner of American culture, from the halls of Congress and the recesses of the Smithsonian Institution to the nation's centennial exhibition and the living rooms of California's new grandees...³⁸

And as a consequence, the images and narratives of the west were to become an indelible part of American culture for generations, establishing the foundations of the later cinematic 'legends' through which the mechanics of subjugation and territorialism were mythologised as a pioneering endeavour in search of 'new' landscapes. Sandweiss's observation that nineteenth century "...exploration narratives are not neutral acts of documentation"³⁹ is as valid for these later photographic images, despite their implied authority of the mimetic and the referential, as it is for the more traditionally expressive modes of visual imagery more commonly used in earlier expeditionary narratives. And although the major geological and cartographic surveys of the 1860's and 1870's still utilised a variety of visual information as source material, the utilisation of photography as the medium for other forms of illustration identified it as an increasingly useful form of evidential means.

Increasingly, photographic sources and photomechanical reproductions came to be associated with the literary rhetoric of science; drawings, paintings, and the more conventional reproduction media of engraving and lithography with the language of personal perception.⁴⁰

2.2.5 Overview

The discussion has concerned itself with three main points in relation to the progressive dominance of the photographic medium over the imaginative power of other visual media in this context. As we have seen, prior to the developed use of photography in the 1850's through the wet-plate process, traditional media had a history of representing the institutional ideologies of expansion and of fulfilling the popular demand for images of these landscapes. Through a discussion of the history

³⁸ Sandweiss, *Print the legend*, 154.

³⁹ *Ibid.*, 148.

⁴⁰ *Ibid.*, 299.

of opticality we have seen that the gestation of photography is constitutive of a particular 'way of seeing', and that the design of the camera itself is inherently subjective, in that its modifications over the centuries came about as a result of the desire to artificially enhance and develop the potential of human sight, and consequently impact upon what might be seen. So alongside the objectified aims of scientific exploration of sight and vision, the development of opticality and the inherent subjective bias of the camera have ensured that photographic images are as capable of creative expression as any other visual media. This characteristic is the first point that can be made about the rise and potency of the medium in its depiction of an institutional agenda through the imaging of the nineteenth century American west. Far from being an impoverished and less creative medium than more traditional visual practices such as painting or printing for example, the gestation of modern photography was derived from a similar expressive foundation of optical curiosity about the world and the impetus to reflect this through representational imagery. In this sense the emergence of photography was yet another iteration of the fascination with the visual as it was developing in social popularity through the empiricism and embodiment of the nineteenth century.

Secondly, the mimetic quality of photographic imagery is just one dimension of its functioning, but one that met the increasing demand for scientific veracity in geological and cartographic requirements. As the photographic processes and images began to supplant the orthodox visual formats, and where photographs were used as the basis for other forms of illustration, in the form of captioned images and as supporting visual evidence alongside the textual accounts, reports and other findings of the expeditionary process, the pictorial and symbolic uses to which photography might be put, were evident, particularly in major surveys.

Thirdly and finally, as the photographers themselves became more skilled and familiar with the processes and possibilities of the medium, the resulting images were a potent combination of the reflected ideologies – scientific, military, expansionist – together with a subjective level of expressiveness that both confirmed and shaped a popular and particular way of seeing the west during this period, and which provided a continuing legacy. As the camera obscura was instrumental in the invention and operations of perspective as a scientific schematic underpinning the creativity of

Renaissance painting during the sixteenth century, so the development of the camera and early photographic innovations by scientists and photographers in the nineteenth century, allowed for the creation of images that functioned both aesthetically and analytically in their framing of the landscape. This potent union of landscape description and ideological narrative is part of the wider story of photography as both an appropriating and a revelatory visual practice, and will be discussed further through the photography of Timothy H. O'Sullivan, and his work as a member of the survey teams of both Clarence King (1867-69) and Lieutenant Wheeler (1871-74).

2.2.6 *Staking the claim – establishing expeditionary survey*

The survey exploration of the American west in the nineteenth century was a means through which to further the interests of state, science and economics, and to support the colonising of native lands and peoples in favour of immigrant expansion. The potential benefits for the survey commissioners were great, ranging from the military scoping of 'new' territories and frontiers and the securing of homelands for incoming settlers, to harnessing the wealth of trade routes and fur trapping and the resources made accessible by the laying of the railroad. These beneficial outcomes of survey activity are noted by the curator of photography at the Smithsonian American Art Museum, Toby Jurovics in his introduction to *Framing the West: The Survey Photography of Timothy H. O'Sullivan*.⁴¹ Prior to the major surveys of the 1860's and 70's there was a history of smaller scale military, scientific and federal surveys. 'The United States and Mexico Boundary Survey' (1848-1855) explored the resources of a wide area and provided information essential to securing a boundary line beneficial for the United States. 'The United States Naval Astronomical Expedition to the Southern Hemisphere' (1849-1852) was conducted primarily to calculate a definitive Earth-Sun distance from the Southern and Northern Hemispheres, but also gathered scientific and anthropological artefacts from Buenos Aires. A third expedition, 'The United States Pacific Railroad Survey' (1853-1855) aimed to map the territory for a transcontinental railway, although Congressional interests in home constituencies influenced these routes of exploration. This survey also included studies of natural

⁴¹ Toby Jurovics et al., *Framing the West: The Survey Photographs of Timothy H. O'Sullivan*, (Washington: Yale University Press, 2010) The exhibition was shown in the Smithsonian American Art Museum Washington DC, in collaboration with the Library of Congress, Feb. 12 – May 09 2010.

history and ethnography from areas north and south of the west coast. Following the survey, the Pacific Railroad was laid and the results published as an extensive twelve volume work. The other two surveys also published volumes of their findings.⁴² So although the role of photography became more definitive through the later surveys, as will be discussed, the principles and practices of the surveys themselves were already firmly established and in social circulation through a framework of earlier expeditions and publications.

2.2.7 Major geological and geographical surveys 1860-1870's

The major expeditionary surveys that will be considered are the 'Geologic and Geographic Survey of the Fortieth Parallel', under the leadership of geologist Clarence King, which surveyed an area from the Sierra Nevada to Cheyenne in Wyoming, from 1867-70 and 1872, and the survey led by Lieutenant George M. Wheeler, the 'Geographical and Geological Surveys West of the One Hundredth Meridian', 1871 and 1873-74, which included California, Arizona, Colorado, New Mexico and Utah. Although the rationale for the King and Wheeler expeditions differed, the survey personnel teams of each were similarly composed of geologists, topographers, natural scientists and support teams. Timothy H. O'Sullivan was employed as the photographer for four seasons on the King survey, in 1867, 1868, 1869, and in 1872, and later for three seasons on the Wheeler survey during 1871, 1873 and 1874.⁴³ While the landscape of the American west was being mapped and analysed broadly through the practices of each survey, each also had a distinct purpose; the King expedition was geologically and scientifically driven, and the Wheeler survey was under the auspices of military cartography. In geographical terms, the expeditions preceding these major surveys meant that the teams were not going into completely hostile or inaccessible territory. According to Jurovics, after 1869 many of the survey members travelled by rail to their regions, and were within a few days' travel of a railway; "In short, King and his men were not setting off into an

⁴² Smithsonian National Museum of American History. Accessed 4 August 2010.

http://americanhistory.si.edu/collections/group_detail.cfm?key=1253&gkey=235&page=2

⁴³ Carol M. Johnson, "Through Magic Lenses: Timothy H. O'Sullivan's stereographs from the King and Wheeler Surveys," in *Framing the West: The Survey Photographs of Timothy H. O'Sullivan*, ed. Toby Jurovics et al., 161-173.

unknown wilderness.”⁴⁴ The images produced by O’Sullivan for each survey, particularly when completed with captioning and presented with ‘descriptive legends,’ powerfully conveyed the varying emphases that reflected the empirical and territorial aims of the respective survey leaders.

2.2.8 *Geologic and Geographic Survey of the Fortieth Parallel*

In his introduction to *Framing the West*, editor and writer Toby Jurovics discusses the aim of the leader of the ‘Geologic and Geographic Survey of the Fortieth Parallel’ survey, Clarence King, as being a geological affirmation of the theory of ‘catatrophism.’ This was the belief that a divine creationary impulse had formed this dramatic landscape through violent peaks of geologic activity interspersed by troughs of comparative calm. King’s objective in surveying the geological formations of the ‘Fortieth Parallel’ was to represent the cataclysmic proportions and power of elemental forces shaping and defining the landscape. This position sought to counter the geological theory of ‘uniformitarianism’ following the publication of Charles Darwin’s *On the Origin of Species* in 1859. This theory concurred with the principles promoted by Darwin that the pace of geologic change was more measured and uniform, taking place over many thousands of years, and where the passage of time was the instrumental factor rather than the creationist belief in “catatrophism.”⁴⁵

King’s position required gathering evidence in the form of data and images that represented this implicit geological upheaval and turmoil within the dramatic contours of the western landscape. The role of the photographer meant that O’Sullivan was required, as all team members were, to provide a sense of “a geological reconnaissance in an unknown and often unexplored region, where geology and topography had to go hand in hand...”⁴⁶ Although no directly written instruction to O’Sullivan as photographer on the King survey has survived, his valued role as a survey member, sometimes working collaboratively with other team members in the

⁴⁴ Jurovics et al., *Framing the West*, 16

⁴⁵ Jurovics et al., *Framing the West*, 17-18. Jurovics describes these opposing geologic positions of ‘catatrophism’ and ‘uniformitarianism’ as the foundations for King’s requirements for O’Sullivan’s photographs to reflect the drama and upheaval of ‘catatrophism’ in geologic activity.

⁴⁶ *Ibid.*, 18. Jurovics refers to the introduction to *Descriptive Geology*, second volume of the King survey reports, geologists Samuel Franklin Emmons and Arnold Hague are explaining the survey work was of the “leading geological facts” rather than claiming to be a systematic survey of this vast territory.

selection of the best vantage points, is evidenced in other sources. There are journal entries from other members that indicate constructive dialogue with the scientific officers, and stating that O'Sullivan led side parties and was trusted to work independently when required, "It also suggests that very early on in the fieldwork there was a mutual understanding of the needs of the survey and a confidence in O'Sullivan's ability to meet them."⁴⁷ The implications of this are that O'Sullivan perceived his photographic role as entirely integral to the aims and objectives of the expeditionary activities, and that he gathered visual data under the same auspices as the other members of the survey team gathered geological and scientific samples. Working as an 'operator', the term by which photographers of the period were often described,⁴⁸ it is evident that O'Sullivan approached his subjects with both diligence and inventiveness, fulfilling his brief of visual appropriation whilst simultaneously creating images of enduring aesthetic and iconic value. This creative tension, as we will see, is at the heart of the contradiction between what is being revealed by a particular way of seeing the landscape, and what is hidden from view.

2.2.9 *Imaging the territory – photography and the geological*

The geographical area encompassed by the King survey was vast,⁴⁹ and the purpose of the photography in the fieldwork of the survey was not to attempt a comprehensive documentation of this vastness, but rather to reflect the ethos and visual evidence of geological "catatrophism." O'Sullivan was tasked with visualising a sense of such tumult and upheaval, and of charting a landscape characterised by change. Images such as *Trachyte Columns, Trinity Mountains, Nevada* (fig.2.10) and *Tufa Domes, Pyramid Lake, Nevada* (fig.2.11) fill up the frame with the isolated strangeness of

⁴⁷ *Ibid.*, 19. This refers to an entry in the geologist Emmon's journal for April 6, 1868, describing an excursion to Mono Lake, where it indicates that in the selection of a suitable viewpoint and in other tasks, it was a collaborative effort between O'Sullivan and fellow team members.

⁴⁸ Sandweiss, *Print the Legend*, 150. In the author's discussion of issues of authorship and competency in use of the camera, she refers to the status of photographers on expeditionary work, who, despite special training, were not regarded as authors of their work, "They were engineers, not artists. No tradition specified that the creator of a photographic image deserved any more authorial credit than the creator of an astronomical table."

⁴⁹ Clifford M. Nelson, "Towards a Reliable Geologic Map of the United States, 1803-1893," in *Surveying the Record: North American Scientific Exploration to 1920*, ed. Edward C. Carter (Philadelphia: American Philosophical Society, 1999), 65-68: "The King survey covered an area of almost eighty-seven thousand miles and employed an advanced system of triangulation mapping that used astronomically determined points and ground-measured baselines that could stretch over fifty miles in length." Quoted in Jurovics et al., *Framing the West*, 18.

their compressed and bulbous rock formations. Appearing almost moulded in the richness of their textures and forms, they each dominate the pictorial space and allow for no other geographical distractions or reference points. This was a compositional decision on the part of O'Sullivan, whose method of blanking out the sky and eliminating extraneous detail enhanced the drama and otherworldly quality of the image. Although the motivation of creating the image would have been dictated by the demands of the survey for depictions that conveyed a sense of permanence and clarity,⁵⁰ the effect was images that transcended the original, delimited demands of topographical survey. In her discussion of *Tufa Domes* in a comparison between the photograph produced by O'Sullivan in 1868 (fig.2.11), and a later lithograph of the same image reproduced within Clarence King's *Systematic Geology* in 1878,⁵¹ Rosalind Krauss describes just how precisely this sense of 'otherworldliness' is created within the original photograph.

A fantastical descriptive clarity has been bestowed on the bodies of these rocks a hallucinatory wealth of detail, so that each crevice, each granular trace of the original volcanic heat finds its record. Despite all this, the rocks seem unreal and the space dreamlike, the tufa domes appear as if suspended in luminous ether, unbounded and directionless...The mysterious beauty of the image is in this opulent flattening of the space.⁵²

⁵⁰ Robin E. Kelsey, "Viewing the Archive: Timothy O'Sullivan's photographs for the Wheeler Survey, 1871-74," *The Art Bulletin*, Vol. 85, No.4 (December 2003), 708. Accessed 8 April 2011.

<http://www.jstor.org/stable/3177366> Kelsey refers to O'Sullivan's methods of eliminating "visual noise" and extraneous detail as a means of mirroring the practices of survey gathering in general, through the distillation of detail and as a means of overcoming the "...production of noisy clusters of qualitative, subjective, illegible and inconvertible stuff."

⁵¹ Clarence King, *Systematic Geology*, 1878, is Vol. 1 of *Professional Papers of the Engineering Department U.S. Army*, 7 vols. & atlas, Washington, DC, U.S. Government Printing Office, 1877-78, cited in Krauss, note 1., 318.

⁵² Krauss, "Photography's Discursive Spaces: Landscape/ View," 311.



2.10 Timothy H. Sullivan, *Trachyte Columns, Trinity Mountains, Nevada* (1867).
Albumen print. 19.7 x 26.7cm. George Eastman House, Rochester, New York, USA.



2.11 Timothy H. O'Sullivan, *Tufa Domes, Pyramid Lake, Nevada* (1867). Albumen print on paper mounted on paperboard. 20.0 x 27.0cm. Smithsonian American Art Museum, Washington, DC, USA.

Other strategies employed by O'Sullivan involved carefully moving his camera to incline a subject more dramatically towards the horizon, filling the foreground with jagged and crumbling forms that emphasise the instability of the ground as the photographer, "...frequently circumnavigated geologic features in order to photograph them from a number of angles and directions."⁵³ These working methods created dynamic images that changed from frame to frame and were resistant to providing a singular and definitive version or view. In so doing he was reflecting the potential for movement and change inherent within the landscape, and simultaneously reflecting the overall ethos and practices of the survey culture.

His photographs captured only one moment in the ongoing transformation of the inter-mountain West. Making multiple views also imitated the process of

⁵³ Rick Dingus, *The Photographic Artifacts of Timothy O'Sullivan*, (Albuquerque: The University of New Mexico Press, 1982) Jurovics cites Dingus's work as the first to identify the "photographer's strategy of carefully shifting his camera to heighten the dramatic intensity of an image." Jurovics et al., *Framing the West*, 19-20.

survey itself. Circling and documenting a site with his camera, O'Sullivan mimicked the activities of the geologists and other scientists as they worked in the field, placing the viewer alongside the survey team.⁵⁴

2.2.10 *Landscape versus View – aesthetics of acquisition*

When discussing the work and legacy of Timothy O'Sullivan, there is a distinction to be made between the terms 'view' and 'landscape', as each has been applied to his work in order to emphasise difference, rather than as interchangeable descriptions of topographical formations. The terms also have currency not least because of the art historian Rosalind Krauss's seminal essay "Photography's Discursive Spaces: Landscape/View" which addresses the attempts of modernism to incorporate the work of nineteenth century photographers, and which has set a certain benchmark for debates around the positioning of the work of Timothy O'Sullivan.⁵⁵

There are a number of points that can be made about the use of these terms to imply difference in the photographer's work, some of which can be traced back to his own use of the term 'view' and 'viewing' to describe his working methods in the survey field. Krauss notes a feature of O'Sullivan's working methods, where he composed the image around such a focal point, and consequently "...whose compositional sense derives from the special sensations of the *view*."⁵⁶ In his use of 'views' to denote a photographic image, and 'viewing' as the work/activity which secures the image, O'Sullivan is reflecting the influence of the nineteenth century habits of stereoscopic viewing of the time, and the term as common parlance to describe the nature of the engagement that was taking place between photography, landscape and viewer. This engagement involved the subject matter (dramatic landscape, made tangible by the illusion of verisimilitude) and the embodied apparatus of the stereoscopic viewer (a socially circulated but personal, intensive visual experience) which combined to create a partial, fragmented and serial 'view' of landscape. Krauss also discusses 'viewing', in the nineteenth century context, and its association with the stereoscopic

⁵⁴ Ibid., 20.

⁵⁵ Jurovics, *Framing the West*, 37, comments on Krauss's essay as the "most persistent of these ideas", discussing the concept of O'Sullivan as a protomodernist. Kelsey, "Viewing the Archive," 702, (Note 2), observes that the Krauss essay is the most challenging of an unconditional acceptance of topographical imagery into the modernist academy.

⁵⁶ Krauss, "Photography's Discursive Spaces," 314.

experience, referred to in chapter one, which she describes as a dramatic intensification of “perspectival space raised to a higher power.”⁵⁷ This dramatisation of the ‘view’ was often found in the construction of the stereo cards themselves, where an image focussed attention on a vertical form in the fore or middle ground, centring the space and “...forming a representation within the visual field of the eyes’ convergence at a vanishing point.”⁵⁸

The second point that can be made about this partial image of the ‘view’ is that, although O’Sullivan’s work has been incorporated into museum and exhibition practice in the twentieth century,⁵⁹ it is clear that the ‘views’ he produced in the nineteenth were intended to function as a visual form of exploration of the landscape that reflected the interests of the expeditionary leaders. That this material was primarily created for the audience of the leaders and commissioners of the surveys is observed by Joel Snyder.

Both the King and Wheeler surveys used photographs as the basis for lithographs that were bound into their interim and final reports. Each of the surveys also produced bound volumes of original photographic prints as well as sets of stereoscopic views that were sent to selected government agencies, universities, and foreign governments. Very few of O’Sullivan’s photographs reached an audience of nonprofessionals, except for those that went to Congress and the army.⁶⁰

The distinction between ‘view’ and ‘landscape’ is at the crux of the debates that are ranged around a contemporary re-evaluation of O’Sullivan’s work as ‘aesthetic’ as differentiated from ‘scientific’. And as Krauss has indicated, the ‘discursive space’ of aesthetics and the landscape genre are distinct from the ‘discursive space’ of scientific survey. Krauss also asks whether the ‘aestheticism’ of the photographer’s output for

⁵⁷ Ibid.

⁵⁸ Ibid.

⁵⁹ Jurovics et al., *Framing the West*, 36. Timothy O’Sullivan’s photographs were included in an exhibition to commemorate the first centenary of photography in 1937, *Photography 1839 – 1937*, March 17 – April 18, 1937, curated by Beaumont Newhall at the Museum of Modern Art in New York, and were originally brought to his attention by Ansel Adams through an album of the Wheeler survey.

⁶⁰ Snyder, “Territorial Photography” in *Landscape and Power*, 192.

the expeditionary surveys of the 1860's and 70's and the appropriating agenda that they served, can be legitimately separated for the purposes of art history.

Is the interpretation of O'Sullivan's work as a representation of aesthetic values – flatness, graphic design, ambiguity, and, behind these, certain intentions towards aesthetic significations: sublimity, transcendence – not a retrospective construction designed to secure it as art?⁶¹

Krauss asks this question about the 'retrospective construction' of O'Sullivan's images as part of the discourse of 'exhibitionality' by reiterating the disjunctions between the terms 'view' and 'landscape'. Her analysis of 'view' culminates with an observation of its positioning as an integral part of land survey, and a means of visualising and governing spatiality, as distinct from the term 'landscape,' which is set within an aesthetic discourse.

The one composes an image of geographic order; the other represents the space of an autonomous Art and its idealised, specialised History, which is constituted by aesthetic discourse.⁶²

As to the inclusion of topographical photography within the genre of landscape, Sandweiss makes the critical observation that; "Survey photographs however, were never meant to stand as independent works of art. The vast majority were issued with printed texts and marketed in series that enabled them to narrate stories about the western landscape and America's western future."⁶³

Whereas the debates on whether O'Sullivan's work can be said to retrospectively illustrate the characteristics of modernist aesthetics – the 'flatness, graphic design and ambiguity' – as indicated by Krauss, may continue, the images themselves are firmly

⁶¹ Krauss, "Photography's Discursive Spaces," 313.

⁶² Ibid., 315

⁶³ Sandweiss, *Print the Legend*, 184. Sandweiss discusses how the images were shown to contemporary audiences of the time. For example, in the 1876 Centennial Exhibition in Philadelphia, photographic "landscape views" from the Wheeler survey were hung in the Engineering section, together with related watercolour drawings. Also presented were the bound survey albums composed of the same images, which were accompanied by extensive captioning which detailed their significance for the purposes of the Wheeler survey.

positioned within art history, and as an influential legacy for contemporary art practices. This has been shown most recently by a major exhibition of his survey photography in 2010 at the Smithsonian Institute in Washington DC, curated by Toby Jurovics. *Framing the West: The Survey Photographs of Timothy H. O'Sullivan* demonstrates how fully survey photography has been incorporated into the discourse of museum 'exhibitionality,' a route which began with an earlier exhibition in which O'Sullivan's work, and other examples of topographical survey, were shown in *Before Photography: Painting and the invention of Photography* (1981), at the Museum of Modern Art, New York. Curated by Peter Galassi, whose aim was to 'legitimise' the inclusion of photography as part of the discourse of modernist aesthetics, and who famously said, "The object here is to show that photography was not a bastard left by science on the doorstep of art, but a legitimate child of the Western pictorial tradition."⁶⁴ However, although it can be said that in topographical photography of the nineteenth century, the original narrative and ideological function of the imagery has been sublimated to the matrix of aesthetic and dramatising values of the images by the twentieth, distanced from the context of state and military commissioning, it can also be noted that in the imperial appropriation of landscape, as was the case with the 'Manifest Destiny' agenda of the west, that these positions are not necessarily independent of each other. As in the 'traditional' landscape genre established in the seventeenth century Dutch school, the aesthetics of naturalism and the picturesque are not exclusive of other, politicised and commercial interests, although these may be visually encoded and masked by more idealised subjects. In her discussion of this convergence of economic and geographic interests with the marked interest in localised landscape paintings, Ann Jensen Adams notes the pictorial invisibility of this quality of mutual interest.

Thus, while the visual preoccupation with local landscape formations coincides with the first large-scale creation of land in the same region, the "naturalistic" imagery at the same time ignores the commercial enterprise that

⁶⁴ Peter Galassi, *Before Photography*, New York, The Museum of Modern Art, 1981, 12, quoted in Krauss, "Photography's Discursive Spaces," 313.

seems to have catalysed it. In the cradle of capitalistic creation of real estate, the subject is non-commercial and pseudohistorical.⁶⁵

In the nineteenth century representations of landscape in the American west, where the subjects reflected empirical and expansionist ideas, it can be seen that this seventeenth century balance was reversed, and the original appropriating impetus behind the photographs was later overtaken by the twentieth century claims of modernity and aestheticism. In the twenty-first century the debates become less didactic and polarised, and the issues of contestation and tension can be more usefully addressed.

2.2.11 *Geographical Surveys West of the One Hundredth Meridian*

The work of the survey led by Lieutenant Wheeler, 1871 to 1874, was commissioned under the auspices of the United States War Department, in order to map and topographically survey an area of over 360,000 miles of the American south-west. The aim was the production of ninety-five maps of the territory below the Fortieth Parallel and West of the One Hundredth Meridian, to assist troop movements through the Native American lands of Nevada and Arizona, and facilitate further settlement of the Southwest.⁶⁶ Timothy O'Sullivan was recruited by Wheeler to join the expedition for three seasons in total, during 1871, 1873 and 1874, resulting in the production of a body of work that can be seen as visually differentiated from his photographs for the King survey. The military and colonising imperatives were clear from the outset in the instructions from General Humphreys, as the administrator of the Wheeler survey.

The main object of this exploration will be to obtain correct topographical knowledge of the country traversed by your parties, and to prepare accurate maps of that section. In making this the main object, it is at the same time intended that you ascertain as far as practicable everything relating to the physical features of the country, the numbers, habits, and dispositions of the Indians who live in this section, the selection of such sites as may be of use for

⁶⁵ Adams, "Competing Communities in the "Great Bog of Europe" Identity and Seventeenth-Century Dutch Landscape Painting," 51.

⁶⁶ Jurovics et al., *Framing the West*, 28.

future military operations or occupation...the influence of climate, the geological formations, character and kinds of vegetation, its probable value for agricultural and grazing purposes, relative proportions of woodland, water, and other qualities, which affect its value for the settler, should be carefully observed.⁶⁷

The images subsequently created by O'Sullivan, therefore, although still ostensibly of the western landscape, were positioned within an ideological imperative that was distinct from the geological emphasis of the King survey. Although still descriptive and expressive of the geographical drama of the landscape, there are for instance, many more images of individual Native Americans, family groups and habitats, ancestral grounds and evidence of ancient settlements. There are also numerous photographs documenting the activities of the survey team itself, the Native Americans hired as guides, and the expeditionary progress through the landscape. Previously O'Sullivan had integrated people into the survey landscape composition primarily for topographical contrast and a sense of visually dramatic scale, often a lone figure who was usually another survey member.

In the introductory remarks of his essay discussing the role of the photographer of the Wheeler survey, "Viewing the Archive: Timothy O'Sullivan's Photographs for the Wheeler Survey, 1871-74" art historian Robin E. Kelsey defines his interest in approaching the work from a position that occupies the discursive spaces of both the aesthetic and the analytical.

If the modernists have suppressed the governing circumstances of O'Sullivan's practice, the contextualists have suppressed his puzzling pictorial choices. Weaving together the emphases of both camps may yield a more compelling understanding not only of how O'Sullivan approached his work but also of how his work performed its instrumental and ideological functions.⁶⁸

⁶⁷ Humphreys to Wheeler, March 23, 1871. As reproduced in A.A. Humphreys, *Preliminary Report concerning Explorations and Surveys Principally in Nevada and Arizona* (Washington, D.C: U.S. Government Printing Office, 1872), 11-12, in Jurovics, *Framing the West*, 28.

⁶⁸ Kelsey, "Viewing the Archive," 703.

Kelsey's argument that O'Sullivan's practices were derived from his integration with the survey culture, is reinforced by his impression that the role of the photographer had an equivalence with the roles of peers within the team. Kelsey suggests that the distinctiveness of the photographic images produced during this period was based on his close adherence to the "values and strategies drawn from the survey visual culture"⁶⁹ and that his methodological approach closely mirrored the practices of the geologists and topographers with whom he worked. Kelsey reflects that in the work of O'Sullivan, and the debates around whether topographical survey photography is part of a modernist contribution to the aesthetic discourse, that this positioning may be more usefully considered as complementary rather than oppositional. For example, in his capacity as survey photographer it seems reasonable to assume that his 'views' were created from the outset in order to contribute to the overall ethos and aims of the survey expedition, utilising his photographic experience and equipment to achieve the best possible image within the context of the survey.

O'Sullivan's experience as a supervisor in the field would have not only acquainted him with the survey's coordinated efforts and overall aims but also invited him to consider his practice in relation to other technical or scientific modes of apprehending the West. All specialists on the expeditions were engaged in collecting information, impressions, or specimens from traversed regions, and photography was, from this point of view, simply one of several modes of acquisition.⁷⁰

O'Sullivan was also in a position to create images in series that were not required to present a totalising landscape narrative, but were suggestive of a more fractured, experimental and sequential 'view' both in terms of photographic experimentation and of the geographical features that he experienced within the landscape. As a commissioned survey photographer O'Sullivan was in a salaried, non-competitive position which may have, on one level, enabled his confidence in creating aesthetically tangential images, rather than being inclined towards the more scenic and singular photographs in the style of Jackson or Watkins. On another level, this

⁶⁹ Kelsey, "Viewing the Archive," 702. Kelsey notes that O'Sullivan, alongside his specific photographic remit within the team, was also a valued and trusted supervisor appointed by Wheeler.

⁷⁰ *Ibid.*, 705.

approach ensured that the terms of his contract were fulfilled by meeting the aim of acquisition through photographic means. Kelsey suggests that there were professional imperatives for his practice, such as “the need to make survey photography a more effective survey instrument and the need to make photography a more effective means of promoting survey work,”⁷¹ and that these were marked as features of his work.

2.2.12 *Imaging the territory – photography and the cartographic*

Lieutenant Wheeler was entering the arena of survey relatively late, following the earlier activities of his peers Hayden, Powell and King,⁷² all of whom were involved to some degree with the cataloguing and acquisition of scientific and ethnographic samples and artefacts. Additionally, these leaders were experts in their scientific fields and, in the competitive climate of the western survey environment, Wheeler had to differentiate the nature and quality of his work in order to access governmental funding and to be in a position to publish and disseminate the results. Kelsey writes that there was one distinct area in which Lieutenant Wheeler was in a superior position, as follows:

While he could claim to compete in the quality and scope of his cartographic and geodetic work, the truly distinguishing feature of his survey was its military tenor. Although King also led expeditions for the Department of War, Wheeler was a military officer, and he alone among the leaders of the principal postwar surveys tended to keep military concerns at the forefront of his work. If the promotional hypothesis is robust, then we would expect that O’Sullivan sought to make photographs laying claim to the special value of this emphasis.⁷³

This emphasis can be traced through the example of one of O’Sullivan’s best known images, *Ancient Ruins in the Canyon de Chelly, Arizona* (fig.2.12). The image configures a number of elements to present both the success of the expansionist

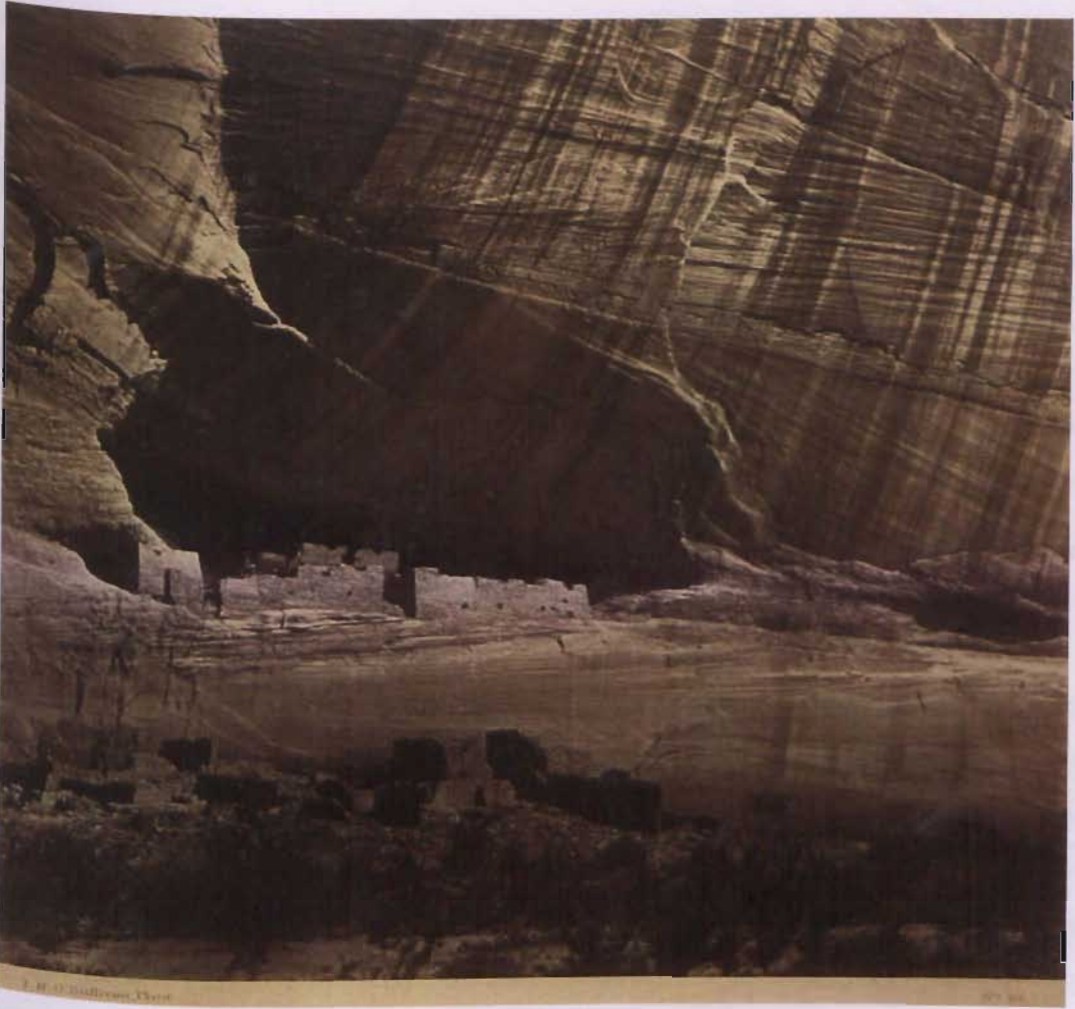
⁷¹ *Idib.*, 707.

⁷² Sandweiss, *Print the Legend*, 187. According to Sandweiss, Wheeler was a rival of the other chief civilian surveys leaders of the time, and was keen to assert his specialism and military difference in terms of gathering information that would be of strategic value to future settlement and expansionist policies, and encourage immigration.

⁷³ Kelsey, “Viewing the Archive,” 715.

project and the instrumentality of the military arm in its achievement. As Kelsey notes, the historical context underpinning the image was the conflict which took place between Navajo Indians and troops under the command of General Carleton and Kit Carson in 1863-64, a decade before O'Sullivan's photograph of the site. The view of the Canyon de Chelly would have been familiar to the authorities from whom Wheeler required continued support as the site where the resisting Navajos were driven into the canyon, threatened with starvation and the razing of their peach orchards. The violence shown cowed the other Navajo resisters into submission and brought about their effective surrender.⁷⁴ The photograph, Kelsey observes, weaves together two significant narratives of the west and speculates that this might be the reason for its arresting, haunting quality. The first stakes a claim for the contemporary and scientific acquisition of the region through the mapping of its geology and territory. The dwellings for which the image is titled are present but overshadowed by the sheer face of the rock formation filling the space of the photograph, itself almost a schematic diagram for geologic activity and charting of the area. The second makes explicit the military investment in a previous and expansionist agenda of occupation, and the dwellings are now 'ancient' uninhabited ruins, remnants of a redundant past. For Wheeler's purposes, the photograph functions as a pictorial image and reminder of fairly recent military conflict, and consequently of the need to maintain and develop that presence in the west. The image reinforces the specificity of the Wheeler survey and its dual purpose of military cartography and scientific advancement, powerfully projected through this overlapping of topics and temporalities as presented.

⁷⁴ Ibid., 715. Kelsey cites L. R. Bailey, *The Long Walk: A History of the Navajo Wars 1846-1868* (Los Angeles: Westernlore Press, 1964), for a history of this conflict.



2.12 Timothy O'Sullivan, *Canyon de Chelly, Arizona* (1873). Library of Congress Prints and Photographs Division, Washington, DC, USA.

2.2.13 *Territorial aesthetics – concluding observations*

In conclusion, the discussion by Kelsey of O'Sullivan's methodology and position within the survey team, suggests that perhaps the most constructive way to consider the ideological and instrumental functions of his work could be through a complementary rather than an oppositional approach. This approach does not change either the aestheticism inherent in his images, nor the instrumentality of their original intended use, but instead acknowledges the tensions that may have contributed to their visual strength and to the emergent debates around their cultural value. And although Krauss acknowledges the positioning of the O'Sullivan's oeuvre firmly within the space of aesthetic discourse, she cautions against retrospectively attaching motifs and emblems of modernism to the work. The historian Sandweiss, in her treatment of the

'interchangeability' of photography with other visual sources, and the ideological shifts in meaning as a result of captioning and re-captioning according to the range of audiences and publics that the images variously addressed, adopts a position that goes further than Krauss, in stating that the images of survey photography were not intended to be apprehended as independent works of art. Sandweiss observes that, "Meaning in nineteenth-century western landscape photographs is a slippery concept,"⁷⁵ for reasons which include a lack of written evidence, temporal distance, and issues of authorship and attribution. These reasons reflected the 'interchangeability' with other photographers and production methods that was the cultural norm of the time, but which makes notions of "artistic intent"⁷⁶ particularly problematic in contemporary analyses.

Each of these arguments have a bearing on any treatment of nineteenth century survey photography, not in the sense of a translation of 'original' meaning, but in a consideration of their influence and legacy for contemporary representations of contested landscape within a critical photographic discourse. As observed by Jurovics in his argument that counters that of Sandweiss in her caution against the attribution of retrospective meaning to nineteenth century western landscape photography; "The meaning of images can and does change over time, but this should not necessarily be seen as problematic. O'Sullivan's photographs have survived and negotiated varying interpretations while retaining their currency."⁷⁷ The arguments of Sandweiss, Krauss and Kelsey do not provide a neat summation but instead highlight overlapping and contradictory theories concerning the use of photography as an ideological and aesthetic activity, and the framing of landscape through visual means. There are a number of points that can be made concerning the particular use of this dynamic and newly emerging optical technology of photography and its relationship with landscape.

Firstly, that nineteenth century survey photography, as discussed through the work of Timothy O'Sullivan, was capable of operating within an explicitly institutional context, and of the production of images that instrumentally and ideologically

⁷⁵ Sandweiss, *Print the Legend*, 185.

⁷⁶ *Ibid.*

⁷⁷ Jurovics, *Framing the West*, 39.

supported western expansionism and the requisition of native lands. Secondly, that the aestheticism and 'visual strangeness' of the images, referred to by both Krauss and Kelsey has resulted in their being placed firmly within the discourse of aesthetics and the 'exhibitionality' of the modern art museum. The pictorial conversion of the 'landscape' into 'view' only serves to support the contention that the landscape genre itself, whether pre-photographic or as part of the colonising imperialism of the nineteenth century, is as capable of sustaining an appropriating bias as it is of an aesthetic one. Finally, that the 'scientific' use of photography as a means of landscape survey and representation, relatively early in the development of the medium, was to prove remarkably consistent in terms of later institutional deployment of lens based media in the territorialisation of landscape. This will be explored through the use of photography as a challenge to this positioning, and a harnessing by artists of those qualities of photographic visibility and invisibility, as first seen in the images of Talbot and Daguerre, and in the "multiplicity and malleability"⁷⁸ and latent qualities of the medium, as referred to by historian Kriebel. Preceding that, however, will be a discussion on the influence of the cultural form, particularly the visual, on the study of 'landscape' within the field of geography.

2.3 Cultural landscape.

2.3.1 Introduction

The research interest in formations of landscape is primarily concerned with the cultural rather than the geographic. However, what is relevant is an exploration of the extent to which the academic study of geography has been influenced by representations of landscape, particularly the genre of landscape painting. This chapter begins, therefore, by suggesting that the position occupied by landscape is as a form of cultural medium itself, which both influences, and is influenced by, cultural representations of landscape. This theme is developed through a discussion of the cultural impacts that have influenced geography as a discipline, and framed an

⁷⁸ Sabine T. Kriebel, 'Theories of Photography: A Short History' in *Photography Theory*, ed. James Elkins (U.S.: Routledge and University College Cork, 2007), 5.

approach to understandings of landscape. So, instead of a definition of landscape per se, which would be an oversimplification of a complex subject, I will begin with a vivid description of how landscape may be represented, here in literary form.

I lingered round them, under that benign sky; watched the moths fluttering among the heath and hare-bells; listened to the soft wind breathing through the grass; and wondered how anyone could ever imagine unquiet slumbers, for the sleepers in that quiet earth.⁷⁹

This is the last line of *Wuthering Heights*, Emily Brontë's passionate nineteenth century novel set in the English landscape of the Yorkshire Moors. This final sentence alludes to the author's abiding themes of love, death and landscape. As her narrative of human life unfolds across generations, the landscape within which it is set is not depicted as a backdrop but as an integral and vital pulse of the textual body. In the novel the landscape is evoked through vivid and tumultuous descriptions, interwoven as a central character alongside the human proponents. The relationships as revealed are not just those between people, but between people and the landscape they inhabit, expressed through the cultural medium of the novel form. The cultural scholar and visual theorist W.J.T Mitchell expresses a related, albeit not so poetically inclined, description of this relationship where he states the following:

Landscape may be represented by painting, drawing or engraving; by photography, film, and theatrical scenery; by writing, speech, and presumably even music and other "sound images." Before all these secondary representations, however, landscape is itself a physical and multisensory medium (earth, stone, vegetation, water, sky, sound and silence, light and darkness, etc.) in which cultural meanings and values are encoded, whether they are *put* there by the physical transformation of a place in landscape gardening and architecture, or *found* in a place formed, as we say, "by nature."⁸⁰

⁷⁹ Emily Brontë, *Wuthering Heights*, first published 1847 (London: Penguin, 1984), 367.

⁸⁰ W.J.T. Mitchell, "Imperial Landscape," in *Landscape and Power*, ed. W.J.T. Mitchell (Chicago: University of Chicago Press, 2002), 15.

Mitchell continues by stating that landscape is already a construct at the point at which it is understood and experienced as 'landscape,' an artifice which takes place even before the experience is translated as the subject of pictorial or cultural representation.⁸¹ This chapter will explore the construct of 'landscape' as a cultural medium, capable of being invested with a range of meanings and values. This influence, as we have seen in the discussion on landscape painting, extends in both directions; where ideologically motivated 'ways of seeing' impact upon the social and territorial relations of a geographical landscape; and a geographical landscape frames the relationship between social perception and strategic use of the land, each contributing to the contract of influence and exchange. The work of geographer Denis Cosgrove (1948 – 2008) is strongly identified with the argument of 'the 'visual bias' in geography.'⁸² This influence of the visual, and of the landscape genre itself, allied to the legacy of the rules of linear perspective, is acknowledged as a specific influence in the academic study of cultural landscape within the geographical discipline. In the transition from the nineteenth to the first quarter of the twentieth century the study of the impacts of culture on geography began to emerge as a field of academic study in its own right, and the discussion will identify some of these key contributions to the formations of cultural geography. Visuality is only one of the dominant themes of cultural geography study, and other key themes resist and interrogate this visual bias and propose more experiential and alternative research pathways.

These include the 'Humanistic Geography' and anti-ocular propositions first mooted by J.B. Jackson (1909–1996), based on the theorising of lived experiences and 'insider' knowledge. Jackson's approach was to develop his observations which explored the vernacular source of the everyday, developing his interest in the materiality of small town post-war America through an independent position as a writer, commentator and editor of the journal *Landscape*. Jackson founded the journal in 1951, as a geographical publication that "provided a unique forum for authors writing about landscape history, planning and ecology, issues of religion, myth and

⁸¹ Ibid. Mitchell makes this point through reference to Kenneth Clark's *Landscape into Art* (1949), and challenges Clarke's earlier analysis of an untroubled, unproblematic 'landscape' genre of landscape art, as effectively redundant.

⁸² Denis Cosgrove, *Social Formation and Symbolic Landscape* (University of Wisconsin Press: Wisconsin, 1998), 28.

symbol, and, above all, the particularity and value of everyday, ordinary places.”⁸³ Although unorthodox in the academic interpretation of the geographical discipline, this criticism has not detracted from the value of his closely observed mapping of the development of American cultural life and the interaction between people and an often hostile and challenging landscape.⁸⁴ The themes of feminist geography are exemplified by the work of geographer Gillian Rose (1962), and her identification of the gender bias within the discipline itself, and of the ‘patriarchal gaze’ of geography as it extends an appropriating eye over the study and multiplicity of landscapes.⁸⁵ These readings of the geographical discipline from a feminist perspective and the constructions of landscape studies as gendered, implicitly opens up the research field to other, differentiated positions and claims, such as the analysis of cultural landscape impacted by militarism, as discussed in the work of geographer Rachel Woodward.⁸⁶

The theme of geographies affected by militarism is explored by Woodward through a series of topics - geographies, landscapes, economics and fields of representation - with a particular interest in the relationship between military geographies, and their discourses and representations. Despite the global ubiquity of militarised landscapes, and the volume of analysis available on the evolution and impacts of the act of war and conflict situations, the non-combat military landscape as a research theme is relatively undertheorised.⁸⁷ Woodward describes the impacts of militarism as forming a pyramid of cumulative effects, the apex of which is the act of warfare itself, whilst the base is formed by the preparedness for conflict. Each contributes to a series of cultural and other effects, the relative invisibility of the base preparations no less a constituent element than the visibility and destructiveness of the act of conflict itself; “The little things are, collectively, part of the base of the pyramid, upon which the

⁸³ John Wylie, *Landscape*, (Oxon: Routledge, 2007), 42.

⁸⁴ The Association of American Geographers (AAG) honour J.B Jackson’s work by awarding an annual Jackson Prize, to a geographer who has written about the United States in a form that is academic and serious but which has appealed to a social audience.

http://www.aag.org/cs/awards/jackson_prize

⁸⁵ The argument that geography as an academic study is derived from a masculinist perspective is discussed in Gillian Rose’s publication *Feminism and Geography: The Limits of Geographical Knowledge*, (Cambridge: Polity Press, 1993)

⁸⁶ Woodward similarly explores issues of gender and geography, alongside interests in visual culture and representation. Selected examples include *Sexing the Soldier: the Politics of Gender and the Contemporary British Army*, with Trish Winter (London: Routledge, 2007), “Warrior Heroes and Little Green Men: Soldiers, Military Training and the Construction of Rural Masculinities,” in *Country Boys: Masculinity and Rural Life* (Pennsylvania: Penn State University Press, 2006) M.M Bell and H. Campbell, H, eds. <http://research.ncl.ac.uk/military-research/publications.html#gender>

⁸⁷ Rachel Woodward, *Military Geographies* (Oxford: Blackwell, 2004), 9.

capacity to use lethal force rests.”⁸⁸ The argument concerning these more oblique spaces, frequently of strategic, historic or territorial significance, and which are often covert in comparison with more overt and active militaristic activities and systems, is of most interest to this narrative of landscape mediated through an analysis of visibility and invisibility.

2.3.2 Describing cultural landscape - origins of the term

The impacts of human activity as cultural effects upon the formation of landscape first became theorised by the geographer Otto Schluter (1872-1959) who coined ‘cultural landscape’ as an academic term in 1908. Schluter was arguing for the establishment of a *Landschaftskunde* (landscape science) as a foundation to the establishment of an academic status for the study of geography as an independent scientific discipline. The geographer defined two forms of landscape: the *Urlandschaft*, a concept of ‘original landscape’ as a territorial form and landscape that was not marked by significant human effects and changes; and the *Kulturlandschaft*, a form of ‘cultural landscape’, an environment created by the interaction of human agency and habitat within the landscape. He viewed the study of change between the two landscapes as a fundamental purpose of modern geography.⁸⁹ This concept of a culturally constructed landscape was developed further through the work of American geographer Carl Ortwin Sauer (1889- 1975), whose research has provided much of the foundation for continuing debates within the discipline of geography that have both supported and supplanted Sauer’s own original propositions. Geographer John Wylie describes the establishment of the ‘Berkeley School’ where Carl Sauer was a Professor of Geography at the University of Berkeley, California from the 1920’s to the 1950’s, as the “effective originator of cultural landscape studies in the USA.”⁹⁰ The influence of Sauer’s essay “The Morphology of Landscape,” first published in 1925, has been far-reaching, not least as a touchstone for later responses and divergent theories of cultural landscape within the discipline of geography. By 1925 the original meaning of the term ‘cultural landscape’ had broadened into an area of academic study

⁸⁸ Woodward, “How Military Landscapes Work,” in *Military Landscapes/Militære Landskap* (Bergen: Bergen Kunsthall, 2008), 99.

⁸⁹ Schuler reference here. ‘Promotion of a Cultural Area Common to Rural Communities’ “Culture 2000” http://cultural.net/themedia/File/Rural_landscapes_EKD_1111.pdf p.4

⁹⁰ Wylie, *Landscape*, (Oxon: Routledge, 2007), 19.

encompassing readings in geography, archaeology, the social sciences, and arts and humanities. The position of cultural landscape was articulated by Carl Sauer as a specific definition that influenced related studies for the following three decades.

The cultural landscape is fashioned from a natural landscape by a cultural group. Culture is the agent, the natural are the medium, the cultural landscape is the result.⁹¹

“The Morphology of Landscape” promoted the term ‘cultural landscape’ and emphasised the centrality of culture as a force in shaping the geographical features of the Earth’s surface in particular ways and across regions and communities. In his discussion of the cultural factors considered by Saur, geographer Don Mitchell in *Cultural Geography: A Critical Introduction*, states that it is hard to exaggerate the extent of his influence on American geographical study, and describes one of Sauer’s aims as the establishment of a strong academic basis for the discipline of geography in order to show the effects of culture as transformative in making and re-making the landscapes in which people lived.

This was (and remains) an immensely exciting project, and for Sauer it was one of increasing urgency as the twentieth century wore on and the degree to which the ability of humans to transform the earth – with bulldozers, chainsaws, bombs, and nascent biotechnology – seemed to steadily increase.⁹²

Some of these transformations, particularly the ‘conquest of indigenous peoples by imperial powers’ that had taken place across many global landscapes over the preceding centuries, had a specificity to the landscape of the American west and California. This is also where Saur established the research interests of the ‘Berkeley School,’ the geography department in the University of California that established a tradition of radicalism and protest,⁹³ in the locus of previous expansionism and

⁹¹ ‘The Morphology of Landscape’ (1963b, p.343) in Wylie, *Landscape*, (London: Routledge, 2007) (1963, originally published 1925)

⁹² Don Mitchell, *Cultural Geography: A Critical Introduction* (Oxford: Blackwell, 2000), 28.

⁹³ Amongst the many examples and history of activism at Berkeley, from the early twentieth century are Alfred Kroeber, who pioneered research into the indigenous native American cultures when it was considered ‘primitive’; economist Paul Taylor who advocated for the rights of immigrant workers during the 1930’s Depression; and Barbara Christian, an African American scholar who was the first

immigration policies of the nineteenth century that had dispossessed the Native American populations. Wylie, in his survey of the debates within cultural geography and their interdisciplinary applications over the preceding three decades of the twentieth century, refers to the achievements of the geographical past, through their influence on more current models. The 'new' cultural geographies that later emerged during the 1970's and 80's have, for the most part, reacted and responded by developing theories in other directions from the totalising ethos of Sauer's 'nature plus culture equals cultural landscape' argument. In terms of legacy Wylie maintains that the 'Berkeley School' is generally encountered now in a "...critical vein, and as a prelude to more in-depth examinations of contemporary cultural geographies and cultural politics."⁹⁴ As discussed through the examples of the nineteenth century surveys of the American west, earlier interests in geographical landscape were primarily because of its value as a medium for territorial acquisition and as an instrument of empirical enquiry. It is perhaps not surprising then, given its previous expeditionary history, that the proving ground for many of the contributors and academics theorising new concepts of geographical science subsequently emerged from the 'Berkeley School' and which focussed on the regional geography, culture, landscape and history of California.⁹⁵

2.3.3 *Developing cultural landscape – ways of seeing*

In his analysis of the major developments and shifts in the landscape studies of the more recent periods of the 1970's and 80's, Wylie writes that it was through an acknowledgement of a particular 'way of seeing' that the earlier propositions of Sauer in 'Morphology' began to be supplanted, and definitions of landscape associated with distinctly cultural productions began to emerge.

In this definition landscape is quite closely identified with landscape art, a complex and diverse artistic genre evolving from the fifteenth century to the present day. As a system for producing and transmitting meaning through

black woman to be granted tenure in Berkeley, and first to be promoted to full professor in the UC system, in 1986. <http://berkeley.edu/about/hist/activism.shtml> Accessed 3 January 2012.

⁹⁴ Wylie, *Landscape*, 27.

⁹⁵ Carl Sauer is credited with the creation of the 'Berkeley School' where he was Head of Geography Department, University of Berkeley, California, (1923-1954) <http://geography.berkeley.edu/about/history.php> Accessed 25 November 2011.

visual symbols and representations, landscape art, alongside cognate arts such as cartography, photography, poetry and literature, is a key medium through which Western, and in particular European, cultures have historically understood themselves, and their relations with other cultures and the natural world. In adopting the concept of landscape as a way of seeing, new cultural geography thus emphasised the visual qualities of landscape, and also tended to focus upon *representations* of landscape in art, literature, photography and other media. Such representations, or cultural images, the argument runs, may be understood and analysed as expressions of cultural, political and economic power.⁹⁶

Denis E. Cosgrove (1948-2008), is an example of the new school of contemporary geographers who responded to the empirically-driven ethos of Sauer's 'Morphology' by producing theories of landscape based on such 'expressions of cultural, political and economic power', one example of which is the construction of linear perspective in art. Cosgrove has written on the interrelationship between the representation of landscape in art and a comprehension of the geographical landscape; "In fact they are intimately connected both historically and in terms of a common way of appropriating the world through the objectivity accorded to the faculty of sight and its related technique of pictorial representation."⁹⁷ Writing on the appropriating use of linear or single point perspective and its origins in the Renaissance, Cosgrove refers to the influence of Leon Battista Alberti and his *De Pictura* (1435-6) as an influential template for realist representations of nature and landscape over subsequent centuries. Cosgrove has used the term "way of seeing"⁹⁸ to describe the relationship between an idea of landscape that is culturally expressed, and a history of landscape that is predicated on a wider social currency.

Landscape is a way of seeing that has its own history, but a history that can be understood only as part of a wider economy and society; that has its own assumptions and consequences, but assumptions and consequences whose

⁹⁶ Wylie, *Landscape*, 13.

⁹⁷ Cosgrove, *Social Formation and Symbolic Landscape*, 9.

⁹⁸ The term 'way of seeing' is also associated with the writer John Berger and his publication *Ways of Seeing* (1972) and in the discussion by Rose in *Feminist Geographies*, 91, where she refers to Cosgrove and his use of the term 'way of seeing' as intrinsic to class relations within landscape.

origins and implications extend well beyond the use and perception of land; that has its own techniques of expression, but techniques which it shares with other areas of cultural practice.⁹⁹

This position indicates the cultural malleability of landscape, through a history of perception that engages with 'techniques of expression' as a means of understanding the term imaginatively and expressively, not just as a genre that is ideologically impressionable, but one which exists as a medium in its own right. The realm of 'landscape' as cultural medium is further developed by W.J.T. Mitchell, who describes the quality as being "...like language or paint, embedded in a tradition of cultural signification and communication, a body of symbolic forms capable of being invoked and reshaped to express meanings and values."¹⁰⁰ In this model, 'landscape' is the antithesis of 'land', an ultimately finite and limited natural resource, whereas the value of 'landscape' is potentially inexhaustible "Could we fill up Grand Canyon with its representations? How do we exhaust the value of a medium like landscape?"¹⁰¹ Mitchell reminds us of a common preconception regarding the form and content of the landscape image in the following:

What we tend to forget, however, is that this "subject matter" is not simply raw material to be represented in paint but is always already a symbolic form in its own right. The familiar categories that divide the genre of landscape painting into subgenres – notions such as the Ideal, the Heroic, the Pastoral, the Beautiful, the Sublime, and the Picturesque – are all distinctions based, not in ways of putting paint on canvas, but in the kinds of objects and visual spaces that may be represented by paint.¹⁰²

The success of these distinctions and our willingness to believe the naturalism of the depicted scene, the artlessness of the artificial/natural landscape, Mitchell concludes, is predicated on not just the expression of value, but of communication, specifically between the "Human and the non-Human,"¹⁰³ the age-old dichotomy between culture and nature, the issue at the crux of cultural geography. Mitchell goes on to give an

⁹⁹ Cosgrove, *Social Formation and Symbolic Landscape*, xiv.

¹⁰⁰ Mitchell, "Imperial Landscape," 14.

¹⁰¹ *Ibid.*, 15.

¹⁰² *Ibid.*, 14.

¹⁰³ *Ibid.*, 15.

example of attributing a “special value on landscapes with lakes or reflecting pools” as a symbolic means of reflecting a process whereby Nature is seen to be representing itself, mirroring the construct of “...the Real and the Imaginary that certifies the reality of our own images.”¹⁰⁴ This example could also be used to describe the mimetic and indexical attraction of the photographic image to the articulation of the landscape ideal, particularly illustrated through the defining images of topographical survey with its emphasis on veracity and the gathering of ‘views’. Another iteration of the landscape as a medium expressive of value is discussed by Wylie in his comments on Cosgrove’s discussion of the pictorial conventions of perspective. Here Wylie emphasises the ideological meaning of perspective which legitimises and makes visible the material and economic apparatus of privilege and land ownership, and which underscores the dominance of the perspectival vantage point.

Not only does perspective establish vision as the *privileged sense* in epistemological terms; the landscape ‘way of seeing’ which develops from perspective further becomes in itself the *sense of the privileged*.¹⁰⁵

The issue of vision as a privileged sense in the perception of landscape is also discussed by Gillian Rose, a geographer with an interest in visual culture and the power relations of the academy. Her work questions assumptions of the patriarchal male gaze and its appropriating power in relation to the production of knowledge of the landscape, and within the discipline of geography. In *Feminism & Geography: The Limits of Geographical Knowledge*, Rose discusses the centrality of landscape as a concern of cultural geography in its study of the relations between environment and society. Embedded within this landscape interest is the dominance of vision and the act of looking, which she describes as analogous to fieldwork within the geographical discourse.¹⁰⁶ Rose describes the impetus to look, and to seek knowledge through the act of seeing, as intertwined within the geographical narrative.

¹⁰⁴ Ibid.

¹⁰⁵ Here Wylie is commenting on Cosgrove’s case study of sixteenth century Venetian landscape school, from *Social Formation and Symbolic Landscape*, (Cosgrove, 1998 [1984]) Painters such as Bellini, Giorgione, Titian and Veronese were creating the idyllic arcadian motifs which were in sharp contrast to the working life of the *terraferma*, a swathe of agricultural land stretching westwards from Venice. John Wylie, *Landscape*, (UK: Routledge, 2007), 59-61.

¹⁰⁶ Rose, *Feminism & Geography*, 86.

The absence of knowledge, which is the condition for continuing to seek to know, is often metaphorically indicated in geographical discourse by an absence of insight, by mystery or myopia; conversely the desire for full knowledge is indicated by transparency, visibility and perception. Seeing and knowing are often conflated.¹⁰⁷

Rose comments that in recent geographical discourse this connection between seeing and knowing has been problematised by the idea of looking as being less of an objective gaze, but more of a learned process, one which incorporates the hierarchies and interactions of a society and its environment. And that, consequently, it may be argued that "the gaze of the fieldworker is part of the problematic, not a tool of analysis."¹⁰⁸ The 'visual bias' as described by Cosgrove, derived from the appropriating practice of linear perspective and the landscape genre, therefore presents a partial view of property and class relationships, made legitimate through the prospects of a landscape view.

2.3.4 *Specifying cultural landscape – military geographies*

Nowhere is the union of 'seeing and knowing' in the landscape more potent than in the military use of vision in production of the specifics of strategic knowledge. The act of vision and the ability to extend and intensify the ability to see is an undisputable advantage, an instrumental weapon in the armory of ancient and contemporary conflict.

From the original watch-tower through the anchored balloon to the reconnaissance aircraft and remote-seeing satellites, one and the same function has been endlessly repeated, the eye's function being that of a weapon.¹⁰⁹

The operations of photography and film have had a symbiotic relationship with acts of warfare from its inception, a position powerfully argued by cultural theorist Paul Virilio, who writes that the ascendancy of the visual in twentieth century warfare has positioned it at the core of military and strategic significance, overtaking previously

¹⁰⁷ Ibid

¹⁰⁸ Ibid., 87.

¹⁰⁹ Paul Virilio, *War and Cinema: The Logistics of Perception* (London: Verso, 1989), 4.

conventional methods of combat.¹¹⁰ The industrialised landscapes of the nineteenth century ushered in a new form of optical warfare in the twentieth and twenty first, enabled by the speed and technology of aerial flight and photographic practices.

At the turn of the century, cinema and aviation seemed to form a single moment. By 1914, aviation was ceasing to be strictly a means of flying and breaking records...it was becoming one way, or perhaps the ultimate way, of seeing."¹¹¹

The military landscape, therefore, can be considered from the context of two overlapping frames: that of the instrumental, territorial occupation, and that of the imaginary, the visualising of the landscape for military purposes. In her theorising of the impacts of military presence in her publication *Military Geographies*, geographer Rachel Woodward claims that this presence is evident in the multiplicity of actions, effects and legacies of the military occupation of geographical space "Military geographies are everywhere; every corner of every place in every land in every part of this world of ours is touched, shaped, viewed and represented in some way by military forces and military actions."¹¹² This description of the ubiquity and pervasiveness of global military impacts is fundamental to the discourse around militarised landscape and the themes that define it. Describing the powerful representational strength of military systems, the territorial claims and a comprehensive surveillance apparatus she writes:

Military activities, an endless cycle of preparations for waging war, and war itself, define countless lives. People fight, flee, defend, work, live, conquer, celebrate, suffer and die, scratching their progress and their demise onto place under circumstances defined by militarism in its various national guises. Castles and bastles, forts and ports, depots and silos, bases and training spaces are built, used and relinquished. Military geographies are representational as well as material and experiential. Military maps and information systems name, claim, define and categorise territory. Infantry and artillery and

¹¹⁰ Virilio, *War and Cinema*, 5. Virilio suggests that the power of the image is such that, "A war of pictures and sounds is replacing the war of objects (projectiles and missiles)."

¹¹¹ Virilio, *War and Cinema*, 22.

¹¹² Rachel Woodward, *Military Geographies*, (Oxford: Blackwell, 2004), 3.

armoured regiments analyze terrain. Spy planes and satellites scan from above, watching. Military geographies surround us, are always with us.¹¹³

Of all the themes of military landscape the most fundamental is the acquisition and occupation of space. Armies, of all nationalities, whether for the purposes of preparation and training, the maintenance of defences or overseas engagements, or ultimately, territorial warfare, require the use of space, and physical occupancy is the “fact of presence” that defines a militarised landscape.¹¹⁴ In this sense military occupation may also define and produce a particular typology of space, and the space of landscape is then in turn shaped by militarism. The term ‘militarism’ is used to describe “an extension of military influence to civilian spheres, including economic and socio-political life.”¹¹⁵ Woodward’s argument is that a study of the military impacts on landscapes involving non-combat activities and sites, the places where preparations for warfare, training and habitation take place, arguably offers more insight into the pervasiveness of military influence than an emphasis on active or battlefield situations.¹¹⁶ She describes the critical features of military spatial control as being: firstly, that military geographical presence is constituted by the “very fact of being there” and situated within the landscape: secondly, that the flow of information and data available on military occupation is not always readily or fully accessible: thirdly, that the control and allocation of geographical space is dependent on the “management of civil-military relationships,” and finally, that military control of space “is a discursive as well as a material practice.”¹¹⁷ These territorial themes are similarly explored through the essays of *Militarised Landscape: from Gettysberg to Salisbury Plain*, a recent publication that discusses battlefield sites (warfare) and military defence estates (habitation) as related forms of occupied territory.

On one level, a landscape becomes militarised once it is legally owned or rented by an army, navy or air force, or if it becomes a site of battle in wartime. But the militarisation of landscape is a far more complex and

¹¹³ Ibid., 31.

¹¹⁴ Ibid., 153.

¹¹⁵ A definition of ‘militarism’ after Thee (1980: 15), quoted in *Military Geographies*, 3.

¹¹⁶ This theme of preparedness for conflict is the broad argument of Woodward’s publication *Military Geographies*, and also in the University of Newcastle Department of Geography introduction to themes of military geographies online. <http://research.ncl.ac.uk/military-research/themes/geographies.html>

¹¹⁷ Woodward, *Military Geographies*, 36.

profound process than this. Not least, it is the work and activity of soldiers that maintains the militarised landscape.¹¹⁸

These complexities and profundities relate to issues of an overlapping of and tension between civilian and military landscapes, military environmentalism, and the conversion of former militarised landscapes into heritage sites. Military geographies are not always distinct or off limits to civilians (although many are), and occupied sites may range from the highly visible and experiential, to the covert and out of bounds, both which are part of “National and transnational histories and geographies. Despite their secretive nature, they exist within wider social and cultural patterns and larger spaces.”¹¹⁹ An indication of these ‘larger spaces’, an observation on the extent of global occupied land is given as follows:

At 38,000 hectares (an area the size of the Isle of Wight), Salisbury Plain is the UK’s largest army training estate...British training grounds and firing ranges cover over 241,000 hectares, or approximately one per cent of national territory...Training grounds and bases now cover vast expanses of land in other countries as well; 12 million hectares in the United States, 3 million hectares in Australia and 258,824 hectares in France.¹²⁰

As part of this schematic of land occupation, perhaps the most direct footprint of militarism, although information is not always easy to access, a position discussed by Woodward as being a result of “Whether deliberate and strategic or whether a by-product of incompetence, the control of space by military establishments is easier to sustain when little information is placed in the public domain about those establishments and that use of space...Power and control are exerted through the availability of information.”¹²¹ Woodward also gives an indication of the extent of the global military bases occupied by United States forces since the end of World War Two, which includes Kuwait, Guam, Japan, the Philippines, Diego Garcia, Spain, Germany, the Azores, Korea, Honduras, Saudi Arabia, Turkey, Iceland, Greenland

¹¹⁸ Chris Pearson et al, eds. *Revealing Militarized Landscapes: From Gettysberg to Salisbury Plain*, (London: Continuum, 2010), 8.

¹¹⁹ *Ibid.*, 7.

¹²⁰ *Ibid.*, 2.

¹²¹ Woodward, *Military Geographies*, 155.

and Italy. In 1999, as an example of the numbers of personnel, 60,000 were based in Japan, and over half of these in Okinawa, which has 39 bases, home to around 30,000 US military personnel and an additional 22,500 family members.¹²² The statistics support Woodward's assertion that militarism and the control it exerts is "essentially geographical, in that it is expressed in and constitutive of space, place and landscape, and those outcomes are variable, nuanced and fluid, rather than uniform in cause and effect and immutable in consequence."¹²³ Yet this assertion of widespread and diverse impact is not at odds with an equally valid claim of a lack of accountability as a result, "The military occupancy of land is a critical issue almost *because* of its relative invisibility."¹²⁴ This assertion is also what is at stake in the claim for the influences of militarism upon landscape, and in my argument that a critical and creative use of photography, because of its instrumental and transformative relationship with visibility, is particularly well placed to explore this issue.

In her essay on the work of artist Trevor Paglen, and in a recent illustration of the 'battlefields', the term is used by American author Rebecca Solnit to describe the ubiquity of the military landscape which has proliferated as a result of the 9/11 terrorist attacks in the United States, particularly the global territorial designations which took place under the administration of President George Bush. Solnit refers to an online essay "The Global Deployment of US Military Personnel," written by Jules Dufour, president of the United Nations Association of Canada and which presents a summary profile of worldwide military bases under the United States military jurisdiction, and who observed that, "the surface of the earth is structured as a wide battlefield."¹²⁵ Dufour continues: "The U.S. tends to view the Earth's surface as a vast territory to conquer, occupy, and exploit. The fact that the U.S. military splits the world up into geographic command units vividly illustrates this underlying geopolitical reality."¹²⁶ The 'geographic command units' referred to by Dufour and used by Solnit in her discussion of the pervasiveness of the global 'battlefield' are

¹²² Ibid., 18.

¹²³ Ibid., 3.

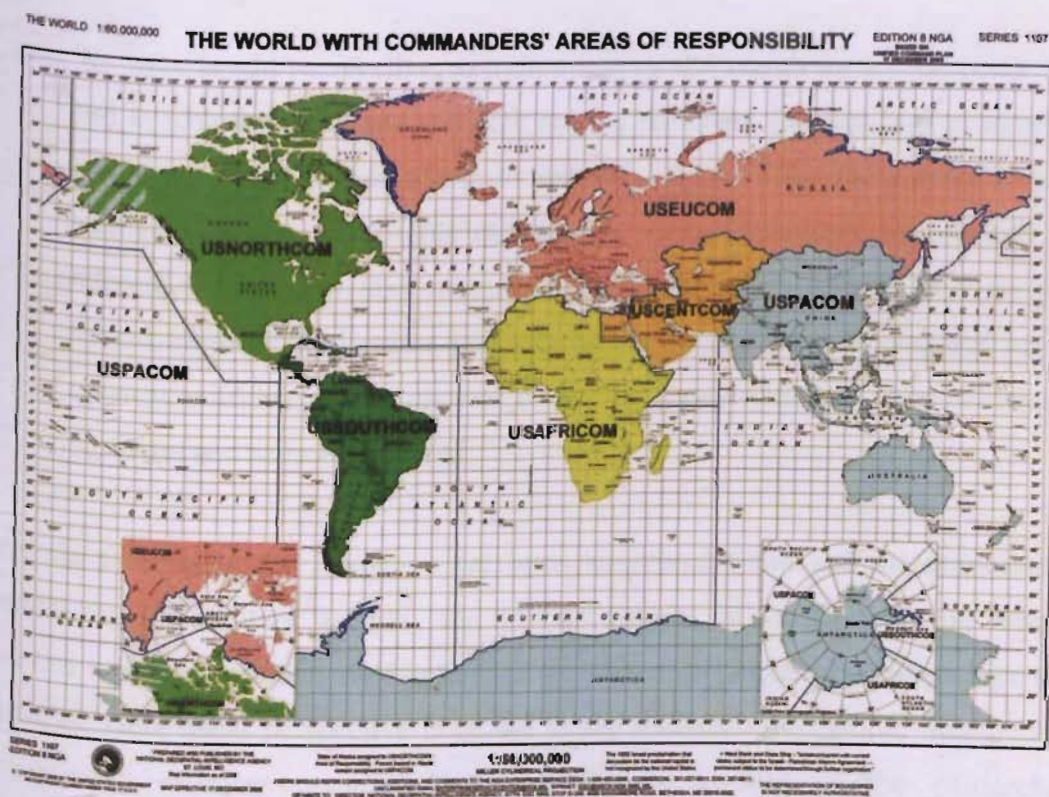
¹²⁴ Ibid., 12.

¹²⁵ Prof. Jules Dufour, "The Global Deployment of U.S Military Personnel," (July 1 2007)

<http://www.globalresearch.ca/index.php?context=va&aid=5564> quoted in "The Visibility Wars," Rebecca Solnit in *Invisible: Covert Operations and Classified Landscapes*, Trevor Paglen (New York: Aperture, 2010), 8.

¹²⁶ Rebecca Solnit, "The Visibility Wars" in *Invisible: Covert Operations and Classified Landscapes*, Trevor Paglen (New York: Aperture, 2010), 9.

detailed in the 'United States Unified Command Map, 2008' (fig.2.13) The map is a powerful reminder of the role of cartography and representation as integral to the agenda of geographical occupation.¹²⁷ Territory must first be named and claimed as part of a military agenda of symbolic and geographic appropriation. Solnit describes the spectrum of conflict thus: "War is a series of landscapes, from the manufacturing, testing, training, and storage sites to the battlefields and hospitals – and cemeteries."¹²⁸ This 'series of landscapes' connects to the analogy of Woodward's pyramid, where the base supports the apex of conflict and the 'exercise of lethal force', and ultimately, death in the landscape.



United States Unified Command Map, 2008

2.13 Illustration United States Unified Command Map (USUCM), 2008. *Invisible: Covert Operations and Classified Landscapes*. New York: Aperture, 2010.

2.3.5 Transforming landscape - the military imagination

An aspect of Woodward's analysis of the 'military imagination' involves a reading of how the armed forces themselves are trained to 'see' the landscape as part of their

¹²⁷ Woodward, *Military Geographies*, 109. Woodward observes that the "very history of cartography is bound up with the history of military-led expansion."

¹²⁸ Solnit, "The Visibility Wars," 9.

preparedness for warfare, and the ascribing of militarised meanings upon the landscape. This experiential encoding and visualising of the landscape as part of the soldiers' basic training exercises is part of what is described as "military representation as a strategic act,"¹²⁹ that extends the spatial dominance and purposes for which the land is used militarily, and which is legitimised for political purposes. Woodward quotes from Adam Ballinger, in his account of the selection process for the SAS, as an indication of the fundamental role of vision and opticality within military representation, starting with training exercises for recruits in the development of their own individual sense of visual perception.

We were taught perspective, to train our eyes and search for a focal point. We had to scan the landscape and pick out the dominant features, just as an artist would peer ever deeper trying to unravel colours. Like the painter who is restricted by the size of his canvas, we were constrained by our arcs of reference. We were also instructed in interpretation: countryside became terrain, rolling hills became gradients that slow down one's progress across country, wild hedgerows became camouflage, and mountain streams became obstacles and sources of water.¹³⁰

Here the features of the landscape are open to interpretation and the perspective, literally, of the military agenda; the military origins of cartography are simply revealed in the representation of landscape as terrain and gradients, camouflage and obstacles. Here linear perspective is an aid to the military imagination, literally and perceptually, recalling geographer Gillian Rose's reading of the patriarchal, geographical gaze, where "seeing and knowing are conflated."¹³¹ The landscape of training exercises and the role of the individual soldier become part of the operations of what Paul Virilio terms the "logistics of perception"¹³² whereby the history of

¹²⁹ Woodward, *Military Geographies*, 111.

¹³⁰ Adam Ballinger, *The Quiet Soldier*, (London: Orion, 1992), 129 quoted in Woodward, *Military Geographies*, 106.

¹³¹ Rose, *Feminism & Geography*, 86.

¹³² The phrase, also the title of the publication in which it originates, refers to Virilio's argument that in twentieth century conflict the significance of images, and image making technologies, have replaced the 'battlefield logistics' of preceding centuries, and have transformed the arsenal of modern warfare, through practices of representation, propaganda, reconnaissance, surveillance, and in the gestation of a new 'weapon system' out of combat vehicle and camera." Paul Virilio, *War and Cinema: The Logistics of Perception*, trans. Patrick Camiller (London: Verso, 1989), 2.

conflict is part of the history of changing perceptual fields, and military perception requires an ever-increasing intensification of vision as an intrinsic element of warfare.

From the commanding heights of the earliest natural fortifications, through the architectonic innovation of the watch-tower, and the development of anchored observation balloons, or the aerial reconnaissance of World War 1 and its 'photographic reconstruction' of the battlefield, right up to President Reagan's latest early warning satellites, there has been no end to the enlargement of the military fields of perception. Eyesight and direct vision have gradually given way to optical or opto-electronic processes, to the most sophisticated forms of 'telescopic sight.'¹³³

Written towards the end of the Cold War era, when the 'Star Wars' (SDI)¹³⁴ technologies of warfare had escalated into the stratosphere, Virilio argues that the military imagination and 'way of seeing' has transformed the landscape of war into the landscape of images of war "*War is cinema, and cinema is war.*"¹³⁵ In his evocative parallels drawn between vision and warfare, and argued through examples that place the development and social experiences of cinematography, alongside the electronic imaging of twentieth century conflict, Virilio is a major proponent of the indivisibility of images and technology in practices of modern warfare.

2.4 Landscape and the archaeological

2.4.1 Introduction

This chapter unfolds a series of landscape narratives, from the nineteenth century origins and depictions of photographic landscape, used so effectively in the territorial and ideological appropriation in the images of the American west, to the theorising of cultural landscape as a field of study, including the specificity of militarised landscape. As the discourse draws towards a close, this final section will consider

¹³³ Virilio, *War and Cinema*, 86.

¹³⁴ Strategic Defence Initiative (SDI) or colloquially, 'Star Wars' was the space-based nuclear ballistic deterrence missile system originally announced by U.S President Reagan on March 23, 1983,

¹³⁵ Virilio, *War and Cinema*, 34. (original emphasis).

aspects of archaeological practice and its contribution to the overarching narrative of conflict and representation. These disciplinary strands collectively reflect a nuanced and diverse approach to the subject of landscape and its representation, made in order to establish a sense of context around the issue of contemporary conflict and how its presence within the landscape may be characterised and interpreted through arts practice. The archaeological approach, with a focus on temporality, tangible and intangible traces, is another lens through which to approach the narrative of landscape. Of interest here are the archaeological practices that map the recent and the contemporary past, and their consideration of the diverse nature of twentieth century conflict. This will begin with an introduction to the overarching framework of 'historical archaeology' as a branch of the discipline that explores a time period which includes the present day, and that engages a broad spectrum of source material. The framework of historical archaeology encompasses disciplinary specialism that focusses on the recent and contemporary past: 'documentary', 'industrial' and 'contemporary', and includes terms that address the archaeology of twentieth century conflict; 'conflict', 'combat', and 'military.' Within the archaeological framework each of these terms represents recently emergent studies within a discipline more traditionally associated with the ancient or archaic material record. In this section the scope and themes of historical and contemporary archaeology will be considered, beginning a discourse around the concerns of conflict archaeology which will be developed in the following chapter.

2.4.2 *Disciplinary diversity - historical archaeology*

In a generic sense, the archaeological discipline is commonly understood to involve the "study of past cultures by the scientific analysis of physical remains" from the Greek *arkhaiologia*, the study of what is ancient.¹³⁶ This definition is expanded by Graham Hicks and Mary Beaudry, archaeologists and editors of *The Cambridge Companion to Historical Archaeology* as follows:

¹³⁶ *Collins English Dictionary* (UK: Harper Collins, 2006), 34.

Our understanding of archaeology as a contemporary project with a distinctive bundle of methods and practices, which works on the material remains of human societies from all periods.¹³⁷

The interest of archaeological practice in the relevance of the 'contemporary project' implies methodologies and practices that have current agency, rather than more traditional archaeological concerns with the archaic or ancient past. Within this context therefore, which 'works on the material remains of human societies from all periods,' it is clear that the archaeological principle extends across temporalities, so in a sense a semantic distinction between terminologies is not altogether valid. However, any discipline includes clusters of key interests and schools of thought, and the production of distinct areas of study and research, so it seems valid that archaeology, traditionally concerned with ancient remains, may equally be interested in exploring the material record of recent and contemporary life.

Historical archaeology first emerged as a term in the mid 1950's and dates from the period beginning around AD1500 up to and including the present day, and is distinguished by its interest in drawing from "interdisciplinary environments."¹³⁸ This includes, although not exclusively, the emergence of literate societies and their production of the written and textual record. What differentiates the questions being asked through historical archaeology is not the availability or otherwise of the material record, but rather the proximity of whoever is asking the question. Put very simply, this is the "archaeology of us"¹³⁹ *Modern Material Culture: the Archaeology of Us*, was first published in 1981, and included documentation of an innovative study by archaeologist William Rathje (1945), 'The Garbage Project', a long running archaeological project first established in 1973. Rathje argued that through this focus

¹³⁷ Dan Hicks and Mary C. Beaudry, eds. *The Cambridge Companion to Historical Archaeology* (Cambridge: Cambridge University Press, 2006), 2.

¹³⁸ Ibid.

¹³⁹ Richard A. Gould and Michael B. Schiffer, eds. *Modern Material Culture: the Archaeology of Us* (University of Michigan: Academic Press, 1981). This interest in a more immediate and social impact, the 'archaeology of us', arose from a symposium and publication that discussed the new theoretical directions and activities arising out of activities taking place on American university campuses in the 1970's. Following the emergence of historical archaeology in the 1950's, a epistemological shift in the discipline from the temporal proximity of the object of study, to an interest in the contemporary relevance of the study of material culture took place. An interest in this form of 'ethnoarchaeology' subsequently focussed academic attention on data and methodology rather than the significance of time periods.

on the social, mundane and transgressive, meant that archaeology could no longer be defined by the traditional excavation of archaic concerns and instead was attending to the complexities of the interaction between material culture and human behaviour, irrespective of space and time considerations. In anthropological and archaeological studies, an emergence of the ability within a social group to create and record their own history through the process of writing traditionally marked a significant shift from non-literate societies. However, in their introduction to the beginnings of historical archaeology, Hicks and Beaudry emphasise that historical archaeology may also operate where there are no textual accounts, and that, consequently, there is an awareness of a lack of documentation about the details of everyday life and so attention is brought to other material sources. Even when an archive is available, the emphasis on literacy as a form of authoritative record is a fraught position, implying a potential hierarchy over "...models of non-western or non-literate societies as being 'without history.'"¹⁴⁰

Another debate within historical archaeology centres on the concept of a 'cut-off' point and where this might be positioned chronologically. The argument for a time limit is suggested by Richard Newman in his overview of 'the historical archaeology of Britain', and referred to by Hicks and Beaudry in their introduction to the place of historical archaeology.

The end of the Victorian Age makes much sense as a terminus. We are probably too close to the twentieth century's cultural detritus to be able to focus on the nature of its archaeology. Moreover, the development of the telegraph, the telephone, photography, and at the end of the nineteenth century, the internal combustion engine, all had profound effects on material culture and everyday life.¹⁴¹

Newman's potential constraints raise an interesting schism between the supposed objectivity of distance and the interpretative potential of proximity. In the sense that these 'profound effects' are part of a technological continuum that began in the nineteenth century, developing through the twentieth and into the twenty first century,

¹⁴⁰ Eric Wolf (1982) quoted in Hicks and Beaudry, *Historical Archaeology*, 2.

¹⁴¹ Richard Newman (2001:8) quoted in Hicks and Beaudry, *Historical Archaeology*, 3.

it is perhaps all the more imperative that they may be studied, archaeologically and culturally, whilst their origins and impacts are within living memory. As we have seen with the development of opticality and photography, a consideration of the technologies and operations of artificially enhanced sight can be usefully traced from inception as an externalised, scientific device, through modifications over the centuries, into an embodied apparatus of aestheticism. Arguably, the processes and products of modernity and post-modernity may be best analysed through a range of interdisciplinary approaches and within the temporal and social context of their production, specifically in order to reflect differences and contradictions in their chronology. Within historical archaeology, this approach effectively eliminates any fixed time period or limit between material remains and the process of study, and “defines historical archaeology as a contemporary and creative practice, rather than trying to imagine recent pasts that are distanced, made unfamiliar, before being interpreted.”¹⁴²

This proximity to the subjects of study adds another layer to the archaeological record and implies that; “We have not, as archaeologists or ‘managers’ of the past, withdrawn outside the places and things that constitute the object of archaeology; on the contrary, we live with them, amongst them.”¹⁴³ So whilst acknowledging the narrowing of the temporal gap may present another form of challenge, the imperatives remain the same.

Historical archaeologies are different from the work of our prehistorian colleagues only in the sheer diversity and quantities of materials that survive, and in the relative proximity of the material to the present: both of which bring distinctive opportunities rather than essential differences.¹⁴⁴

The ‘distinctive opportunities’ in addressing the materiality of the twentieth century are raised by archaeologists Schofield and Johnson in their essay “Archaeology, Heritage and the Recent and Contemporary Past.” This includes a recognition that the cultural record of artefacts, buildings, sites and landscapes of the recent past, not just

¹⁴² Ibid., 4.

¹⁴³ Laurent Olivier, “The Archaeology of the Contemporary Past,” in *Archaeologies of the Contemporary Past*, eds. Victor Buchli and Gavin Lucas (London: Routledge, 2001), 180.

¹⁴⁴ Hicks and Beaudry, *Historical Archaeology*, 3.

the archaic, may indeed 'matter' and require some form of retention. And also, that an archaeological analysis of more recent remains may offer a unique insight and understanding of contemporary life, predicated as it is upon the experience and study of previous and past cultures. The view raised by the authors, that 'change and creation,'¹⁴⁵ as a naturally occurring process in all forms of materiality, should not be viewed as a negative catalyst, altering or eradicating earlier cultures, but instead approached as a characteristic of the rapid development of the twentieth century.¹⁴⁶

2.4.3 *Disciplinary proximity - contemporary archaeology*

In his essay discussing "Historical Archaeology and Time,"¹⁴⁷ archaeologist Gavin Lucas posits a more fundamentally different position between historical and contemporary archaeologies, than that of chronology and a temporal gap. He suggests that in 'contemporary archaeology' the temporal distance between the subject and object of study which may be maintained within mainstream historical archaeology to some extent is collapsed in contemporary archaeology, and the potential of the social role is pronounced. Therefore any attempt at detachment and disinterest is effectively removed, and the axis upon which archaeology rests, the relationship between past and present phases of time, and what constitutes 'remains', therefore, undergoes a subtle shift. Inherent in this position then, is the potential for the "social role of archaeology"¹⁴⁸ and an acknowledgment of the subjectivity that is at play in both the scientific analysis and the interpretative practices of the discipline. This social role positions contemporary archaeology as both contributing to and challenging of traditional archaeological discourses, and of evidence presented within a more distanced, historical context. In their publication *Archaeologies of the Contemporary*

¹⁴⁵ John Schofield and William Gray Johnson, "Archaeology, Heritage and the Recent and Contemporary Past" in *Historical Archaeology*, 106. "Change and Creation: Historic Landscape Character 1950 - 2000" is also the title of a programme by English Heritage that characterised the latter half of the legacy and impacts of the twentieth century material record. <http://www.english-heritage.org.uk/publications/change-and-creation-historic-landscape-character/> Accessed 26 August 2011.

¹⁴⁶ Ibid.

¹⁴⁷ Gavin Lucas, "Historical Archaeology and Time," in *Historical Archaeology*, eds. Hicks and Beaudry. pp. 34-47.

¹⁴⁸ Ibid., 47.

Past, editors and authors Gavin Lucas and Victor Buchli discuss their theme of the 'absent present'¹⁴⁹ in order to focus on the following:

...the critical consequences of presencing absence in the recent past – bringing forward that which is excessive, forgotten or concealed. As a result this body of archaeological work begins to appear qualitatively different from more conventional archaeological projects and other disciplines working on the recent past.¹⁵⁰

The concerns of contemporary archaeology with recently lived social activities may involve, by definition of their proximity, events that are contentious and troubling. In this framing of the recent past, the social value of addressing this sense of absence is specified through related themes of 'alienation', 'transgression', 'the unconstituted' and 'redemption', and the editors argue that it is within the marginalised narratives of the dispossessed that contemporary archaeology can provide the most valuable insights. In Buchli and Lucas's thesis of the 'absent present' they argue for the role of archaeology as being of particular value.

So what is unique in archaeology's role in this? Beyond its overt emphasis on material culture, it moves away from the design, art and architectural history and attempts to make that which is *absent* present through the effects of the archaeological act.¹⁵¹

However, it is my argument that arts practice as an area of research similarly has a social contribution to make to understandings marginalised and contentious recent events, also in situations that have been politically and culturally overlooked or hidden. So whilst I agree with the positioning of archaeology by Buchli and Lucas as a powerful and revelatory methodology in considering issues of the 'absent present,' I diverge from the argument that archaeological practice is unique in this respect. My argument is that arts practice may be equally valuable in 'uncovering' as a creative,

¹⁴⁹ Victor Buchli and Gavin Lucas, *Archaeologies of the Contemporary Past* (London: Routledge, 2001), pp 3-17.

¹⁵⁰ Buchli and Lucas, "Presencing Absence" in *Archaeologies of the Contemporary Past*, 171.

¹⁵¹ Buchli and Lucas, "The Absent Present: Archaeologies of the Recent Past" in *Archaeologies of the Contemporary Past*, 16.

interpretative act and that this may be a parallel and complementary activity alongside archaeological processes in formulating understandings of the recent and conflicted past. Equally, an argument also raised by Buchli and Lucas is that creativity is part of the inherent discovery process of archaeology, as they propose that “archaeologists constitute things in the present, not only conceptually but materially as well”¹⁵² Therefore the approaches of discovery and interpretation, articulation and imaging, may be understood as characteristics of each area of research, particularly significant when dealing with themes of contention and contradiction. From the ubiquity of the military bunker across the global landscape to the specificity of the mass graves of Croatia and Argentina, the archaeological gaze unites the study of materiality with the invisibility of the overlooked.

2.4.3.1 Contemporary relevance – “The Van”

The project “The Van – Archaeology in Transition” is an example of a contemporary archaeological approach to material culture, and one that addresses the marginal and the transgressive within the discipline of archaeology itself. “The Van” project involved an ‘excavation’ carried out on a decommissioned Ford Transit van previously used for archaeological fieldwork trips over the previous decade. It was undertaken by archaeologists Anna Nilsson, Cassie Newland, and John Schofield, with filmmaker Greg Bailey, from the Department of Archaeology and Anthropology at the University of Bristol, with involvement from Atkins Heritage, in 2006. The project was recorded as a short film, *In Transit*, which was presented by John Schofield in his public lecture on ‘Landscape and People: Contemporary Archaeology, Communities and Artistic Practice’, invited as part of the Graduate School of Creative Arts and Media (Gradcam) seminar series, Dublin.¹⁵³ The excavation process that was applied during ‘The Van’ followed the same orthodox and analytic approaches of the discipline to any material subject under investigation.

This was to be like any conventional excavation: we proposed to dismantle the van systematically and – at times – forensically, recording all features,

¹⁵² Ibid., 17.

¹⁵³ Dr John Schofield, “Landscape and People: Contemporary Archaeology, Communities and Artistic Practice” (paper presented at a public lecture, part of the Gradcam seminar series, National College of Art and Design (NCAD), Thursday 22 October 2009, with respondent Mhairi Sutherland).

structures, deposits and artefacts, as well as introducing specialists for particular tasks.¹⁵⁴

Although the subject matter of 'the dig' was controversial, the methodological root of understanding the present through an interpretation of the past engaged the same process as would be applied to a more mainstream excavation. The project attracted attention and initiated debates and controversy within the discipline, some of which extended to other media, over the question of how archaeology should function in relation to the contemporary material record, and the potential subjects of 'excavation.'¹⁵⁵ The purpose of the project was to demonstrate the social and disciplinary value of this contemporaneous approach to this example of the 'culture of us,' through scientific methods of analysis and interpretation of the contemporary remains of material culture, as expressed in the project report.

The object, to see what can be learnt about a very particular and characteristic type of contemporary place, and to establish what archaeologists and archaeology can contribute to understanding the way we (society) and specifically we (as archaeologists) use these places.¹⁵⁶

¹⁵⁴ "The Van – Archaeology in Transition" *Archaeolog*, Accessed 11 December 2009. <http://traumwerk.stanford.edu/archaeolog/2006/08/> by project originators archaeologists John Schofield, Cassie Newland, Anna Nilsson, and film maker and archaeology and screen media student Greg Bailey. <http://www.archaeologychannel.org/content/video/intransit.html>.

¹⁵⁵ Examples include *British Archaeology* 92, January/February 2007. <http://britarch.ac.uk/ba/ba92/feat2.shtml> "Remains of What we are Left" Angelika Franz in *Der Spiegel* 4 January 2009. <http://spiegel.de/wissenschaft/mensch/0,1518,616536,00.html>

¹⁵⁶ "The Van – Archaeology in Transition" *Archaeolog*, Accessed 11 December 2009.



2.14 'The Van' during the excavation. Image John Schofield, Greg Bailey, Cassie Newland and Anna Nilsson. (2006)

In the example of 'The Van' a number of observations may be made that exemplify aspects of historical and contemporary archaeology as applied in a disciplinary and social context, and to a particular locus and materiality. Framed within the overarching theme of historical archaeology, which is the evidential use of a range of interdisciplinary sources, these ranged from the material object of the van itself, records of travel and service histories, to the habits and patterns of its travellers and drivers. Throughout the period of the excavation there was both specialist contact, from the Crime Scene Manager of Avon and Somerset Police and the Transit Van Club, to interested passers-by, archaeology summer students and lecturers.¹⁵⁷ The argument of the 'absent-present' of contemporary archaeology proposed by Buchli and Lucas, is manifest here through the creation of 'new' forms of materiality and the archaeological record. In their forensic investigation of the van the archaeologists were engaged in conversations and debates, produced reports, engaged a filmmaker in order to produce the film *In Transit*, published textual materials online, reported at conferences and the project was reviewed and discussed through press and media outlets. Although not transgressive or redemptive in the sense of an individual or civic violation that might be found in the examples of forensic archaeology that may be applied to war graves for example, the model of problematising the archaeological

¹⁵⁷ Ironbridge Archaeology, John Schofield, August 1, 2006 (9:03am) on "Ironbridge Archaeology Van (viii)" <http://contemp-ironbridge.blogspot.co.uk>

imagination, socially, theoretically and materially, reflects similar issues between presumed and distanced objectivity, and the interpretation of proximity.

2.4.4 Conclusions

The aim of this chapter was the unfolding of a series of narratives in order to show the influence of the visual as a dominant theme in the cultural construction of landscape. This continued and developed the theme of chapter one, where vision itself was discussed as constructed by its modification through optical aids and the emergence of photography. In this chapter, as the instrumentality of photography was shown to be capable of ideological investment, so too was the cultural medium of landscape, established as being 'always already a representation' and ideally positioned to function as the medium for the impress and appropriating gaze of photography. In terms of the potential contradictions traced in the survey photography of O'Sullivan, between the institutional claim and ordering of territory, and the contribution of his images to the aesthetic discourse of modernity, Kelsey questions whether this is the most useful way to consider value and meaning in relation to the imagery, "One issue is whether it is time to move away from the long-standing concern with locating this category of practice relative to the changing historical border between art and science."¹⁵⁸ The early appearance of ideologically motivated photographic images is, of course, no surprise when made in the contextual history of an evolving apparatus specifically constructed in order to frame a particular 'view', but still presents a challenge to the legacy of early photographic images. In considering issues of militarism or conflict and a relationship with landscape, the challenge for contemporary artists using lens-based media is to critique and re-position the ideological capacity of both the landscape and the photographic medium, and to represent images that explore concerns of social value, whilst acknowledging the inherent contradictions in the chronology of each medium. It is this sense of tension between the positions of historical legacy and issues of current relevance that is at stake when considering the examples of photographic practice and the representation of landscape and conflict, and which will be discussed and developed in the subsequent chapters.

¹⁵⁸ Kelsey, "Viewing the Archive," 719.

The cultural representation of landscape was shown to be an influence in the academic discipline of geography, where the study of cultural landscapes began with the issue of human interaction and the natural world, as in Saur's proposition, "The cultural landscape is fashioned from a natural landscape by a cultural group. Culture is the agent, the natural are the medium, the cultural landscape is the result."¹⁵⁹ Here the act of looking becomes part of the activity of learning, as observed by Rose, and which was exemplified by the overlay of linear perspective gridding and apportioning the landscape, beginning in the Renaissance and extending its influence over subsequent centuries, as theorised by Cosgrove. The depiction of landscape in art was discussed as a defining frame for the formulation and study of cultural landscape, and for a new generation of geographers as referred to by Wylie "In adopting the concept of landscape as a way of seeing, new cultural geography thus emphasised the visual qualities of landscape, and also tended to focus upon *representations* of landscape in art, literature, photography and other media."¹⁶⁰ And as discussed from the position of the visual theorist, W.J.T Mitchell, in this sense landscape truly becomes the medium, not just as a territorial form to be rendered in two dimensions, but one which co-exists ideologically and topographically, and where the existence of each is defined and framed through recognition of the other. In the specificity of militarised landscape, the culture of militarism can be identified by its ubiquity and omnipresence; from the stratospheric to the subterranean, from the overtly defensive to the covert and the stealthy, there are potentially very few limits, territorially or ideologically, to the exercising of the military imagination. My concerns in this argument chime with those of the geographer Rachel Woodward, "The military occupancy of land is a critical issue almost *because* of its relative invisibility."¹⁶¹ Therefore this particular narrative of landscape began at the point where photography itself began to emerge amongst the history of representation of landscape, and was seen to play a particular role in the appropriating institutional agenda, whilst in the study of cultural landscape representations continue to influence understandings of the topography and its formations. The archaeological was framed as an approach, a methodology and lens through which to view and explore some aspects of the discipline, in preparation for the introduction of conflict archaeology and the

¹⁵⁹ Carl Sauer, "The Morphology of Landscape" quoted in Wylie, *Landscape*, 343.

¹⁶⁰ Wylie, *Landscape*, 13.

¹⁶¹ Woodward, *Military Geographies*, 12.

relationship with landscape. The following chapter will continue and develop the theme of landscape narrative through a closer examination of some of the archaeological approaches to places of contemporary conflict, and discuss related examples of arts practice and interpretation by artists both within an archaeological context, and through the individual work of selected artists.

CHAPTER THREE: 'CONFLICTED TERRITORY'

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- 3.4 Chapter conclusions

Chapter 3: Conflicted Territory

3.1 Introduction

A discussion of how arts practice may contribute to the research and understanding of aspects of recent and contemporary conflict, with a cross-disciplinary value that has currency across empirical and artistic fields of study is presented in this chapter. This will involve a consideration of some approaches and themes common to both arts practice and to contemporary archaeology in relation to sites of conflict within the landscape. The approaches that will be discussed include characterisation, interpretation and the creation of new conceptual and material forms, and archaeological themes of the absent-present and ambiguous, contradictory narratives.

The chapter begins by exploring the comparatively recent archaeological interest in the ontological nature of twentieth century warfare,¹ with a broad introduction to conflict archaeology and the methods of 'characterisation and interpretation' as a means of establishing the value and legacy of tangible and intangible remains of recent conflict. This broad approach will be followed by specific examples of artistic contribution to the archaeological discourse through a discussion of two arts projects addressing the legacy of the Cold War in European landscapes. As the images of 'wilderness' originally created and circulated through the images of the pioneering photographers of the nineteenth century American west passed into the public consciousness through the social consumption of such representations in their various forms, so too are the resonant impressions of the Cold War in the twentieth century associated with particular sites and landscapes. Similarly, these have also become publicly known and disseminated through photographic and mediatised imagery. The iconography of places such as Greenham Common and the annexing of much of Eastern Europe to the control of Soviet Russia after the end of the Second World War

¹ Much of the emphasis on recent conflict as a period of archaeological concern has emerged during the last decade, and includes initiatives such as 'Change and Creation: historic landscape character 1950 – 2000', *The Journal of Conflict Archaeology*, published by the 'Centre for Battlefield Archaeology' established in 2006 at Glasgow University. Publications charting new research in the field include *Matériel Culture: the Archaeology of Twentieth Century Culture*, eds. J. Schofield, W.G. Johnson, C.M. Beck (2005), *Combat Archaeology*, J. Schofield (2005), *Re-Mapping the Field: New Approaches in Conflict Archaeology*, eds. J. Schofield, A. Klausmeier, L. Purbrick (2006). The theme of the UNESCO World Archaeological Congress in Vienna was 'Archaeology in Conflict' (2010).

have become part of the collective social mythology of twentieth century conflict. Images of contradiction are emblematic of this time of latent conflict and diplomatic confrontation, where symbols of aggressive deterrence were juxtaposed with scenes of non-aggressive, peaceful protest. Therefore in the 'Landscapes of Conflict' section of the chapter, the work of artists John Kippin and Angus Boulton has been selected for discussion for reasons connected to this social awareness of such iconography. Firstly, each artist has created a body of work that explores related landscapes in the aftermath of the Cold War, in Britain and in the former East Germany. Secondly, the use of lens based mediums in both photographic print and video is fundamental to the working processes of each artist. Finally, and significantly, the projects which will be discussed have been cited by contemporary archaeologists as examples of the interpretative power of an artistic approach to contextualising and adding to the understandings of sites of former conflicts. The timing of the projects by Kippin in 2001 and Boulton in 2004 each of which took place in the transitional phase of military bases after closure, but before new developments were underway, similarly positions their approach alongside that of archaeologists, in their 'characterisation and interpretation' of contemporary sites and installations. From the social and civic perspective these projects address a period of accelerated and intense historical change, a brief moment of international optimism in the chronology of conflict signalled by the bringing down of the Berlin Wall in November 1989, and the beginning of the dismantling of nuclear warhead installations. This moment marked a shift in the global post-war relationships between the superpowers of the United States and the former Soviet Union, and in the scale and immediacy, if not a complete withdrawal, of the threat of nuclear war.²

From this point, the focus of the argument will move to arts practice as a disciplinary field of enquiry and interrogation, with examples of artists who present a visual critique on the relationship between landscape and conflict in their work. Each of the three contemporary artists has been selected in support of the claim that arts practice has a particular role to play in the representation of the visible and invisible archaeologies of conflict. The rationale for discussion of their work in the 'Artistic

² On 8 December 1987 the United States of America and the former USSR signed the *Treaty on the Elimination of Their Intermediate-Range and Shorter-Range Missiles* (the INF Treaty). http://www.iaea.org/Publications/Factsheets/English/npt_chrono.html Accessed 28 March 2011.

Landscape' section has been based on their contribution to the subject of contextualising the cultural visibility of conflict upon landscape, and how this may be envisioned through photography. Each of the artists deal with this issue in a particular way, and collectively the argument for arts practice as a means of interpretation and witness to contemporary conflict is further developed. In the first two chapters of the thesis the evidence for the constructed nature of the histories of both vision and landscape was examined, as was the significance of the photographic medium in the shaping of a particular landscape. The rationale for the selection of the American west was made in terms of the institutional and aesthetic applications of photography, and of the link between perceptions and assumptions of 'wilderness' with the Irish landscape of Donegal which is addressed in the final two chapters. In this third chapter it is important that this critical conversation around photography and landscape be continued and extended through relevant examples in the selection of contemporary artists and specific artworks.

The criteria for the selection of the artists Trevor Paglen, David Farrell and Willie Doherty therefore, was firstly a critical use of lens-based processes, and the engagement of photography as an artistic medium through which the diverse nature of contemporary conflict might be traced and critiqued. The second criterion was that the artists were geographically situated and connected to the landscapes of the research, so an artist from the American west, from the Irish Republic and from Northern Ireland were selected. Each artist had produced artwork which problematised the idea of 'landscape,' whether urban or rural, and which informed and underpinned their individual approaches to the making of artwork. The third criterion was that the artist made reference to an issue of conflict, not necessarily as the most dominant concern, but as a consistent and significant element of their catalogue. This characteristic of questioning the relationship between landscape and conflict could be evidenced through a focussed and specific series, as in the photographic excavations of *Innocent Landscapes* by David Farrell, or as an insistent presence throughout a body of work, as in the images of Willie Doherty presenting an alternative to the mediated views of conflicted and post-conflict Northern Ireland, and Trevor Paglen's interrogation of the limits of visibility in the contemporary militarised spaces of the American west.

So within this framework of commonality the selected artists are also examples of individual artistic approaches to the specificity and diversity of conflict. This includes, for example, photography as a critique of the strategic deployment of invisibility and the 'black sites' of military operations in the reconnaissance projects of Paglen; the photographic series as a form of 'archaeological' excavation and visual memorialisation of death in the landscape of Farrell's troubled, rural topographies; and the imaging and exposure of surveillance and sectarianism in the 'local' conflict of three decades duration explored in the photoworks of Doherty. The selection encompasses a reading of the artists' work that addresses a relationship between visibility, landscape and conflict through 'archaeologies' or traces in the landscape that have been distanced in time, but which have currency and meaning for the present. In this I am echoing the claim of others in a selection of artists whose work, although they may not claim a specific archaeological narrative within it, may "constitute an archaeological approach, even though some of the researchers won't consider themselves to be archaeologists."³ This is done in order to present the case for the value of arts practice as a visual field of research, with the potential for areas of shared knowledge and collaboration with other disciplines, made from an informed standpoint as a visual artist.

One of the strengths of arts practice as research is its 'exhibitionality', to use Rosalind Krauss's term for the culture of display as it changed from the patronage of earlier eras, and emerged as an assertion of modernity during the nineteenth century. The approach of arts practice to the contextualisation of a subject, either conceptual or material, followed by interpretation and the exhibition of artwork in the public domain, mirrors an approach of archaeological practice in its 'characterisation and interpretation' of contemporary material culture, that subsequently becomes public through the listing and scheduling of the remains under consideration. Whilst the examples of arts projects such as *Cold War Pastoral* and *Stolzenhain* will be discussed in the light of their position as already contributing to the archaeological discourse, through their referencing by archaeologists and specialists with an interest in shared research practices, the work of artists Trevor Paglen, David Farrell and Willie Doherty will be explored and presented as evidence for the use of photography

³ John Schofield, Axel Klausmeier, Louise Purbrick, eds. *Re-Mapping the Field: New Approaches in Conflict Archaeology* (Berlin/Bonn: Westkreutz-Verlag, 2006), 6.

as a medium with a particular relationship to levels of cultural visibility and the critique of conflict. Therefore the balance will be achieved between the archaeological argument for the value of arts practice, and my related argument as an arts practitioner asserting the value of specific practices, mediums and methodologies. So although the archaeological and the arts disciplines are distinct disciplinary standpoints, I will argue that the social value and public dimension common to both is of particular value when considering the diversity and impacts of modern conflict, and indicates the value of shared disciplinary and research pathways.

3.2 Landscapes of Conflict

3.2.1 Disciplinary framework

The ongoing legacy of militarism, in its ubiquity and influence upon the geographical landscape, and as an issue for archaeologists of recent conflict, has been increasingly studied over the past two decades.⁴ ‘Conflict archaeology,’ ‘matériel culture,’ and ‘combat archaeology,’ are all terms used to describe the overarching theme of twentieth century warfare and its study within the auspices of the archaeological discipline.⁵ The militarised landscape is also a culturally complex space according to archaeologist John Schofield, not least because of an ultimate agenda that may generate death in the landscape, whether through battlefield combat or as a result of long-range geopolitical warfare. He refers to this cultural imprint of militarism as a process which continues to transform and reconstitute itself within the landscape.

It includes the deliberate creation or manipulation of landscape, for the purposes of military use and occupation. It also includes what is sometimes referred to as relict cultural landscape, being those places that either retain traces of their military historic past (e.g. battlefields), or where the presence of

⁴ John Schofield, *Aftermath: Readings in the Archaeology of Recent Conflict*, (New York: Springer, 2011), 49. preface xvii. Schofield refers to the work of the late Henry Wills and Andrew Saunders preceding the development of interest over this decade, and the work of English Heritage and their focus on Military programmes, of which Schofield was the Head of Naval and Military Characterisation Team.

⁵ Schofield, *Aftermath*, 16.

military units has both preserved earlier cultural and natural heritage, as well as adding new layers in the form of military archaeological remains.⁶

Conflict archaeology, the term which will be used in this chapter, describes the study of the material culture of recent and contemporary conflict and warfare. Correspondingly, the scope of this field of research is as diverse as the scale of warfare in the twentieth and early twenty first century "...from entire landscapes whose personalities bear the traces of military activity or presence, to specific places – sites, structures, buildings, monuments – where events occurred or where soldiers sat, waiting for invasions that in some cases never came."⁷ Archaeologist John Carman, in his discussion of twentieth century battlefield sites, refers to this diversity and change in the nature of warfare of the twentieth century as a result of investment in new technologies which became evident towards the final months of the Second World War. Carman describes the move from former sites of traditional battlefield and hand-to-hand combat, to the stratospheric and subterranean penetration of space, sea and air. He identifies the activities of the Second World War as emblematic of the shifting emphasis of warfare in relation to the use of technologies and the changing nature of conflict.

The search for supremacy in the air; the airborne delivery of forces by land and sea; fighting in and for cities; amphibious landings; the military occupation of conquered territory; long-range aerial bombardment; Special Operations, resistance to occupation and espionage; and the deployment of secret weapons. The action of the war thus extended conceptually beyond the battlefield proper, to civilian populations and their governments, into the realms of science and technology, and the beginnings of computerdom, the infosphere and cyberspace...⁸

Carman states that this has established a pattern of 'postmodern war' which includes the duration and ending of the Cold War. This pattern corresponds to the

⁶ John Schofield, *Combat Archaeology: Matériel Culture and Modern Conflict* (London: Duckworth, 2005), 44.

⁷ John Schofield, William Gray Johnson and Colleen M. Beck, eds. *Matériel Culture: The Archaeology of Twentieth Century Conflict* (Oxon: Routledge, 2002), 4.

⁸ John Carman, "Twentieth-Century Battlefield Sites" in *Matériel Culture*, 12.

characteristics of twentieth century warfare – speed, technology and vision – as theorised by Paul Virilio. Virilio initially identified these features in *Bunker Archaeology*,⁹ his unique textual and photographic record of the Atlantic wall fortifications of the Normandy coast during the Second World War. As indicated, Virilio has written extensively on the logistics of the battlefield shifting to ‘the logistics of perception,’ and from the localised to the global through the influence of optical and communication technologies within the military-industrial complex of warfare. He speaks here of this move from earlier epochs to the twentieth century era of warfare and of the movement from the terrestrial to the aerial.

In fact, in the modern arsenal, everything moves faster and faster; differences between one means and another fade away. A homogenising process is under way in the contemporary military structure, even inside the three arms specifications: ground, sea and air are diminishing in the wake of an aeronautical coalescence, which clearly reduces the specificity of the land forces.¹⁰

The bunkers of the Atlantic Wall were being constructed at the same time as this technological unification of sea and air power was taking place. The practice of aerial reconnaissance that was begun in the First World War was advancing rapidly through these combined strategies of the Second World War, where radar and antiaircraft weapons were becoming instrumental in new ways of seeing “This integral visibility piercing through each and every obstacle made the space of this new warfare transparent, while time was reduced by systems of prediction and foresight.”¹¹ The punctuation of the landscape by the bunker form marking the limits of warfare across geographical terrain was already becoming obsolete, and was being superseded by increasingly stratospheric operations of flight and sight. The defensive tangibility of the bunker was already being surpassed by the air offensives taking place overhead, intangible networks of radar and the bombing manoeuvres of the Luftwaffe and Bomber Command crisscrossing over Europe. Linking the strands of aerial offensives,

⁹ Paul Virilio, *Bunker Archaeology*, trans. George Collins (New York: Princeton Architectural Press, 2008). Originally published for the exhibition *Bunker Archaeology*, Museum of Decorative Arts, Paris, from December 1975 to February 1976. the photographs were taken by Paul Virilio from 1958 to 1965.

¹⁰ Virilio, *Bunker Archaeology*, 18.

¹¹ Virilio, *Bunker Archaeology*, 31.

naval strategies, buried trenches and defensive casements erected along the periphery of 'Fortress Europe.' Virilio invokes the futility and obsolescence of the structures, through the materiality and metaphor of the military bunker.

3.2.2 Archaeological characterisation

Archaeologists Schofield and Jonson, speaking about the dynamic process of change and the shifting patterns of how landscape may be used and inhabited, and consequently of the need to retain what is useful from the past, refer to the role of characterisation:

Characterisation enables this dynamic process to occur, while recognising what matters from the past. It uses attributes such as field morphology, place names, boundary loss, historic environment and modern land-use data to create a geographical information system (GIS) based view of landscape.¹²

The characteristics of landscape impacted by historical factors such as industrialisation, agriculture or militarism can then be taken into account when considering any future changes, and management of change can be undertaken holistically and in a way that considers all relevant features.¹³ 'Characterisation,' in archaeological terms, begins with a broadly similar meaning to that which it has in common usage: an identification of all the elements that constitute the character of a particular place or situation, through an analysis of features that indicate previous or current functions and capacities. This information is then used for underpinning heritage policies regarding how the site in question should be either developed, conserved, or a combination of both for the future.¹⁴ In Ireland this is managed through 'The Heritage Council'¹⁵ working in partnership with local authorities and other agencies. In the United Kingdom this is managed through the statutory agency

¹² John Schofield and W.G. Jonson, "Archaeology, Heritage and the Recent and Contemporary Past," in *The Cambridge Companion to Historical Archaeology*, eds. Dan Hicks and Mary C. Beaudry (Cambridge: Cambridge University Press, 2006), 114.

¹³ Schofield, *Combat Archaeology*, 128.

¹⁴ Schofield and Jonson, "Archaeology, Heritage and the Recent and Contemporary Past" in *Historical Archaeology*, 115.

¹⁵ Other agencies include regional assemblies, tourism boards, semi-state agencies, cultural institutions, NGO's and international partners. <http://www.heritagecouncil.ie/home/> Accessed 18 March 2011.

of English Heritage, where the process may also include the 'scheduling' of sites that are considered to be of national, special or community-based value.¹⁶ Schofield illustrates the relationship between the broad schematic of characterisation and the specificity of the protection measures such as scheduling.

For example, while scheduling will provide protection for a control tower on an airfield, characterisation can ensure that planning decisions which may determine the future use of an abandoned airfield take the form of that airfield, its characteristics, its legacy and its impacts on the surrounding landscapes and community into account.¹⁷

From initial characterisation, there are a range of protection measures that can be taken, which are divided between: statutory, the designation of scheduling, listing and conservation areas; and non-statutory, which translates as inclusion on a register, protection through agri-environment plans, and management of change through the planning process.¹⁸ World Heritage sites are non-statutory, of which Auschwitz, Robben Island and Hiroshima are included as sites of conflict.¹⁹

3.2.3 Characterisation for sites of recent conflict

An example of how the process of archaeological characterisation for sites of recent conflict was undertaken for the Ground-launched cruise missiles Alert and Maintenance Area (GAMA) at Greenham Common, which resulted in the drafting of new criteria in order to register the iconic and international status of the military installation as the structures were comparatively recent in archaeological terms. Although the site is located in the United Kingdom and had been an airbase for the Royal Air Force (RAF) since the Second World War, the airbase was operated by, and under the control of the 501st Tactical Missile Wing, United States Air Force (USAF) from the arrival of Cruise missiles at the base on the 14 November 1983.²⁰ Greenham

¹⁶ 'Schedule' refers to the designation as a scheduled monument, under the terms of the 1979 Ancient Monuments and Archaeological Areas Act, UK Scheduling as a designation has a history dating back to 1882, when the first sites (all prehistoric and monumental) were added to the list or 'Schedule.'

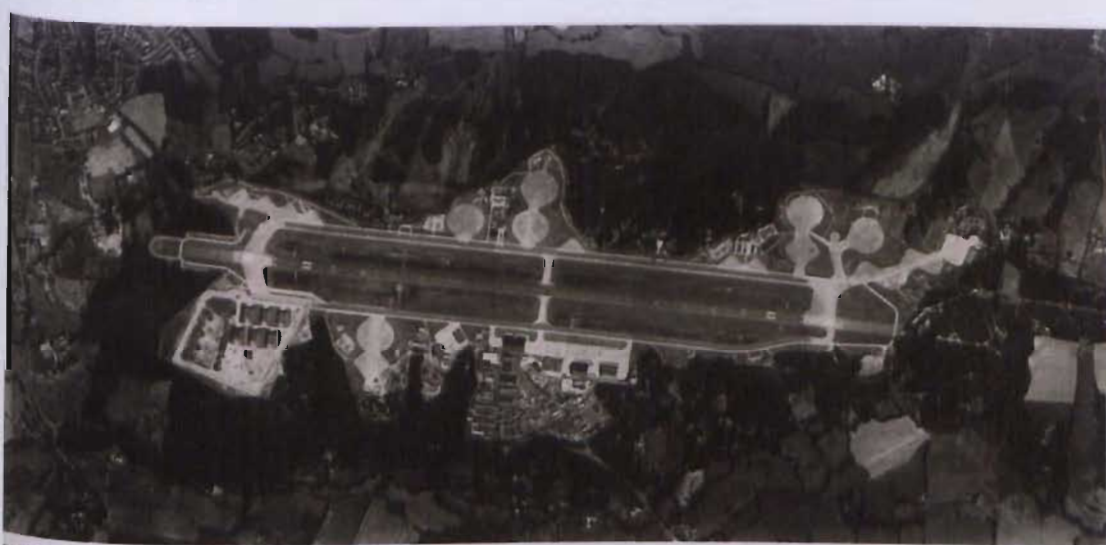
¹⁷ Schofield, *Combat Archaeology*, 129.

¹⁸ Ibid.

¹⁹ Ibid., 138.

²⁰ John Kippin, *Cold War Pastoral: Greenham Common* (London: Black Dog Publishing, 2001), 20

Common became a nationally and internationally contentious symbol of the Cold War, indicative of the aggressive nature of the relationship between the United States and the Soviet Union and, equally, a site of civic and feminist protest in the form of the Women's Peace Camp that became established outside the perimeter fences of the base.²¹ The Greenham Common site is in the county of Berkshire, England, and has a long military history of occupation, following requisition by the War Office in 1941 for use as an airfield in the Second World War. At the end of the war, the United States Air Force maintained and extended the use of the runway, which became the longest in Europe and consequently ideal for military aircraft (fig.3.1).²²



RAF Greenham Common

3.1 RAF Greenham Common. Photograph *Cold War Pastoral: Greenham Common*. London: Black Dog Publishing, 2001.

Following ratification of the Intermediate Nuclear Forces (INF) treaty in 1988, having been signed by Reagan for the United States and Gorbachev for the Soviet Union on the 8 December 1987, Cruise and Pershing nuclear missiles, amongst others, were effectively decommissioned from use. Although less than 4% of the global nuclear arsenal, it was a radical achievement and acknowledged that the Treaty signatories were aware "...that nuclear war would have devastating consequences for all

²¹ Sarah Hipperson "Women's Peace Camp 1981-2000" in *Cold War Pastoral*. The Womens' Peace Camp began on 5 September 1981 and remained for the next nineteen years, until 5 September 2000.

²² Woodward, *Military Geographies*, 138.

mankind.”²³ With the fall of the Berlin Wall on the 9 November 1989, the dismantling of the installations and ending of the Cold War was imminent. As part of this process the extensive Greenham Common site was returned by the United States Air Force (USAF) to the Ministry of Defence on the 11 September 1992, after five decades of operations on the site. By November 2011, the site had undergone a process of partial and ongoing redevelopment, through a combination of private, council and community trust stewardship and is now managed by the Greenham Common Trust.²⁴ The former Control Tower and the vast silos which operated as storage bunkers for Cruise missiles are material evidence of the escalation of nuclear capability during the 1980’s are protected structures, as a result of designation by English Heritage. The Control Tower on the former airbase was Grade II Listed on 13 January 2012²⁵ and previously the Cruise missile shelter complex was designated a Scheduled Monument on 3 March 2003.²⁶ The remains of the former airbase and missile shelters have been recognised as significant because of their iconic and significant architectural testament to Cold War policy, and not least because of the parallel history of civic and feminist resistance to such policies.²⁷ This was an acknowledgement of the dissonant history of the site, and of the value of incorporating the history of civic resistance to state preparedness for warfare that took place at the Greenham Common site.

According to Schofield, the assessment undertaken by archaeologists, under the auspices of English Heritage, of Greenham Common and other Cold War sites in England prompted a revision in the criteria used for archaeological assessment. Previously, the evaluation process was primarily undertaken for ancient and archaic structures, and was “rigorously applied through a system of numerical calculation, supported by the professional judgement of informed observers.”²⁸ Although this

²³ Ed Cooper “Swords and Ploughshares – The Transformation of Greenham Common” in *Cold War Pastoral*, 28.

²⁴ Greenham Common Trust <http://www.greenham-common-trust.co.uk/>

²⁵ Control Tower at former Greenham Common airbase, Listed Grade II, under the Planning (Listed Buildings and Conservation Areas) Act 1990.

<http://list.english-heritage.org.uk/resultsingle.aspx?uid=1403764>

²⁶ Cruise missile shelter complex Sceduled number I021040 under the Ancient Monuments and Archaeological Areas Act 1979. <http://list.english-heritage.org.uk/resultsingle.aspx?uid=1021040>

²⁷ Schofield, *Combat Archaeology*, 132.

²⁸ *Ibid.*, 120. Senior Archaeological Investigator Wayne Cocroft developed a typology and revised criteria for Cold War considerations in *Cold War Monuments: An Assessment by the Monuments*

process worked well for earlier remains, it was not considered adequate to evaluate the complex and diverse circumstances of the recent past. This was because of complications over attributing significance to sites that were so recent; "...when it came to assessing massively monumental and very recent remains, where technology and associations over long distances were more significant than for earlier sites and structures"²⁹ and was also due to the nature of the Greenham Common site itself, with its technological and international status. Schofield suggests that the assessment process that led to GAMA being recognised as a national monument was more reliant upon the "professional judgement of informed observers,"³⁰ itself an acknowledgement of the role of experience and interpretation as fundamental to developing an understanding of conflict within living memory.

Assessment of recent remains presents a different set of challenges, including a lack of definitive historical events and battles, such as were available in the Second World War, and the accelerated growth of new technologies, which were often obsolete before being appraised and understood, in this case the full potential of nuclear technology capability. There were also two major political and civic factors to be considered. The first of these was the involvement of the United Kingdom in the "post-war political alliances and changing political strategy,"³¹ so that although the site was no longer actively militarised, the political partners and stakeholders included the United States and the North Atlantic Treaty Organisation (NATO), and these were still ongoing international strategic partnerships. Secondly, there were the sociological and civic considerations in terms of the sensitivities and issues raised by the presence of the Greenham Common base, associated as it was with the rapidity of nuclear technology proliferation, and consequently the social impacts and fears for the potential of places designed to "develop, test, assemble and handle nuclear weapons, and to operate them within a post-nuclear attack environment..."³² Archaeologist Wayne Cocroft revised earlier criteria of significance to be applied to Cold War sites, under the headings of "Period, Rarity, Documentation, Group Value, Survival/condition, Diversity and Potential."³³ Cocroft's report also included a

Protection Programme (2001) that developed the 'statement of significance' and rationale for retaining GAMA as a scheduled monument.

²⁹ *Ibid.*, 122.

³⁰ *Ibid.*, 120.

³¹ *Ibid.*, 122.

³² *Ibid.*

³³ *Ibid.*, 124.

typology of Cold War monument classes, which identified thirty-one types of monument within the Greenham site and the field remains. These were divided between the phases of what was termed the First Cold War (1945-62), with its rearmament and building programme of 1950-62, and the Second Cold War (1980-89) which consolidated established bases, following a building programme in the 1970's.³⁴ In summary, the assessment process that retained the legacy of the GAMA site involved adapting and modifying existing criteria for characterisation that responded to the demands of contextualising contemporary sites of conflict, which included references to the importance of the protest movement, and to the potential value of other sources, such as oral narratives, for further study.

...Beyond its significance as an exemplar of the infrastructure of GLCM technology the GAMA complex had a wider significance as the centre of mass protest, especially by women's groups, against the nuclear arms race. The value of the USAF site is enhanced by surviving archive material held on-site, detailed unit histories preserved in the United States, and the potential for these to be supplemented by oral testimony. Complementary archive sources also exist relating to the women's peace camp.³⁵

This 'statement of significance' provided the rationale for scheduling that ranged from the political and strategic involvement of NATO in one of the 'key emblematic monuments' of the Cold War internationally, retaining the obsolete remains of some of the early 'first strike' ground launched cruise missiles (GLCM) as an instrumental reminder and "potent symbol of the positive power of arms control treaties to render advanced military technology obsolete."³⁶ Alongside the material culture of the technologies and architectures, the contemporary approach of historical archaeology is evident in the value placed on the 'statement of significance' and the evidence of archival testimonies and histories of both the military unit personnel and the Greenham Common protesters, the ephemera and culture of the Womens' Peace Camp, and the potential for further oral testimony.

³⁴ Wayne Cocroft and Roger Thomas, *The Cold War: Building for Nuclear Confrontation 1946-1989* (English Heritage, 2003)

³⁵ Excerpt from the statement of significance contained in the report by Cocroft (2001) quoted in

Schofield, *Combat Archaeology*, 126.

³⁶ Ibid.

3.2.4 Interpretation: conflict archaeology and arts practice

The comment "Today, we are all archaeologists,"³⁷ is a useful starting point for a discussion of crossdisciplinary approaches to the issues and understandings of recent conflict. The phrase is also referred to by the editors of *Re-mapping the Field: New Approaches in Conflict Archaeology* in order to highlight the range of researchers from "very different backgrounds and specialisms [who] are using archaeological methods and theory to examine material records of the recent past."³⁸ This diversity of approach in the field is indicated by the research backgrounds of the editors themselves, specialists in arts practice and history, archaeology, heritage and architecture.³⁹ In their introductory essay, "Reflexivity and Record: Re-mapping Conflict Archaeology," editors Purbrick, Schofield and Klausmeier, refer to the idea of "uncomfortable monuments"⁴⁰ as a common theme connecting the individual projects and situations discussed through the essays, and to the need for 'passionate advocates' in the development of new and tangential ways of making the conflicted landscape comprehensible.

If the original remnants and elements of contested sites are being preserved and interpreted in order to convey how painfully they cut through or intervene into society's civil life, they have to change to survive for the future. However, artistic as well as scientific approaches may complement one another to hopefully explain more about the full story of the site on the one hand and to open ideas and perspectives for the future treatment and interpretation on the other.⁴¹

³⁷ Mike Shanks, comment on the cover of C. Holtorf, "From Stonehenge to Las Vegas: archaeology as popular culture" (Atamira, 2005) quoted in Schofield, "Constructing Place: When Artists and Archaeologists Meet," in *Aftermath*, 185.

³⁸ Schofield, Klausmeier, Purbrick, "Reflexivity and Record: Re-mapping Conflict Archaeology" in *Re-Mapping the Field*, 6.

³⁹ Dr Louise Purbrick is Senior Lecturer in the History of Art and Design at the University of Brighton. Dr John Schofield is Director of Cultural Heritage Management MA Programme at the University of York, Department of Archaeology. Dr Axel Klausmeier is the Director of the Berlin Wall Foundation.

⁴⁰ Schofield, Klausmeier, Purbrick, "Reflexivity and Record: Re-mapping Conflict Archaeology" in *Re-Mapping the Field*, 5-8.

⁴¹ *Ibid.*, 8.

The evolution of conflict archaeology as a research topic is described by the editors as progressing from an earlier, literal recording of the geographical traces of a militarised landscape, to the current, more theorised position and deeper understanding of the defensive markings and remnants of conflict. This change in approach to the material culture and remnants of militarism has taken place through “an appreciation of their setting, the character of the area influenced by their presence, and crucially their meaning in geographic, political and social terms.”⁴² One of the causes in this change has been the consideration of a range of documentary sources, including the testimony of oral narratives, which are now much more prevalent within the discipline of contemporary archaeology, as we have seen. In the projects discussed in *Re-Mapping the Field*, there is a willingness to incorporate other interpretations of contentious issues in relation to conflict, as the challenges as presented require “more reflexive, more integrated and more thoughtful approaches.”⁴³ An example of such an approach to contentious sites from the collection will be discussed.

Another text that similarly considers the contribution of artists to the archaeological discourse around conflict is contained in the essay and e-book *Constructing Place: When Artists and Archaeologists Meet* by archaeologist John Schofield.⁴⁴ Here the argument is presented for the involvement of contemporary artists, particularly those using photography and film, as meaningful in the interpretation of dissonance and conflict. In both texts, the arguments are made for contemporary archaeology establishing a relationship with potentially valuable contributions from other disciplines such as arts practice, art history, and anthropology. Schofield’s argument is that the role and relationship of archaeology to the past can benefit from the incorporation of artistic interpretation “...to characterise, contextualise and interpret material records of the past – can usefully be expanded to include the contributions of artists.”⁴⁵ The argument is twofold, firstly based on the potential of a reciprocal relationship between arts practice and archaeology, in that arts practice may mirror aspects of archaeological practice, and secondly that the connection between arts and archaeological processes are derived from the broadening of historical archaeology to

⁴² Ibid., 5.

⁴³ Ibid., 5.

⁴⁴ John Schofield, *Constructing Place: When Artists and Archaeologists Meet* (Proboscis, Liquid Geography series, 2006) eBook available at www.diffusion.org.uk Accessed 16 May 2008.

⁴⁵ Ibid., 2.

actively investigate contemporary life “Even the processes overlap; archaeological fieldwork as performance and the similarities of ‘incavation’, intervention and excavation for example.”⁴⁶ As previously described, an awareness of the legacy and impacts of twentieth century warfare and the critical value of elements such as oral histories and marginalised, even contradictory, narratives have all been factors in the hybrid approach that incorporates methodologies from other disciplines into the archaeological realm. In *Constructing Place*, Schofield identifies a number of similar strands in this reciprocal relationship between arts and archaeological practices.

Art as an archaeological record, the idea that we create as well as consume material culture;

Archaeological investigation as performance;

Art as interpretation, as narrative, and as characterisation.⁴⁷

Whereas each approach has a distinct and related value, it is the functioning of ‘Art as interpretation, as narrative, and as characterisation’ that is of primary interest to my argument, with ‘Art as an archaeological record, the idea that we create as well as consume material culture’ as a secondary concern. Each of these strands will be examined individually through two arts projects exploring the archaeology of former Cold War installations: the first, *Cold War Pastoral* (2001) as an example of ‘Art as interpretation, as narrative, and as characterisation,’ and the second, artist Angus Boulton’s film *Stolzenhain* (2004) illustrates the approach of ‘Art as an archaeological record, the idea that we create as well as consume material culture.’

Cold War Pastoral is a photographic project by artist John Kippen that was commissioned in order to document the site of the former Greenham Common airbase soon after the camp finally closed in 2000, and before redevelopment plans were underway. Exhibited as *S.S.S.I Greenham Common* (Site of Special Scientific Interest) at the Imperial War Museum, 2001 the project included the publication *Cold War Pastoral*, a series of editioned posters and a site specific installation in Building

⁴⁶ Ibid.

⁴⁷ Ibid., 3.

150, Greenham Common, April 2001.⁴⁸ Artist Angus Boulton's video, *Stolzenhain*, was filmed in a former East German military bunker storage facility for nuclear warheads and has been shown at the Whitechapel Gallery, London, July 2004, at Blau – Zimmer für Kunst, Hamburg, October 2004, and as part of the 'Memory, Film and War' season at the Imperial War Museum, London, September 2005.⁴⁹ *Stolzenhain* will be discussed not solely in the filmic context, but also with reference to the essay by Boulton as part of the *Re-Mapping the Field* collection, in which he speaks about the creation of the archaeological record as part of the motivation for the project.

3.2.5 Kippin: 'Cold War Pastoral'

In the intervening period between active military service and the drawdown and closure of the decommissioned site, there have been a number of artistic responses to the militarisation of this particular landscape. Of these, the installation *GAMMA*, a four screen video projection, with still photographs and sculptures by artists Jane and Louise Wilson,⁵⁰ and *Cold War Pastoral/ S.S.S.I Greenham Common*, by artist John Kippin are amongst the best known. John Kippin's artist residency at Greenham Common airbase was commissioned by the owners of the site, West Berkshire Council, in partnership with the Imperial War Museum, at the time of military withdrawal.⁵¹ The work is relevant to this argument because of the characterisation of this iconic landscape through a visual and textual documentation of both its emblematic and overlooked features; its creation of a new narrative of critique that addresses militarism and its apotheosis, civic protest; and the interpretation of these features through arts practice. *Cold War Pastoral* addresses both the material remains of the military functions of the site, the storage and preparedness for launching of nuclear warheads,⁵² and the adjacent traces of nineteen years of civic and feminist protest in the activities of the Women's' Peace Camp. As such, the project is a strong

⁴⁸ "Biography Professor John Kippin" <http://www.sunderland.ac.uk/faculties/adm/research/artanddesign/researchstaff/profjohnkippin/> Accessed 11 August 2011.

⁴⁹ *Stolzenhain*, DV film, colour, 14 mins. 2004. <http://www.angusboulton.net/film-screenings/> Accessed 28 February 2012.

⁵⁰ First shown at the Lisson Gallery, February 18 – April 01 1999. <http://www.lissongallery.com/>

⁵¹ Funded by The Arts Council of England, National Touring programme. <http://www.artpoint.org.uk>

⁵² John Kippin, *Cold War Pastoral*, 19. On 12 December 1979 a secret committee meeting at NATO headquarters the decision was made to site 96 nuclear ground launched Cruise missiles on Greenham Common. Each of the missiles would carry a nuclear warhead, with the equivalent explosive power of 16 Hiroshima bombs.

example of the value of arts practice in the contextualisation of the militarised landscape of this iconic place that had assumed almost mythic proportions in the public imagination, and of an approach that resonates with the concerns of contemporary archaeology when dealing with contested landscape.

Much of the credit for putting and keeping the issue of nuclear warhead storage in the public arena was due to the activities of the Womens' Peace Camp, an example of which is described here by author Sarah Hipperson.

On 12 December 1982, the third anniversary of the NATO decision, 30,000 women, linking hands, encircled the base – the picture of this powerful action was relayed around the world. Women from every corner of the globe, either visited or sent messages in support of the Peace Camp. The women from the Camp were interviewed by the world's media and called upon to speak at national and international conferences and gatherings.⁵³

The archaeological characterisation that produced the aforementioned 'statement of significance' and the scheduling of the control tower and missile silos, was a process that recognised the value of retaining material traces that marked the significance of the remains of conflict. This recognition was amplified by the approach of the arts project *Cold War Pastoral*, through a presentation of public exhibitions, site-specific installation, poster and publication. In the transition from secured military airbase to accessible lowland heath, the site was researched over the course of a year as an historic and politicised landscape by John Kippin during his time as the artist in residence in 1998/99. The artist's photographic works visually evoke the pictorial conventions of the landscape genre in order to critique contemporary civic and social issues. Kippin also developed two posters, one to publicise the exhibition and related events, and which included public presentations at the Common and in the nearby town of Newbury, and the other an editioned poster as a public art work that commemorated the public opening of Greenham Common in 2001. In 2005 the exhibition was shown at the Side Gallery in Newcastle upon Tyne. The publication *Cold War Pastoral* was published in 2001, and integrated the photographic narrative

⁵³ Sarah Hipperson, "Womens' Peace Camp 1981 – 2000" in *Cold War Pastoral*, 21.

of artist John Kippin with critical texts by authors Liz Wells, "Paradoxes of the Pastoral," Mark Durden, "Post Cold War Landscape: An Elegaic Documentary," Sarah Hipperson, "Womens' Peace Camp 1981 – 2001," and Ed Cooper, "Swords and Ploughshares: The Transformation of Greenham Common." Kippin describes the publication as a complete 'work of photography' weaving together both the textual and visual photographic contributions, "designed to engage with debates around landscape, our ideological identification with it, the ethical position of a civilisation possessing nuclear weapons, and the pastoral."⁵⁴ The essays discuss elements and implications of the work and its references within the exhibition. Author Sarah Hipperson's text provides an overview of the nineteen years of the existence of the Womens' Peace Camp from 1981-2000. Ed Cooper's essay prefaces Kippin's photographic series of de-peopled and defunct militarised structures, set alongside the ephemera of the Peace Camp and the remnants of civil protest. In his commentary on the visibility and presence of the installation at Greenham, Cooper describes the landscape as punctuated by the redundant airbase Control Tower and the vast, squat and grass covered structures of the silos in the GAMA area used to house the articulated trucks carrying the warheads. He notes that despite the high security measures previously in place, which included three layers of military fencing topped with razor wire, patrolled by dogs and overseen by armed guards in towers, the women still managed to break through, notably to dance on top of one of the silos at dawn on the 1 January 1983.⁵⁵

What is particularly striking about GAMA is its scale and visibility given that basically the silos are garages. The Cruise missiles could have been hidden away anywhere on obscure airbases and army depots throughout the country – perhaps they were. Greenham is a statement of intent; the longest runway in Europe manned by 2,000 Americans, six huge silos, 96 Cruise missiles...⁵⁶

In John Kippin's photo-essay that documents these redundant structures, the specificity of this 'statement of intent' has been revoked and instead the ubiquity of

⁵⁴ "Biography Professor John Kippin"

<http://www.sunderland.ac.uk/faculties/adm/research/artanddesign/researchstaff/profjohnkippin/>

Accessed 23 November 2010.

⁵⁵ Ed Cooper, "Swords and Ploughshares: The Transformation of Greenham Common" in *Cold War*

Pastoral, 16.

⁵⁶ *Ibid.*

'military geographies' is more subtly suggested. The former deployment of visibility of the airbase, the overt presence as a means of stating a defensive intent, has been withdrawn. Captured at a time of transition, the aestheticism of the images resonates with a sense of the sublime and the arcadian. As noted by Mark Durden in his observation on the work "*Cold War Pastoral* makes an elegy and pastoral out of the remains of the former US air base at Greenham. But of course there is nothing to lament amidst such remains."⁵⁷ The complexities of this landscape are mirrored in the visual clues and aesthetic compositions within the work, where Kippin has layered motifs of the pastoral amongst the references to the potential for lethal force. In images of the most potentially destructive and iconic installations, those of the storage silos and the control tower, the panoramic landscape view is presented as a triptych, and the enigmatic, sequential images are visually ordered according to the aesthetics of the landscape genre.



3.2 John Kippin, 'VIII' *Cold War Pastoral* (2001) colour photograph/tripdtych

⁵⁷ Mark Durden, "Post Cold War Landscape: An Elegiac Documentary" in *Cold War Pastoral*, 111.

approximately 50 x 60 inches (detail).

In 'VIII' *Cold War Pastoral* the work is composed of three images of individual empty silos, of which there are six structures in total set into the landscape. The large, low, grassed mounds, initially oblique and hillock-like, can be seen to be symmetrically built rather than organically formed. A dark area of entranceway is centrally positioned in each mound and foregrounded by grassland and patches of close-up, out of focus purple blooms. An expansive blue sky with scudding clouds is an antithesis to the suggestion of the alternative, that of a mushroom clouded, nuclear sky. According to Mark Durden, the English pastoral aesthetic and its instrumentality in the relationship between war and landscape, a patriotic feature of both World Wars, is being both evoked and troubled by Kippin's images of Greenham. As Durden observes "The dialectic nature of this work is the result of cumulative relations set up between the pictures in series, the tensions and oppositions set up between the remains of the US military base and the richness of the pastoral setting."⁵⁸ It is these tensions and oppositions that are visualised in the triptych series as described. The images have been created from photographic shots that are distanced, almost wary, and taken from a vantage point well below eye level, almost at ground level. One could speculate that it is a viewpoint that might have been familiar to a protester when the camp was active, and that Kippin is representing, almost literally, an alternative perspective, a visual viewpoint that incorporates critique through civic protest. Other images by Kippin show the symbolic and personal effects attached to the remaining perimeter fence, and the ephemera of the Women's Peace Camp as a testament to non-violent protest, as described by Durden, (fig.3.3)

⁵⁸ *Ibid.*, 112.



3.3 John Kippin, 'XXXI' *Cold War Pastoral* (2001) colour photograph, approximately 50 x 60 inches.

The last image in the series shows red carnations placed against a padlocked gate of the perimeter fence. It is hard not to see the picture as a point of closure. The floral tribute seems to function as a token of remembrance, and to underline the memorialising aspect of Kippin's whole project, to reinstate the irrevocable pastness of his documentary, that we are looking back at something.⁵⁹

However, Durden cautions against looking back from the assumed safety of a post Cold War context, as militarisation continues apace. As real or perceived threats recede, so others advance. As the escalation of a global nuclear arms race diminishes, so the ongoing 'war against terror' continues in Afghanistan and Iraq. The landscape and its elements are deliberately to the fore in these collections of images. And not just the landscape and the remnants of militarisation and opposition within it, but 'nature' as a redemptive and regenerative force that is already beginning to erode the signifiers of lethal force. This is surely the impetus evident in Kippin's images. In

⁵⁹ *Ibid.*, 114.

their lyrical and transcendent composition set within the tradition of landscape representation, they are essentially a caution against forgetting, a visual reminder of the appropriating power of the military imaginary.

In a sense one can say nothing happened in the spaces Kippin pictured. They remained potential scenes of the crime of genocidal destruction. But in another sense, Kippin's documents draw attention to the occupation of English land by the U.S. military and the location of the nuclear missiles there.⁶⁰

The idea that 'In a sense one can say nothing happened in the spaces...' is key to the evidence that can be drawn from the *Cold War Pastoral* re-imagining/re-imagining of the contested space of Greenham Common. Overall, the project attempts to balance the tangible and the intangible, the materiality of militarism and of protest, giving them equal weight in terms of how the context may be more fully understood as a legacy of conflict, and the overarching potential for nuclear destruction and the fear and suspicion this generated. Environmental psychologist David Uzzell introduced the term 'hot interpretation' in 1988 as a recognition of the emotional and experiential effects of heritage sites of contestation or dissonance on visitors, and subsequently on the overall context of interpretation of such sites. Although the most established forms of analysis emphasise the objective and the dispassionate, an awareness of the role of emotional response and subjectivity, he maintained, should also form part of the totality of interpretation in dealing with dissonant heritage. In their essay "Heritage that Hurts: Interpretation in a Postmodern World," Uzzell and Ballantyne consider the Cold War as an example of a conflict situation that is particularly affected by the idea of abstraction "...suggesting that the relationship between time and emotional distance is not necessarily linear or negatively correlated."⁶¹ Amongst the other factors discussed by the authors that make the Cold War a particular challenge to interpretation, is a sense of "placelessness" which unlike previous wars was not linked to a battlefield site but was "everywhere and nowhere" simultaneously.⁶² The Cold War was a clash of ideologies and propaganda battles, rather than actual conflicts, and

⁶⁰ Mark Dyrden, *Cold War Pastoral*, "Post Cold War Landscape: An Elegiac Documentary," 113.

⁶¹ David Uzzell and Roy Ballantyne, "Heritage that Hurts: Interpretation in a Postmodern World" in *Contemporary Issues in Heritage & Environmental Interpretation*, eds. David Uzzell and Roy Ballantyne (London: The Stationery Office, 1998), 161.

⁶² *Ibid.*

it was characterised by being both “highly public and highly secret.”⁶³ Speaking about an approach to the interpretation of the Cold War, and how it presents a challenge to more conventional means of battlefield commemoration, the authors’ state the following:

Cold War sites are different from other war sites inasmuch as they are often not the scenes of actual conflict and death. Their importance and value lie in what they represent and what could have been.⁶⁴

This is the value in the work of *Cold War Pastoral* and its imaginative engagement with the tangible and intangible remains, and there are a number of points that can be made in conclusion. Firstly, the project has, through image, text and discourse, created another narrative for this landscape, preceding and anticipating the civic and social transformation that continues at the site of the Common. By creating a document that considered the traces and archaeologies of both militarism and opposition, *Cold War Pastoral* is proposing both a positive and cautious looking forward, and a refusal to forget in looking back. In this sense the project adds another layer to the public and archaeological record, contributing through arts practice and research to the specificity of this site in particular, and to the interpretation of militarised landscape in a broader context. The value of this approach is referred to in *Change and Creation: Historic Landscape Character 1950 – 2000* the document produced by English Heritage previously referred to, which considers the changing British landscape of the late 20th century.

The study of the very recent past also provides the opportunity for dialogue with a particularly broad range of disciplines, such as archaeology, modern history, geography, anthropology, planning, sociology, the visual arts, design and literature. An aim of the Change and Creation programme is to enlist their perspectives and innovative techniques.⁶⁵

⁶³ Ibid.

⁶⁴ Ibid.

⁶⁵ A. Bradley, V. Buchli, G. Fairclough, D. Hicks, J. Miller and J. Schofield, *Change and Creation: Historic Landscape Character 1950 – 2000* (London: English Heritage, 2004), 5.

www.changeandcreation.org

Ongoing regeneration of the Common's site, even with some of the former installations protected by archaeological scheduling and listing, means that the particular character of the site and its international role in the nuclear arms race, and later, in nuclear disarmament, will be significantly and materially reduced. *Cold War Pastoral* will continue to exist as a document of record and legacy, and importantly, as a 'passionate advocate for uncomfortable monuments.' In terms of the value of incorporating arts practice into the research approaches of conflict archaeology, in this case referring to artists addressing the Cold War and the Greenham Common airbase specifically, Schofield refers to how the arts outcomes contribute to an understanding of these sites "These studies provide an interpretation of the former airbase, a characterisation, and a record of its transformation."⁶⁶ In his publication *Combat Archaeology*, he continues this theme of connection and interaction between contemporary art and militarised sites.

...both contemporary wall art and later representations of the Cold War, inspired by front-line bases, demonstrate the link between experience and imaginative response in a way that other sources cannot achieve. In transforming the redundant spaces of Cold War military bases, art can usefully create a dialogue between the past and the present. It can also serve as an eloquent expression of opposing views, between East and West, military and political authorities and the peace movement. Artistic representation can also play a significant role in increasing public understanding of the physical remains of war.⁶⁷

In summary, there are a number of areas of arts practice identified by Schofield as potentially contributing to archaeological practice: a transformative arts process may connect past and present, opposition and contradiction can be expressed in an unrestricted way, and that the modes of artwork and exhibition can benefit public understanding of conflicted places. From an archaeological standpoint an arts project such as *Cold War Pastoral*, for example, creates a new narrative that connects temporalities, acknowledges difference, and develops public awareness, illustrating the benefits of shared interdisciplinary research pathways.

⁶⁶ Schofield, *Constructing Place*, 17.

⁶⁷ Schofield, *Combat Archaeology*, 79.

3.2.6 Boulton: 'Stolzenhain'

The artist Angus Boulton has created a film entitled *Stolzenhain* (2004), shot on location at a redundant Cold War military installation in the former East Germany which develops the artist's earlier interests in former Soviet and British military bases.⁶⁸ Also of interest to the argument is the essay by Boulton entitled "Film making and photography as record and interpretation" in which he examines and reflects on his motives, practices and conclusions in undertaking the work of *Stolzenhain*. *Stolzenhain* is an example of an artwork which, similarly to *Cold War Pastoral*, was an act of witness to the transitional aftermath at the ending of the Cold War. This ending can be viewed from the standpoint of history as a particular schism in the re-ordering of national borders and ideas of common nationhood, and one which heralded tremendous changes across the political and geographic landscape of Europe particularly, and for international relationships on a global scale. The aftermath of the Cold War is a period of significant interest to the editors of *Re-Mapping the Field*, in its potential to combine documentation with artistic interpretation and a social dimension. And as Schofield's contention that 'experience and imaginative response' creates a particular connection between the artist and the military space, here the editors of *Re-Mapping the Field* note Boulton's contribution to this particular aspect of conflict archaeology;

But we come closest to experiencing the place perhaps in Boulton's study of *Stolzenhain*. His chapter describes the particular perspective he brings to the site as an artist, photographer and film-maker – in watching Boulton's films, and viewing his images, you are there, with him and with *them*, in a way no other record can achieve.⁶⁹

Stolzenhain is a former military East German bunker facility used for the storage of nuclear warheads, which the artist first became aware of whilst living in Berlin in the

⁶⁸ Other projects have included *41 Gymnasia*, photographic series of 41 Soviet Gymnasia, Brandenburg, Germany, 1998 – 2009. *0/25*, a HDV colour film of typhoon squadrons, RAF Coningsby, Lincolnshire, 2010 and *A Soviet Legacy*, a photographic series of former Soviet bases, bunkers and military installations 1998 – 2000. <http://www.angusboulton.net/> Accessed 20 February 2010.

⁶⁹ Schofield, Klausmeier, Purbrick, "Reflexivity and Record: Re-mapping Conflict Archaeology" in *Re-Mapping the Field*, 6.

1990's. Not easily accessible, it was not until 2003 during a residency at another location not far from Stolzenhain, that Boulton was in a position to gain permission and access to the bunker complex. The installation was originally built during the 1960's and located deep in the woods of Hartmannsdorfer Heide, some 80km south of Berlin, and includes a sister facility near Lychen in northern Brandenburg. Each installation was overseen by KGB troops, as part of the comprehensive Soviet defence system, and typified the "atmosphere of cooperation with the East German forces."⁷⁰ These installations were atypical in relation to their size and storage of nuclear warheads, as this was more usually reserved for larger facilities which were more easily defended, and Stolzenhain was built "with a rectangular bunker 'zone' measuring approximately 500 metres wide and 700 metres in length, set within a wider fenced area of just over a square kilometre."⁷¹ Nonetheless, although unseen by the West, the bunker was calculated to be able to store up to 400 FROG type warheads ('free range over ground') each up to 1.5 kilos in size. Consequently, Boulton states, the 'special nature' of the installation and its functions was reflected in the labyrinthine of camouflaged trenches (fig.3.7), pillbox observation posts (figs.3.4 & 3.6), sunken vehicle stands, fenced compounds and entrance gates, protected by an electric fence and sand patrol strip (fig.3.5), historically reminiscent of First World War defences.

⁷⁰ Angus Boulton, "Film Making and Photography as Record and Interpretation" in *Re-Mapping the Field*, 35.

⁷¹ *Ibid.*



3.4 Angus Boulton, 'Pillbox Observation Tower' *Stolzenhain* (2004). DV film, colour, 14 minutes. Courtesy of the artist.



3.5 Angus Boulton, 'Camouflage wall electric fence' *Stolzenhain* (2004). DV film, colour, 14 minutes. Courtesy of the artist.



3.6 Angus Boulton, 'Northern pillbox sightline' *Stolzenhain* (2004). DV film, colour, 14 minutes. Courtesy of the artist.



3.7 Angus Boulton, 'Northwest access trench' *Stolzenhain* (2004). DV film, colour, 14 minutes. Courtesy of the artist.

This network protected the inner bunker area, where any vehicles entering were electronically monitored from Moscow.⁷² Following the fall of the Berlin Wall in 1989, and after being first stripped of all evidence of its operations by the KGB, Stolzenhain was relinquished to the West German authorities on Christmas day 1990.⁷³ In reflecting on his approach to a filmic and photographic study of the bunker facility as an 'interpretation as an example of artistic practice' Boulton continues:

...it is hoped that various insights might be gained into an alternative method of approaching this subject matter. The discussion hopes to illustrate the relative freedom an artist can draw on to make an interpretation, and will reflect on some of the questions and problems this raises.⁷⁴

As such, Boulton's reflective essay on his work makes explicit the potential contribution of artists and arts practice to a historicised and archaeological field of interpretation and situates it alongside a series of similar activities "While a wider appraisal of the numerous projects that artists have created is reviewed elsewhere,"⁷⁵ his aim was to construct a "survey of recent archaeology, a commentary on the art of building for protection,"⁷⁶ whilst producing an artwork that can be viewed as "both an historical document and a contemporary interpretation."⁷⁷ Speaking of his recurring theme of 'trace' as indicative of human activity and as a link between past and present, and on the use of repetition as an optical frame around the formal and symmetrical images within the film, Boulton describes his use of photography and film as instrumental in his aim to "interpret aspects of recent history, memory, and a sense of place."⁷⁸ His selection of particular scenes and vistas was made in order to echo a "relationship between time halted and continuous time..."⁷⁹ in which the contrasting temporalities of the place were correspondingly evoked in the tension

⁷² Ibid., 36.

⁷³ Ibid.

⁷⁴ Ibid., 35.

⁷⁵ Boulton is referring here to John Schofield's essay on the contribution of artists to contemporary conflict interpretation in *Constructing Place: When Artists and Archaeologists Meet*, as discussed.

⁷⁶ Angus Boulton, "Film Making and Photography as Record and Interpretation," in *Re-Mapping the Field*, 37.

⁷⁷ Ibid.

⁷⁸ Ibid., 36.

⁷⁹ Ibid., 37.

between filmic stasis and movement, which he achieved by alternating still imagery and panning sequences.

The artist's own experience in making a circuitous journey on his bicycle through a number of perimeter fences in the surrounding forest informed his methodology in the subsequent making of the film. The experience reversed his usual working method, which is to first consider the interior, whilst *Stolzenhain* begins with the external landscape around the installation, concentrating on the "...visual archaeology of the landscape, beginning on the outer margins and moving gradually inwards, and finally entering the bunker as a means of explanation."⁸⁰ His intention was to transmit this experience to the audience, in that a sense of the strangeness of the disrupted landscape he had encountered initially whilst walking in the woods, was expressed in filmic terms. Boulton's reflections on his artwork as a historicised record with contemporary relevance link to the contention that art and archaeology have a connected research methodology, and that trans-disciplinary findings are particularly relevant in the understanding of conflicted landscape. The artist's deliberate use of time as a medium, in paused and moving frames, facilitated an active engagement with the archaeology of past events as part of a continuum with the present. Boulton's concluding remarks on the value of artistic interpretation and "projects that employ alternative methodologies and are undertaken from a somewhat oblique and often unforeseen standpoint"⁸¹ resonate with the aims of the authors of *Re-mapping the Field*, in discussing approaches that put significant and 'uncomfortable monuments' of past conflicts in the public context and domain.

3.2.7 Conclusions

Through these examples it has been shown that contemporary arts practice and the archaeology of the recent past, share similar strands of interest and areas of research in the development of a more nuanced understanding of twentieth and twenty-first century conflict. This has been shown through examples of archaeological characterisation and artistic interpretation of the materiality of the Cold War. The ending of this 'conflict' was emblematic of a particular global shift, from the end of

⁸⁰ Ibid.

⁸¹ Ibid., 38

an epoch of enforced borders and maintained nations, to the beginning of an era of international upheaval and national re-ordering. Both John Kippin and Angus Boulton have employed particular visual strategies that can be discerned in the images of the projects *Cold War Pastoral* and *Stolzenhain* respectively. In Kippin's adherence to the landscape convention of the English pastoral as an entry point for the viewer, his visual rupturing of the view is all the more effective in his subtle altering of the traditional viewpoint. In 'VIII' *Cold War Pastoral* as discussed, this strategy of disturbance is revealed in the image by the position through which the photograph has been taken, and the subsequent placing of the image in relation to the viewer. The decommissioned silos have been photographed from a low, horizontal rather than an eye-level, vertical stance, which positions the viewer of the bunker in the landscape in a similar place to the former protesters at the base -- waiting, watching and staying close to the land they were living upon as inhabitants of the peace camp. Kippin's visual strategy appears to reconfigure the placing of the viewer alongside that of the protestor, so that we are not only looking at the redundancy of a former nuclear storage facility, but witnessing the material potential for genocide as an integral, aesthetic element of the contemporary English countryside.

In Boulton's films stills from *Stolzenhain*, the pastoral aesthetic is not the one invoked; rather the serried rows of trees in the forest are suggestive of the tales of Grimm and Anderson, an ancient European fable retold, of being lost in the woods and coming across the unexpected. Although the sites chosen for investigation by each artist are present in the landscape for the same reasons - the storage of nuclear warheads - in Boulton's imaging in the aftermath of military withdrawal the impression is of secrecy and the invisible, the design of concealment and the integration of such structures within the terrain itself. There is no evidence of protestation here. The simplicity of titling in Fig. 3.5, 'Camouflage wall electric fence' where concrete and wire seem almost an indivisible part of the undergrowth, make explicit a zero tolerance of civilian transgression. Boulton's visual strategies invert the artist's usual working methods of beginning with the interior, and instead the film re-stages his external, circuitous mapping of the landscape in gradual movements inwards towards the installation itself. These strategies, which focus on the defensive measures in the land around the storage facility, problematise any assumptions of this landscape as a 'natural,' remote and unmediated place. As visual

images, they perhaps even make visible the imagined fears and fables of Germanic mythology, where danger is camouflaged and sunken in subterranean spaces. The casual naturalism of 'Northwest access trench' in Fig. 3.7, where autumn leaves and strewn branches, together with the upright tree forms, present an aesthetically effective composition, are ranged around a deep, central trench of decidedly 'unnatural' depth and symmetry in the centre of the image.

The argument that the empirical origins and institutional use of photography is a characteristic which may be challenged and transformed through the discourses and practices of aesthetic and artistic concerns, has been directly addressed by the work of *Cold War Pastoral* and *Stolzenhain*. In both examples, in the reverse appropriation position of the protestor presented through Kippin's low-level, ideologically and visually distanced viewpoint of the silos, and in Boulton's subversive circumnavigation of the formerly fortified landscape, the visual strategies of the artists are enabled by their use of photography as a critical lens through which to view and witness such developments. This will be continued through further discussion of the work of artists using photography in this chapter, and developed in an analysis of the visual strategies of my research practice in the following chapter.

The contribution of archaeologists, through assessment of the historic nature of the installations at Greenham Common, stand as public record and part of the fabric of preservation and development as the landscape continues to evolve. The contribution of artists to the archaeology and narrative of this landscape similarly exists in the public domain, reflecting a considered, socially engaged and interpretative approach. These complementary practices, I would argue, illuminate different and related aspects of contemporary conflict, and essentially advocate a deeper, more nuanced epistemological approach to the mainstream narratives of either political history or mediated events. These examples have been discussed also, significantly, as reflecting a view amongst some contemporary archaeologists that acknowledges and promotes the involvement of artists as part of an interdisciplinary approach to methodologies and sources when exploring sites and situations of recent conflict. This inclusion has been developed institutionally and is included on a number of projects under the auspices of English Heritage's 'Contemporary Art for Historic Places

Programme,' for example.⁸² This reflects the willingness for the interdisciplinary study of contemporary conflict, as in the previous statement from *Change and Creation*, where the involvement of artists is in order to "...enlist their perspectives and innovative techniques."⁸³ Although artists and archaeologists have traditionally explored many broad mutual areas of interest, it seems that the study of recent conflict specifically, has much to gain from collaborations involving a 'characterisation and interpretation' approach between practitioners of each discipline.

3.3 Artistic Landscape

3.3.1 Introduction

The artists and projects discussed thus far have made the archaeological explicit within their practice in some way, either through being referenced by archaeologists as exemplifying related issues 'Art as archaeological record, Art as narrative and interpretation' or by inclusion on interdisciplinary teams, or both. In selecting the artists and artworks that will be discussed next, however, the rationale, as detailed in the introduction to this chapter, was to research and present examples in which the potential meaning of 'conflict' and 'landscape' is diversified and troubled by the practices of artists whose work raises questions about the nature and spectrum of political invisibility, and how this is made discursive and brought into the public forum through exhibition and other practices. As in the critical geography discourse of Rachel Woodward, where one of the key issues of militarism and its geographies lies in the global ubiquity of landscapes maintained in preparedness for conflict, rather than in any active theatre of war, the issues of concern to the selected artists have produced implicit, oblique and diverse representations of conflicted landscape.

⁸² English Heritage programmes for contemporary art are located at Berwick Gymnasium and Belsay Hall, Gardens and Castle. The Gymnasium Fellowship programme began in 1993, and is awarded annually to selected professional artists, inviting them to respond to the site and context of the building in this Borders location. Belsay Hall, Castle and Gardens have hosted over a decade of projects from artists and designers responding to the 19 century Hall and 14 century Castle, and including the grade one listed gardens. <http://www.english-heritage.org.uk/discover/people-and-places/contemporary-arts/>

⁸³ A. Bradley, V. Buchli, G. Fairclough, D. Hicks, J. Miller and J. Schofield, *Change and Creation: Historic Landscape Character 1950 – 2000* (London: English Heritage, 2004), 5.
www.changeandcreation.org

As noted in the concluding remarks of the previous section, key to the selection has been the way that the artists use photography in their practice and representations of conflict, and in this way my selection is tangential to the mainstream traditions of photography and war, specifically to the tradition and legacy of photo-journalism and documentary war photography. Common to each of the artists is a concern with the specificity of landscape as integral to the conflict that is being explored. These concerns are not with the immediacy of conflict or the point of violent death or destruction, but rather with situations, for example, that explore an aftermath of violence, the military potential for ceaseless surveillance, and the unnerving ordinariness of an everyday war. In each, there is a particular relationship to time, the core subject matter of archaeology, and to the specificity of place and the material record of conflict. Within this commonality, however, the representations of the artists and the landscapes they consider are quite distinct, and the work of each artist reflects the 'landscape genre' and its contemporary expression through photography. It is my argument that photography, in its fusion of expressive subjectivity with optical technology, is fundamental to these images and what they reveal, in a way that would not be possible in any other medium. This relationship between landscape-conflict-photography in each of the artists' work, I hope to show, is predicated on the dimensions of conflict rendered visible and invisible within each landscape, and how this is represented within the artwork.

Trevor Paglen (1974) is an American artist and geographer who maps the current and ongoing military operations taking place in the American west where he geographically situates his work and conceptually connects with the legacy of the nineteenth century photographic pioneers. Making direct reference to the work of O'Sullivan and Muybridge, Paglen has commented that his own work in photographs, texts, collaborative teamwork and onsite research, is yet another 'iteration' of these early photographic practices. The artist has re-appropriated the tradition of geographical mapping in the area through the use of visual techniques that originated with the survey expeditions of the nineteenth century photographers, and which has culminated in extraterrestrial surveillance by military and reconnaissance satellites, at the behest of governmental interests in both centuries. A diametric difference, however, is that Paglen is working as an independent artist, and his works are a critical commentary on aspects of militarism and the covert activities undertaken by

the United States military authorities in the region, so his work is pioneering in a radically different spirit from the state commissioned photographers of the nineteenth century.

David Farrell (1961) is an Irish artist based in Dublin who has created a series of photographic images that explore notions of landscape and time, often including a pattern of revisiting and re-imaging previous sites. Farrell has created a sequence of images that address a particular aspect of the period of 'the Troubles' in Northern Ireland⁸⁴ and which pictorially trace and map a complex topographical and political situation involving denial and invisibility, continuing to acknowledgement and apology. Although the images and the situation that they explore are resistant to a final dis/closure, the photographic process charts the human scale of these political ambiguities and tensions within the rural Irish landscape. In the work of this artist the archaeologies of conflict are here traced in relation to very particular circumstances and individuals, and the visual representations mirror an actual process of geographical search and excavation.

Willie Doherty (1959) is a Northern Irish artist who has produced a substantial body of work as photographic and filmic representations of a conflicted and post-conflict environment, centred to a large extent on his home town of Derry, Northern Ireland. Doherty's themes offer a social and political exploration of landscape and memory, and critique media representations and treatment of conflict through concerns with language and use of photography. His work presents ambiguous and alternate views on the experience and nature of surveillance, terrorism and polarised, sectarian positions. A concern with language, evidenced first through the juxtaposition of images and text, is evident from early photo-text works of the 1980's to more recent audio-visual work for which Doherty is most known. In the video works of the 1990's and 2000's the use of photography as an interrogative tool applied to the politicised and ancient landscapes of contemporary Ireland, has significantly developed and

⁸⁴ "The Troubles" is a euphemism that is commonly used in Northern Ireland, and the Republic of Ireland, to refer to the most recent period of civil and political unrest, and violent political conflict (from 1968 to the present). The term 'Troubles' was frequently used in a social context at 'wakes' or funerals where people who wanted to express condolence would often say "sorry for your troubles" to the relatives and friends of the deceased. It may be that the use of the term was extended from this context to cover wider social and political conflict." In CAIN (Conflict Archive on the INternet) University of Ulster at Magee, Derry, "The Northern Ireland Conflict." 2
<http://cain.ulst.ac.uk/index.html> accessed 11 September 2009.

matured. The works that will be discussed here however, are selected examples from the early photo-text works of the mid 1980's,⁸⁵ because of their profound critique of the politicisation of the landscape, and of a way of seeing and the act of vision itself.

3.3.2 'The Other Night Sky' – Trevor Paglen: general introduction

Trevor Paglen (1974) is an artist, geographer⁸⁶ and author with interests in mapping, imaging and making visible the secrecy and scale of military programmes and classified operations, primarily in the geographical areas of Utah, California, Nevada, Arizona and New Mexico of the southwestern United States.

"As I photograph the other night sky, the other night sky photographs back"⁸⁷

Paglen also lectures in the Department of Geography at the University of California, Berkeley, where, as we know, Carl Sauer first established the academic basis for cultural landscape studies in the 1920's, and which subsequently developed a history of environmental and political activism. His artwork, in the form of large scale photographs, sculptural and audio installation, has been exhibited at the Andy Warhol Museum, Pittsburgh, the Institute of Contemporary Art, Philadelphia, the San Francisco Museum of Modern Art, and MASS MoCA, in addition to representations at the 2008 Taipei Biennial and the 2009 Istanbul Biennial.⁸⁸ His research interests encompass a wide spectrum of military manifestations in the territorial and stratospheric landscape. Projects include 'The Other Night Sky', which tracks and photographs classified US military reconnaissance satellites and spacecraft in the earth's orbit, assisted by a virtual community of amateur astronomers and satellite spotters. The 'Secret Military Landscapes and the "Black World" of the Pentagon', are projects that identify and document hidden military installations, infrastructures and bases in remote landscapes, via activities such as 'Limit-Telephotography',

⁸⁵ This early work, together with recent and new work, has been shown most recently in DISTURBANCE, an exhibition in the Dublin City Gallery, The Hugh Lane Gallery, 5 September 2011– 15 January 2012.

⁸⁶ Paglen holds an MFA in art and technology, School of the Art Institute of Chicago, 2002, and a PhD in Geography, designated emphasis in new media, University of California, Berkeley, 2008.

⁸⁷ Trevor Paglen, "1000 words," essay in *Artforum International*, March 2009, 228.

⁸⁸ Biographical information from Trevor Paglen's monograph publication; *Invisible: Covert Operations and Classified Landscapes*, with essay by Rebecca Solnit (New York: Aperture, 2010), 153-155.

whereby images of military installations are photographed from extreme distances using astronomical equipment. The project 'Code Names' is a taxonomy of the names assigned to thousands of classified active programmes of the United States army, navy and air forces, compiled between 2001 and 2007. Projects investigating the activities of the CIA (Central Intelligence Agency) are grouped together under the heading of 'The CIA, Ghosts, Unmarked Aircraft, and Black Sites', and refer to the existence of unacknowledged global relationships, the extraordinary rendition programme and disappeared persons.⁸⁹ Paglen is the author of a number of publications including *Torture Taxi: On the Trail of the CIA's Rendition Flights* (2006), co-authored with investigative journalist A.C. Thompson, *Blank Spots on the Map: The Dark Geography of the Pentagon's Secret World*, and a recent monograph of his collected works entitled *Invisible: Covert Operations and Classified Landscapes* (2010) includes an essay by writer Rebecca Solnit, who has previously written on photographer Eadweard Muybridge and the role of nineteenth century photography in the development and technologies of modernism in the American west.⁹⁰

The term 'black' recurs throughout Paglen's work, in his writings, and in the text of those reviewing the work – in her discussion of invisibility in the operations of the state, Solnit refers to the 'black' budget of the Pentagon, and the 'black' sites documented by Paglen.⁹¹ The obverse of the 'white' known world, 'black' has become a common term to describe the classified 'Special Access Programmes' of military operations, and the term 'black sites' has become associated with CIA covert detention centres and the extraordinary rendition programme involving transportation of detainees to locations outside the jurisdiction of the United States.⁹² Throughout Paglen's work therefore, the appellation 'black' is used to denote invisibility and a

⁸⁹ "Trevor Paglen Current Projects," <http://www.paglen.com/pages/projects.htm> Accessed 13 May 2011.

⁹⁰ Rebecca Solnit, *River of Shadows: Eadweard Muybridge and the Technological Wild West* (2003).

⁹¹ Solnit, "The Visibility Wars," in *Invisible*, 10.

⁹² European Parliament resolution of 14 February 2007, on the alleged use of European countries by the CIA for the transportation and illegal detention of prisoners.

http://www.europarl.europa.eu/comparl/tempcom/tdip/final_ep_resolution_en.pdf Accessed 23 December 2011.

Mark Danner, "US Torture – Voices from the Black Sites," in *The New York Review of Books*, 9 April 2009 based on a report by The International Committee of the Red Cross (ICRC), on the Treatment of Fourteen "High Value Detainees" in CIA custody, February 2007.

<http://www.nybooks.com/articles/archives/2009/apr/09/us-torture-voices-from-the-black-sites/> Accessed 22 January 2012.

classified form of non-existence in terms of extraterrestrial and geographical sites, military budgets, satellites, and fake identities for non-existent operatives, functioning as a useful designation for situations involving secrecy and invisibility. Many of Paglen's images are blurred and indistinct, and the revelation of their meaning is made through the juxtaposition between images and titling. In a reference to the specificity of these situations and the potential of these images to be undermined and contradictory, Paglen observes that, by adopting this ambiguous position, they question the 'notion of representation itself' as well as posing questions to those responsible for their very existence, hidden from the public domain.

No matter how ambiguous or elusive the images in this book are, however, the underlying landscapes they point to are quite real. Black sites and secret spacecraft and covert operations and countless thousands of classified military and intelligence programmes have enormous consequences for political and social life, not only in the United States, but throughout the world.⁹³

Paglen has been creating painstaking, long-exposure photographs of American military satellites in the night sky and the 'black sites' across the landscape of the United States since 2005 and the beginning of the 'war on terror', which he surmised might just be "characterised by secrecy and lawlessness."⁹⁴ Connecting these two themes pictorially, Paglen says that the resulting images are not intended to function as documentary photography but more as a visual form of critique of the operating systems.

I think of them as a kind of exercise in political epistemology – allegories for living in an ostensibly 'democratic' state wherein vast functions and activities of the state operate totally outside democratic norms.⁹⁵

The artist describes his approach to the making of such images as dependent on time-based research processes "...the product of countless hours spent in libraries, sifting through documents, conducting interviews, repeated site visits, careful planning and project management, and personal relationships developed over years of dedication to

⁹³ Paglen, "Sources and Methods" in *Invisible*, 151.

⁹⁴ R. Norton-Taylor, "Nothing to See Here," review, Trevor Paglen, *The Guardian* magazine, 44, 9 October 2010.

⁹⁵ *Ibid.*

the material.”⁹⁶ In the ‘Limit Telephotography’ series, Paglen’s methods of tracking classified military installations, the ‘black sites’ of Utah, California, Nevada, Arizona and New Mexico, where bases are open only to “military and intelligence personnel with the requisite security clearances”⁹⁷ have produced images that span a spectrum from inscription to illegibility. Taking a position on high vantage points at distances ranging from 1 to 47 miles from his subject, Paglen has photographed chemical proving grounds, Air Force Test Flight Centres and the morning ‘commute’ of workers at the Gold Coast Terminal, Las Vegas.⁹⁸ Using optical equipment designed for astronomy and astrophotography, images have been created of installations on restricted military lands that would normally be invisible from “...public land where a member of the public might see them with an unaided eye.”⁹⁹ Images range from the clarity of military aircraft markings in *Tail Number, 2006, Gold Coast Terminal, Las Vegas, NV Distance ~ 1 mile*, (fig.3.8) to the abstraction of a remote Air Force Test Centre in *Detachment 3, Air Force Test Centre, 2008 Groom Lake, NV Distance ~ 26 miles* (fig.3.9).

⁹⁶ Paglen, “Sources and Methods” in *Invisible*, 144.

⁹⁷ *Ibid.*, 19.

⁹⁸ *Ibid.* Paglen’s research on the classified military installations on the 4,687 square miles of restricted land and 12,000 square miles of restricted airspace in the southwestern United States, mainly in Utah, California, Arizona and Nevada. Nevada’s Nellis Range Complex is the largest of these restricted spaces, containing the operating location near Groom Lake, itself a restricted zone known to airmen as “the Box”. Within this flight test centre units such as the “Special Projects Flight Test Squadron” develop and test cruise missiles, manned aircraft, drones and electronic warfare systems in a programme not publicly acknowledged.

⁹⁹ *Ibid.*



3.8 Trevor Paglen, *Tail Numbers*, 2006. Gold Coast Terminal, Las Vegas, NV
Distance ~ 1 mile *Invisible: Covert Operations and Classified Landscapes*. New York:
Aperture, 2010.



3.9 Trevor Paglen, *Detachment 3, Air Force Test Centre, 2008*. Groom Lake. NV Distance ~ 26 miles. *Invisible: Covert Operations and Classified Landscapes*. New York: Aperture, 2010.

The degrees of visibility within these images exemplify the representational ambiguities of interest to Paglen. In a discussion of his working methods and sources, the artist acknowledges his interest in this dualism in the boundaries between the verifiable and the contradictory.

In all of my work, I am interested in the limits of the visible world, in the nature of evidence, and the fuzzy and contradictory relationships between vision, imaging, knowing, belief, and truth. I embrace the epistemological and visual contradictions in my work and am most compelled by the images that both make claims to represent, and at the same time, dialectically undermine the very claims they seem to put forth...¹⁰⁰

The artist's use of photography is instrumental in this aim, and that using the most advanced optical and imaging equipment,¹⁰¹ combined with intensive research and collaboration, the limits of what may be technologically imaged can be reached, whilst visual ambiguity is as much an element in the representations as what may be plainly seen.

3.3.2.1 Context and discussion

Viewed through the representations of the nineteenth and twenty first centuries, there is a sense that the landscape of the American west has come full circle. From the early survey photographs and military cartography of the former ancestral lands of the Native Americans, through to the current network of satellite surveillance and extent of the established military presence, this territory is occupied to an extraordinary

¹⁰⁰ Paglen "Sources and Methods" in *Invisible*, 151.

¹⁰¹ Paglen's research incorporates astrophotography equipment, learning how to 'read' the night sky and constellations, a familiarity with telescope designs, tracking systems, calibration and polar alignment techniques, latitude and longitude coordinates and clocks exactly synchronised to the "official" time of the United States Navy. Partners includes a host of amateur astronomers, and software and developers at the Eyebeam Art and Technology Centre and the Matrix programme commissioned by the Berkeley Art Museum. Paglen, "Sources and Methods" in *Invisible*, 146-47.

degree.¹⁰² The pathways between communication and visual systems, and between photographic and military practices, can be seen in this landscape to have many points of connection. These connections are referred to by Trevor Paglen, who has spoken about his work as part of a continuing legacy derived from the nineteenth century survey photographers, particularly that of Timothy O'Sullivan. Paglen comments here on the position of the nineteenth century photographer of the west as part of the regime of appropriation.

It is not a coincidence that this terrain was also one of landscape photography's greatest proving grounds. "Taming the West" meant bringing symbolic and strategic order to blank spots on maps through surveillance, imaging, and mapping. The patriarchs of western photography – Carleton Watkins, Eadweard Muybridge, Timothy O'Sullivan and others – all played a part in asserting control over the landscape they drew into their cameras.¹⁰³

As discussed, both Muybridge and O'Sullivan were in the American west in the employ of government during the expansionist decades of the 1860's and 1870's, and we know Timothy O'Sullivan was employed under the leadership of Lieutenant Wheeler for the expressed purposes of military cartography. Paglen makes the following observation on the work of O'Sullivan specifically, as exemplifying the military ethos in visual terms, commenting on the 'instructions' as discussed in the previous chapter.

O'Sullivan offers perhaps the clearest example of the intersection of frontier photography, the will to map, and military control. His seminal images were largely shot for the War Department on a survey dedicated to "the exploration of these unknown areas." While its main goal was "reconnaissance" to "obtain correct topographical knowledge of the country...and prepare accurate maps," secondary goals included surveying "the numbers, habits and dispositions, of

¹⁰² For further information on the geographical extent of the U.S. military bases – Air Force, Army, Coast Guard, Marine Corps and Navy - in the United States and overseas, see <http://militarybases.com/>

¹⁰³ Tom Vanderbilt, "1000 words Trevor Paglen" discusses "The Other Night Sky." 2007, 224-229. First published Artforum International, March, 2009. Accessed 22 July 2009.

http://findarticles.com/p/articles/mi_m0268/is_7_47/ai_n50361570/?tag=content:coll

the Indians who may live in this section," and, tellingly, "the selection of such sites as may be of use for future military operations or occupation."¹⁰⁴

Paglen continues by saying that the survey photographers performed a role comparable in the nineteenth century to the functions of optical imaging technologies in the late twentieth and twenty first centuries, as; "ideologically and technologically, today's military and reconnaissance spacecraft are directly descended from the men who once roamed the deserts and mountains photographing blank spots on maps."¹⁰⁵ In this statement, the identification with the work of O'Sullivan by Paglen is telling, in that it draws an equivalence between the visual practices of appropriation of each century. However, in the work of the earlier photographer, which clearly "...served the interests of the expeditionary leaders,"¹⁰⁶ there was also a quality of visual inaccessibility, a registration of what was also invisible and intangible within the landscape. This quality is what Snyder described as a pictorialised "No Trespassing"¹⁰⁷ sign in O'Sullivan's work, a visual means of signifying the landscape, not as scenic, but as an emerging scientific territory of expansion and experiment.

These pictures are territorial, but they adumbrate a territory unapproachable in terms of representational schemes that are the common property of the propertied, or would-be landed, class. O'Sullivan's photographs function by refusing to formulate the land in the most readily available terms, by blocking habitual routes of imaginative access.¹⁰⁸

Here the project of 'Manifest Destiny' in the western landscape can no longer be naturalised through aestheticism, reconciled as in the pictorial drama of a Watkins or a Muybridge. In a contemporary context, the work of Trevor Paglen problematises this same, developed western landscape by making explicit the 'No Trespassing' implicit in these survey images, acknowledging and addressing the legacy of the earlier appropriating scientific and visual practices. O'Sullivan's aesthetics of 'visual strangeness' were derived from the empiricist agenda in their presentation of the

¹⁰⁴ Ibid., 228.

¹⁰⁵ Ibid.

¹⁰⁶ Joel Snyder, "Territorial Photography" in *Landscape and Power*, ed. W.J.T Mitchell (University of Chicago Press, Chicago: 2002), 198.

¹⁰⁷ Ibid., 200.

¹⁰⁸ Ibid.

landscape as 'view,' whereas the aestheticism of Paglen's images serve to deconstruct the 'view' of this landscape, by revealing the construction of military and political interests, and where invisibility and contradiction are made transparent.

3.3.2.2 *Analysis of examples*

There are a number of points for elaboration in an analysis of images that illustrate the preceding observations on visibility, connection to earlier optical technologies, and the use of photography as critical and redemptive. In *Four Geostationary Satellites above the Sierra Nevada*, 2007 (fig.3.10), and *DMSP 5/BF4 from Pyramid Lake Indian Reservation*, 2009 (fig.3.11), the images are both part of 'The Other Night Sky' project that tracks the nearly two hundred classified objects in orbit around the Earth.¹⁰⁹ In *DMSP 5/BF4* the image caption refers to the tracking of a spacecraft that is a "third-generation military meteorological satellite originally designed to aid war planning by monitoring weather patterns over the former Soviet Union and Cuba."¹¹⁰ As indicated, Timothy O'Sullivan photographed the same geography in 1867 of the Tufa Domes, Pyramid Lake, Nevada on the Clarence King survey, and Paglen's images formally connect with the composition and tonal arrangement, and in the visual sense of a 'blanked-out' sky, punctuated in this case by the long-exposure streaks of the satellites being observed. As a result, the image depicts a 'view' of landscape disrupted by a subtle revelation of the military presence, and of its integration into the naturalism of the depicted scene. Whereas the intended drama and scale of the western landscape is entirely visible, the omnipresence of militarism is all the more profound for its partial, painstakingly rendered visibility. The ideological intention of the image is to reveal and expose, visualised through its aestheticism and reiteration of the nineteenth century legacy of survey photography. In the *DMSP 5/BF4* image, as in *Four Geostationary Satellites above the Sierra Nevada*, the darkness of the night sky and the satellite movement is rendered visible, the functions of the satellites and observing spacecraft have been reversed and reflected, turned back upon themselves, and the gaze of surveillance has been reciprocated and transformed. Using terrestrial photography and optical imaging at their most technological and geographical limits, these images are also making reference to the

¹⁰⁹ Trevor Paglen, "The Other Night Sky," in *Invisible*, 85.

¹¹⁰ *Ibid.*, 86.

history of the photographic process. From the image produced through the operations of the camera obscura, reflected through light, reversed and inverted, functioning as a scientific device to chart planetary movement, to the modifications of the device as an aid to representational painting, and the production of the fixed and mimetic image of the nineteenth century, Paglen uses photography and contemporary optical aids to plot alternate, contemporary movements in the stratosphere and elsewhere, as observed here by Solnit.

The bright, moving dots in the night sky that are surveillance satellites, the planes at regional airports that are torture transports, the offices that are fronts for dubious activities, the buildings in which secret operations are carried out take effort to see at all, but it takes another kind of effort to recognise, to see with knowledge of what one is seeing, with knowledge that is not strictly visible. They are perhaps another kind of unknown knowns, invisible visible. A minority dedicates themselves to learning to see this way. We could call what they do seeing in the dark.¹¹¹

¹¹¹ Solnit, "The Visibility Wars" in *Invisible*, 15.



3.10 Trevor Paglen, *Four Geostationary Satellites above the Sierra Nevada* (2007).
Invisible: Covert Operations and Classified Landscapes. New York: Aperture, 2010.



3.11 Trevor Paglen, *DMSP 5B/F4 from Pyramid Lake Indian Reservation* (Military Meteorological Satellite; 1973-054A), 2009. *Invisible: Covert Operations and Classified Landscapes*. New York: Aperture, 2010.

3.3.2.3 Conclusions

The work of Trevor Paglen and his use of communication and optical technologies to map, make visible and image the United States military and governmental interests,

often using the same high-resolution equipment and painstaking powers of observation used by the military themselves, demonstrate the effectiveness of photography in this critical context. Fully aware of the positioning of his images in the space of 'exhibitionality,' yet informed by his knowledge and experience as a cultural geographer, the politicised content of the images are fully implicit in the troubling of his representations of landscape. Of the concerns that informed an analysis of Paglen's work - visibility, a connection to earlier optical technologies, and the use of photography as a critical and redemptive medium - the overarching theme is that of the uncovering of concealment, as poetically suggested by Solnit. The 'unknown knowns, invisible visible' are areas of ambiguity and contradiction that draw on Paglen's earlier assertion that his images call into question 'the notion of representation itself'. It is from this assertion that his work draws its ideological and visual power, harnessing the technological capacities of photography to push visual imagery to the limits of legibility, whilst retaining an awareness of its empirical and appropriating functions, proven in the testing grounds of this landscape in particular. Evocative of the "above and below"¹¹² of contemporary warfare as evoked by Virilio in his observations on the overlapping of an era of strategic warfare and elevation of operations into the stratospheric in the potential for 'total war,'¹¹³ Paglen inverts the process of institutional visibility as described by Virilio by bringing the apparatus into view.

Just as weapons and armour developed in unison throughout history, so visibility and invisibility now began to evolve together, eventually producing *invisible weapons that make things visible* – radar, sonar, and the high-definition camera of spy satellites.¹¹⁴

The contribution of the work of Paglen to the enquiry, therefore, lies in his concerns with visibility and invisibility, and the oscillation between these qualities in his

¹¹² Virilio, *Bunker Archaeology*, 46. Describing the bunker as symbolic of the shift between epochs of warfare, Virilio writes; "The blockhouse is still familiar, it coexists, it comes from the era that put an end to the strategic notion of "forward" and "rear" (vanguard and rearguard) and began a new one of "above" and "below", in which burial would be accomplished definitively, and the Earth nothing more than an immense glaci exposed to nuclear fire."

¹¹³ Paul Virilio's central and significant claim is that the military-industrial complex is of crucial importance in the formation of contemporary culture and the spatial organisation of the city. Consequently, a state of 'total war,' is one that extends the parameters and space of conflict beyond the battlefields and theatres of war, "War now spread not just territorially but to the whole of reality, with neither limits nor purpose." Virilio, *War and Cinema*, 72.

¹¹⁴ Virilio, *War and Cinema: The Logistics of Perception*, 89.

treatment of the technologies and impacts of militarism. His research processes and use of photography goes further than a translation of the invisible to the visible, and instead presents the 'black' world as strategic and omnipresent, a disruption of the 'natural' landscape all the more disturbing for its aestheticism and abstraction.

3.3.3 Farrell: 'Innocent Landscapes'

David Farrell (1961) is an Irish artist based in Dublin whose thematic concerns explore issues of the personal and the political, and how these may be revealed through photography and the space of landscape, both geographical and imagined. Working as a photographer since 1990, Farrell also read Chemistry at University College Dublin, graduating with a PhD in 1987 and currently lectures in photography at the Institute of Art Design and Technology (IADT) Dun Laoghaire. He has exhibited nationally and internationally and initially came to critical attention for the series *Innocent Landscapes* (1999), which the artist has continued to develop for over a decade, and which will form the subject of this discussion. As well as this series, the artist has been involved since 2001 with a number of projects that explore landscape through different perspectives: the psychological space of fantasy and desire is present in the 'cruising zones' imaged in the secluded landscapes of *Close Encounters* (2001 – 2006),¹¹⁵ photographing the Iwate prefecture as part of the 'European Eyes on Japan' project (2004), and as an invited artist at the Houston Fotofest (2006). *The Remembering Light* (2007) is an ongoing project that uses the metaphor of the flashlight to reflect on liminal spaces, and to reflect on the relationship between photography and memory. *Innocent Landscapes* was first shown in the Gallery of Photography, Dublin (2001), and has been presented there again recently (August 2011) as part of a group exhibition *The Long View*, with artists Anthony Haughey, Richard Mosse, Jackie Nickerson, Paul Seawright and Donovan Wylie. The work on exhibition addressed issues of landscape and memory, history and social change, in an Irish and a global context, through the work of contemporary artists working with photography in a sustained manner, often engaged with a subject over years, as a counterpoint to the more transient approach engendered by digital photographic

¹¹⁵ David Farrell "Biography" <http://www.davidfarrell.org/photographer.htm> Accessed 18 August 2011.

processes.¹¹⁶ David Farrell describes his current photographic work as being connected to distinct landscapes and mediated through the specificity of place, time and the photographic process.

As a photographer of 'the real world' I am compelled to engage with the necessary ritual of placing myself in front of my subject/object and dealing with the vagaries of light and mood. This for me, of late, has been deeply rooted in the landscape wherein I excavate specific landscapes with photography and time. This usually involves a process of visiting and revisiting small areas over prolonged periods. I try to carry in my pockets small seeds of emotional and conceptual intelligence that, on good days, manage to make a connection with what is around me. My quest is a series of what I consider as 'elusive' rather than 'decisive' 'moments' - a dialogue between myself and what chooses to be photographed. Often, there is a wider political framework but it can be purely personal or if I am really lucky, both.¹¹⁷

The areas of relevance within this statement by the artist are twofold: firstly, his intention to 'excavate specific landscapes with photography and time,' and secondly, the reference to a 'wider political framework.' In Farrell's work the question of visibility, invisibility and what may be revealed within the landscape as a result of conflict, is on a personalised and human scaled register, involving stories of individuals caught up within a conflict that was certainly politically and militarily led, but was also paramilitary in character, and locally driven. In a resonance shared with Boulton's work, David Farrell also uses photography as a form of visual archaeology, in the sense that the landscape is being excavated through the process of visiting, looking, and a re-visiting of sites. In that his photography simultaneously reflects on an actual, territorial excavation process, his work is closest to the disciplinary narrative of the archaeological. The photographic documents produced as the series *Innocent Landscapes*, I will argue, exemplify the concept and creation of a new 'archaeological record', whilst functioning as an act of contemporary witness to a

¹¹⁶ Press Release *The Long View* 1 July – 28 August 2011, Gallery of Photography, Meeting House Square, Dublin. http://galleryofphotography.ie/exhibitions/the_long_view.html

¹¹⁷ David Farrell "Introduction" <http://davidfarrell.org/photographer.htm> Accessed 22 August 2011.

particular aspect of conflict and its concealment within the political and geographical landscape.

3.3.3.1 Context and discussion

The exhibition *Innocent Landscapes* was first shown at the Gallery of Photography, Dublin, and in the Galerie Knabe, Berlin, in 2001. In 2001 the artist was also awarded the European Publishers Award for the subsequent publication, also called *Innocent Landscapes*. The photographic series is based on the search by the authorities and families for the potential burial sites and remains of 'the Disappeared', those people who were understood to have been abducted and murdered by paramilitaries between the 1970's and early 1980's in Northern Ireland.¹¹⁸

On May 27th 1999 the Northern Ireland Location of Victims Remains Bill was passed in the House of Commons. It offered an amnesty for those providing information concerning the identification and location of what became known as the 'Sites of the Disappeared'. The six sites revealed were the burial places of eight people murdered by the IRA in the 1970s and early 1980s. Though they belonged to the savagery of a thirty year conflict, they somehow stood apart...¹¹⁹

In his account of the search for the burial sites, Farrell notes that as a consequence of the peace process, and preceding the passing of the Northern Ireland Location of Victims Remains Bill, the IRA (Irish Republican Army) released a statement on 29th March 1999 accepting responsibility and apologising for the "injustice of prolonging the suffering of the victims' families" and admitting to the "killing and secret burial" of ten people between 1972 and 1981.¹²⁰ When the amnesty for those involved came into effect as part of the Location of Victims Remains Bill on the 27th May 1999, the remains of Eamonn Molloy, twenty one years old when he disappeared in 1975, were

¹¹⁸ The Independent Commission for the Location of Victims Remains states that: "There were sixteen people who 'disappeared' during 'the Troubles' in Northern Ireland. PIRA (Provisional Irish Republican Army) admitted responsibility for eleven of the sixteen, while one was admitted by the INLA (Irish National Liberation Army). No attribution has been given to the remaining four. To date nine bodies have been recovered.", <http://www.iclvr.ie> Accessed 19 August 2011.

¹¹⁹ David Farrell, "Introduction" in *Innocent Landscapes* (UK: Dewi Lewis publishing, 2002)

¹²⁰ Farrell, "the Disappeared – A Brief History" in *Innocent Landscapes*.

recovered the following day, above ground in a recent coffin, in a cemetery in Faughart, County Louth.¹²¹ A list of potential locations for the other people who had gone missing was also released, and the remains of John McClory and his friend Brendan McKinney, 18 and 21 years old when they were both abducted and murdered in May 1978, were recovered in a double grave after 30 days searching, also in 1999. The hopes of this initial period were not followed by successful recovery of further remains for some time.¹²² As a Dublin based artist, Farrell here draws attention to his interest in beginning the work.

The twist in this inventory of place-names and one of the main factors that drove me on in the project was that all the locations were in the South of Ireland. These people had been exiled in death, somehow uniting North and South in relation to the conflict – a dark stain lurking under the ‘peaceful’ landscapes of the South.¹²³

Although a number of sites are known are to be in Northern Ireland,¹²⁴ thereby disrupting the metaphoric opposition of ‘conflicted North’ and ‘peaceful South’, the series of images presented within the publication *Innocent Landscapes*, was created in the ‘peaceful’ South, and date from the period of the first searches, and of Farrell’s original series of visits, between late July 1999 and May 20th 2000, when the second phase of the excavation had been suspended. As in John Kippin’s lyrical depictions of the traces of the potential for genocide within the English pastoral landscape, so here the idealised image of an Irish rural landscape is made manifest, including the generic motifs of bog land and incised turf, fields littered with boulders and empty, windswept beaches. At each site Farrell has produced a number of images in series, and the rural landscape as depicted alternates between expansive, open vistas, and focussed close-up detail. In the *Innocent Landscapes* publication enlarged images of sections from Ordnance Survey maps are presented as full page inserts between the

¹²¹ Ibid.

¹²² Jean McConville was the next person whose remains were recovered, in 2003. <http://www.iclvr.ie>

¹²³ David Farrell, “Background to Innocent Landscapes” in *Source Photographic Review Blogs*,

“David Farrell Innocent Landscapes: Revisits, Discovery and a New Search (1999 – 2009)”

<http://source.ie/blog/>

¹²⁴ Independent Commission for the Location of Victims Remains, “Statement on the Identification of the Remains of Peter Wilson” Following the recovery of eight bodies in the Irish Republic between 1999 – 2010, the remains of Peter Wilson were recovered from a beach in Waterfoot, Co Antrim, Northern Ireland in November 2010. <http://www.iclvr.ie>

images of landscape, showing the artist's efforts to find the inaccessible sites, marked in pen. Following Farrell's introductory text, the locations of the sites are given on a single page: Colgach, Ballynultagh, Oristown, Templetown, Wilkinstown, Bragan, Faughart. This precedes a single page which gives the names of those who disappeared and whose searches were visited by Farrell; Brian McKinney, John McClory, Danny McLlone, Brendan Megraw, Jean McConville, Kevin McKee, Seamus Wright, Columba McVeigh, Eamonn Molloy. In the image series that acts as witness to the search for the remains of the individuals in these locations, there is no other textual information or captioning of the landscapes in the publication. Mostly taken in daylight, some at dusk, the markings of incision and excavation are inscribed lightly within the images, distanced and unspectacular. Only some turned over earth and broken branches, banks of turf, taped off areas and the occasional glimpse of earth moving machinery give an indication of the process and activity of excavation. Farrell has included two images of relatives at the beginning and ending of the series, which serves to re-orientate the de-peopled landscape and signify the human frustration and sadness at three decades of denial and invisibility.

3.3.3.2 *Analysis of examples*

In the series entitled "Danny McLlhone,"¹²⁵ the opening image (fig.3.12) is an establishing view of a wide, sweeping valley with forestry and bog land to the fore, graduating to rolling hills in the background and overlaid by almost Constablesque clouds. The subsequent images of this series gradually and visually descend into the valley, approaching with caution the markings and signifiers of disturbance, coming in the wake of the process of search and excavation. In the next image (fig.3.13), four wooden poles can be seen with white tape still tied to them and trailing across the ground, which has been recently been dug over. The foreground still recedes towards small fields and hills in the background, whilst the clouds have darkened somewhat.

¹²⁵ Ibid. Danny McLlhone disappeared in July 1981 and his remains were recovered in 2008.
<http://www.iclvr.ie> Accessed 19 August 2011.



3.12 David Farrell, *Danny McIlhone, Innocent Landscapes* (1999-2000).



3.13 David Farrell, *Danny McIlhone, Innocent Landscapes* (1999-2000).



3.14 David Farrell, *Danny McIlhone, Innocent Landscapes* (1999-2000).



3.15 David Farrell, *Danny McIlhone, Innocent Landscapes* (1999-2000).



3.16 David Farrell, *Danny McIlhone, Innocent Landscapes* (1999-2000).

The following image cuts to a radical close-up of many footprints, overlaid, back and forth (fig.3.14), over a patch of muddy ground, around a dark hole almost in the middle of the image. Subsequent images show marks on some boulders in the same landscape; perhaps white paint, maybe the glancing blow of machinery. In the next two images of the series, the camera pulls back to a similar vantage point of the original establishing shot, where the foregrounded bog and boulders are framed by the background hills and cloud shadows. The text on the tape can be faintly made out and reads 'Garda' and 'No Entry' (fig.3.15). The final image (fig.3.16) has been taken as a close-up of the terrain, an image of rich black bog land, incised, shaped and cut open by some mechanical method, with rainwater pooling in the hollows and surrounded by an undisturbed top layer of grassland. The clouds have turned to mist and the hills are faded and indistinct.¹²⁶

There are two main points to make about the 'Danny McIlhone' images, which are pertinent to the overall *Innocent Landscapes* series. Firstly, the images all unfold their stories in a similarly connected, sequential way, but are made site-specific through the naming of the individuals and the mapping of the geographical territory. The

¹²⁶ Danny McIlhone's remains were recovered in 2008. He disappeared in July 1981, attributed to the Provisional IRA. Source: Independent Commission for the Location of Victims Remains <http://www.iclvr.ie> Accessed 18 July 2011.

mythology of the 'peaceful South' and the generic Irish landscape is here exposed as the endpoint for acts of violence as a result of conflict, and part of a continuum of a tumultuous relationship between Irish political history and landscape. The second point concerns the way that Farrell has visualised a sense of the temporalities involved in the excavation process – the markings of search shift, change, are cleared away – which connects to the longer, intervening passage of time during the time of conflict, over decades, of the period between disappearance and denial, to a time of acknowledgement and attempts at recovery. By creating the works 'in series' Farrell marks the passage of time during the search period, and it is in this contemporary marking that the historical timeframe of reference is made present. The artist's use of the photographic medium as a form of visual archaeology, is an oblique interrogation into the process of uncovering the landscape in the search for historical, human remains.

In the series entitled 'Jean McConville'¹²⁷ are two images in which it seems that many of the elements of this visual archaeology and act of witness can be seen to converge. In the first (fig.3.17), the distant forms of earth moving vehicles and portacabins can just be seen in the background, at the far end of a deserted beach, whilst in the foreground a white line of tape is drawn across the lower half of the image, mirroring the band of the horizon beyond. Behind the taped off area are mounds of sand and fresh tracks of machinery marking a stretch along the wide length of beach. The image conveys a sensation of tension and urgency. The tape is stretched taut, and prevents any further literal or metaphorical entry into the scene; equipment and possibly operators are still on site. The disruption of the landscape here has a sense of expectation and immediacy; the visual codes signify recent excavation and activity, and a sense of hope alongside the frustration.

¹²⁷ Jean McConville was abducted in December 1972 and her remains were recovered in 2003. Accessed 19 August 2011 Independent Commission for the Location of Victims Remains, <http://www.iclvr.ie>



3.17 David Farrell, *Jean McConville, Innocent Landscapes* (1999-2000).

The final image in this series (not shown) shot in a similarly panoramic format, distanced and at a remove rather than detailed or close, shows the situation has changed and the activity has ceased. The equipment and taped off areas are no longer present in the image. The mounds have been flattened and the beach prepared again for more inclusive and public activities. Farrell's images have charted not only the territorial search and excavation activity within the landscape, creating a record that is witness to the sense of hope and frustration of this period of aftermath of conflict, but also a testament to the impacts of denial and silence during the conflict, and of the invisibility of the individual caught up within the cycle.

3.3.3.3 Conclusions

Farrell has created images in *Innocent Landscapes* that place the photograph as instrumental in the actual and metaphorical activity of excavation, the act most closely associated with archaeological practice. The artist also speaks of his photographs as a form of 'excavation' of the landscape. In my argument, the *Innocent Landscapes* series makes explicit the 'absent present' theorising of archaeologists

Buchli and Lucas, in that contemporary archaeological practice may reconstitute in the present, that which is absent in material from the past, thereby extending the discourse beyond that which is materially present, and the creation of a new document/archaeological record. In these images, the study of this dimension of conflict radically alters the notion of landscape as resting place, as final refuge and as a site of homecoming. What is foregrounded in the images is disturbance and invisibility, and the variance in what may be termed and apprehended as 'conflicted landscape.' As an extension of this, the photograph becomes a means of memorialisation, not in the sense of commemoration of an individual, but in the wider sense of locating within the landscape a point of transformation in a conflict, and in the creation of an 'uncomfortable monument', itself a new form of archaeological record. In their essay "Between remembering and forgetting," Buchli and Lucas speak about the complexity of memorialising conflict in more traditional forms.

...the relation between remembrance and forgetfulness is not a linear process but a struggle, a tension – in every memorial, something has been left out or forgotten, in every removal, something is left behind, remembered. In both cases, it is what is not there, what is absent that causes this tension.¹²⁸

Although this statement refers to the materiality of monuments such as the Berlin wall, and the empty space left in its wake as a testament to the horrors of that particular conflict, the tension induced by absence is also true of these images, and of their alternation between the creation of a new form of archaeological document, and the memorialisation of absence. The material absence as presented also conceptualises a deeper, social loss which took place during a particular moment in Irish history. The photograph re-stages a sense of time as cyclical through the immediacy of these temporal traces, layered with references to the hidden events of many years before. The 'looping' of the process, revisiting and photographing the same sites at different times, accompanying new searches to the sites and framing images that represent not just the burials but the initial denials and the frustrations of the searchers over time. Farrell is still involved in revisiting a number of the original sites on an annual basis, and disseminating images and thoughts on the visits and the progress of the work

¹²⁸ Victor Buchli and Gavin Lucas, "Between Remembering and Forgetting" in *Archaeologies of the Contemporary Past*, 81.

through a blog maintained by *Source Photographic Review*, “Innocent Landscapes: Revisits, Discovery and a New Search (1999 – 2009)”¹²⁹

3.3.4 Doherty: ‘Unknown Depths’

Willie Doherty (1959) is an artist born and brought up in Derry, Northern Ireland, and for much of his career has explored the narratives of his native city within the wider context of Northern Ireland, both during the height of ‘the Troubles’ and in a post-conflict environment. His work addresses concerns of territory, surveillance, the tensions of conflict, and the role of landscape in the production of cultural hegemonies and identity. From the site-specificity of his early photographic work, established in the mid-1980’s, a complex and subtle video and lens-based body of work has developed, and a treatment of themes that have consistently explored the ambiguities of identity, division, landscape and place. His work is internationally represented in collections and has been shown in the contemporary art museums of Europe and the United States, including solo exhibitions at the Kunsthalle Bern (1996), Art Gallery of Ontario, Toronto (1996), Tate Liverpool, UK (1998), the Irish Museum of Modern Art, Dublin (2002), and the Laboratorio Arte Alameda, Mexico City (2006). Doherty was the first solo artist to represent Northern Ireland at the 52nd Venice Biennale in 2007. He has also represented the Republic of Ireland at the 1993 Venice Biennale and Britain at the XXV San Paolo Biennale in 2002. Twice nominated for the Turner Prize (1994 and 2003),¹³⁰ Doherty continues to work in Derry. A recent exhibition in the Dublin City Gallery, The Hugh Lane, *DISTURBANCE*,¹³¹ was a survey of Doherty’s work from the early 1980’s to the most recent, the video *Ancient Ground*, which was shot in the turf bogs of Donegal in early 2011. In this retrospective view the themes and concerns of the artist in dealing with issues of territorial surveillance and a dimension of violence and conflict which is never far below the literal or symbolic surface, was evident from the early works to the most recent. The exhibition information text describes the video *Ancient Ground* as focusing upon “...barely visible traces of human trauma within a rural terrain. Evidence of undefined violence is captured with forensic attention to detail; implying

¹²⁹ *Source Photographic Review* David Farrell Blog can be accessed at <http://source.ie/blog/>

¹³⁰ Erin K. Murphy, *Willie Doherty: Requisite Distance: Ghost Story and Landscape*, Charles Wylie (Dallas Museum of Art: 2009), 93.

¹³¹ *DISTURBANCE* was part of the Dublin Contemporary 2011, 5 September – 15 January 2012.

that whatever unspoken occurrences took place in the past will not disappear and will not be forgotten.”¹³² This approach of site-specificity and an exploration of the undercurrents of conflict and tension within a particular landscape, specifically a critique of surveillance through photographic practices, is also common to the early examples of the photo-text works of the 1980’s that will be discussed here.

3.3.4.1 Context and discussion

Exploring the complexities of three decades of political and civic unrest in a society still divided by sectarian allegiance, much of the work is situated within the political and geographical landscape of Doherty’s native Derry. The city is historically encircled by the city walls and dominated by the river Foyle whose east and west banks are the traditional boundaries representative of communities separated by religious beliefs.¹³³ Beyond the west bank of the city rise the hills of Donegal, revealing the close proximity of the border with the Republic of Ireland. It is within this landscape of politically charged territories and borders, of urban and rural distinctions and separate jurisdictions that the overarching framework for the work is located. Doherty studied sculpture at the Ulster Polytechnic in Belfast from 1978 to 1981, and was brought into contact with Alistair MacLennan (1943), an artist and lecturer who was creating performance and live artworks that directly addressed some of the issues of violence and division taking place in the early stages of the Troubles. The challenging nature of MacLennan’s public practice, with an emphasis on an experiential approach to creating work in response to the political climate of the time, was an influence on Doherty.¹³⁴ On returning to Derry, the artist became interested in making images that were more representative of his indigenous experience of the city

¹³² <http://www.hughlane.ie/past/403-autumn-programme> first accessed 23 August 2011.

¹³³ The pedestrian ‘Peace Bridge’ spanning the river Foyle was opened 25 June 2011, a striking and iconic structure funded under the Peace 3 strand, in order to promote cohesion and tolerance within the wider community, and to span the divide between the traditionally Roman Catholic cityside and the Protestant waterside. EU Commissioner Johannes Hahn opened the bridge, saying: “I believe that the peace bridge will help further this goal for the people of Derry-Londonderry. It will encourage greater levels of cross-community integration and usher in a new period of peace and reconciliation within the city.” <http://www.irishtimes.com/newspaper/ireland/2011/0627/1224299636812.html>

¹³⁴ Alastair McLennan is Emeritus Professor of Fine Art at the University of Ulster at Belfast. One of Britain and Ireland’s leading practitioners of live art, McLennan has been based in Belfast since 1975 and is a formative influence on many students and artists in Northern Ireland and internationally.

<http://www.liveartarchive.eu/archive/artist/alastair-mclennan>

as a counterpoint to the journalistic reports and images of conflict and tension in a situation that was, as Doherty states, becoming something of a cliché.

I moved back to Derry in 1984, having spent a few years away in college. I think when I moved back I really wanted to make some work there, so the work became partly influenced by the images that already existed about the place, this is a cliché, but Derry has been called one of the most photographed places in Europe, for obvious reasons. I was interested in making a contribution to that body of images.¹³⁵

The artist produced a series of black-and-white photographic images with overlaid text in 1985, the first indications of his ongoing interest in the juxtaposition of image and language, as a means of destabilising some of the fixed socio-political positions and suggesting alternative narratives to the dominant, journalistic trope. This early work showed how the use of language, through text, could effect a challenge to the overall reading of the image, and has been developed in later works through the use of moving image, video and audio soundtrack. The layering of text and image provokes a sense of ambiguity in relation to the positions of sectarianism and terrorism, and as such was differentiated from the mainstream and polarised representations of the conflict. From these still black-and-white images of the early photo-works to the later, cinematic video projections, a sense of duality and the potential of positions to become unstable is reinforced through this relationship.

Doherty's use of words and text, whether applied to photographic images or spoken as an accompaniment to his video installations, plays a central role in his practice. His early work drew attention to the preconceptions and prejudices of the viewer and was characterised by his use of photographic images overwritten with words of opposed meaning. In his video installations he has, on occasion, used the spoken word to engage the viewer directly...¹³⁶

¹³⁵ Willie Doherty in conversation with Tim Maul, in an interview for the *Journal of Contemporary Art*. Accessed 20 August 2011 <http://www.jca-online.com/doherty.html>

¹³⁶ Anne Stewart, Curator of Fine Art, National Museums of Northern Ireland. "Recent Acquisition by National Museums Northern Ireland" pamphlet: Willie Doherty *Apparatus* 2004-5 a series of forty photographs, *Ghost Story*, 2007, 15 minutes looped video installation.

An example of this undermining of preconceptions can be found in Doherty's first video installation, *The Only Good One is a Dead One* (1993). A visualisation of the fear of assassination, the installation is composed of a two screen projections, one showing a night time street scene from the stationary interior of a car (fig.3.18), whilst the other shows footage from a video camera held by the artist, also at night, of a journey along a deserted country road (fig.3.19). The soundtrack is a monologue that alternates between the fear of being a victim and the fantasy of being an assassin, exploiting the documentary and fictional elements of surveillance and paranoia and referencing elements of the conflict in Northern Ireland at that time. In the merging of the positions of perpetrator and victim, the work; "undermines any certainties about the truth and exists in parallel with mainstream mediated images of Ireland."¹³⁷



3.18 Willie Doherty, *The Only Good One is a Dead One* (1993) video installation with two colour projections with sound. (installation view) Matt's Gallery, London.

¹³⁷ Matt's Gallery, London, Press Release: *The Only Good One is a Dead One* (1993). Video installation with two colour projections and sound, 10 November 1993 – 30 January 1994. <http://www.mattsgallery.org/artists/doherty/exhibition-2.php> Accessed 20 August 2011.



3.19 Willie Doherty, *The Only Good One is a Dead One* (1993) video installation with two colour projections with sound. (installation view) Matt's Gallery, London.

In a more recent work *Ghost Story* (2007), a looped single channel video installation commissioned for Northern Ireland's solo entry to the Venice Biennale (2007), the story recounted is of a more oblique sequence, fraught and troubled by memories of conflict. *Ghost Story* was created in a post-conflict environment and contains related references of journey, ambiguity, memory and acts of violence, expressed as a cyclical narrative through image and voice-over, where visually the predominant motif is of a long country lane (fig.3.20), overshadowed by undergrowth and narrowing to an end at which we never arrive. Watching the film at an exhibition in Derry¹³⁸ and attending the talk given afterwards by the artist, in conversation with curator Declan Long,¹³⁹ the overriding impression was of an unstable state, shifting between shadows and solids, the soundtrack permeated with the memories of conflict and imaginary encounters. Visually, a slow movement towards the vanishing point at

¹³⁸ Willie Doherty exhibition *Ghost Story/Apparatus/Closure/Empty* at Void Contemporary Art Gallery, Derry 25 November 2008 – 23 January 2009. *Ghost Story* was screened at the Strand Cinema on 22 November 2008, in association with the Foyle Film Festival and the National Museums Northern Ireland. <http://www.derryvoid.com/exhibitions/2008/Willie-Doherty/index.htm>

¹³⁹ Declan Long wrote the introductory essay published to accompany *Ghost Story* at the Venice Biennale.

the end of the lane is occasionally intercut with male and female eyes, pupils dilated in witness of something beyond the screen (fig.3.21).



3.20 Willie Doherty, *Ghost Story* (2007). 15 minutes looped video installation. National Museums of Northern Ireland.



3.21 Willie Doherty, *Ghost Story* (2007). 15 minutes looped video installation. National Museums of Northern Ireland.

Although Doherty's work is an exploration of identity, place and memory in the wider social context and has a currency that extends beyond the specifics of place, there was a particular resonance and extra dimension to watching the film in the city where it was created.

The scene reminded me of the faces in a running crowd that I had once seen on a bright but cold January afternoon. Men and women slipped on icy puddles as they ran for safety...Troops spewed from the back of the vehicle as it screeched to a sudden halt. They raised their rifles and fired indiscriminately into the fleeing crowd.¹⁴⁰

Written by Doherty, the sound track was spoken by actor Stephen Rea¹⁴¹ and is an allusion to the shootings of Bloody Sunday in January 1972, as witnessed by the artist.¹⁴² In the work of Willie Doherty, there has been an exploration of the insistent and diverse nature of conflict, and now of post-conflict, that has taken place in a particular locus and over a period of three decades. Not only does the particularity of the work translate into a wider international context, extending and engaging with new meanings in the process, but shows that a profound engagement with place, the local and the experiential, contributes a unique dimension to the understanding of recent conflicts. In her discussion of Doherty's two part video projection *Re-Run* (2002),¹⁴³ writer Maeve Connolly raises this issue of the shift between the broad and the particular and the development of the work within this locus.

...his work has evolved in a context where the limits of the public monument are all too apparent and the everyday experience of space is inflected by a

¹⁴⁰ Willie Doherty, text/soundtrack in *Ghost Story*, spoken by actor Stephen Rea in *Willie Doherty: Requisite Distance: Ghost Story and Landscape*.

¹⁴¹ Stephen Rea is an internationally acclaimed actor, and well known locally and internationally for his founding of the Derry based Field Day Theatre company, together with playwright Brian Friel.

¹⁴² "Bloody Sunday" refers to the events that took place in Derry on the afternoon of Sunday 30 January 1972. A Northern Ireland Civil Rights Association (NICRA) march had been organised to protest against the continuation of internment without trial in Northern Ireland. Between ten and twenty thousand men, women and children took part in the march in a 'carnival atmosphere'. The march was prevented from entering the city centre by members of the British Army. The main body of the march then moved to 'Free Derry Corner' to attend a rally but some young men began throwing stones at soldiers in William Street. Soldiers of the Parachute Regiment, an elite regiment of the British Army, moved into the Bogside in an arrest operation. During the next 30 minutes the soldiers shot dead 13 men (and shot and injured a further 13 people) mainly by single shots to the head and trunk." In CAIN (Conflict Archive on the Internet) <http://cain.ulst.ac.uk/events/bsunday/30jan.1972>

¹⁴³ *Re-Run* was commissioned by the British Council for the 2002 25th São Paulo Biennale.

history of media representation in which the generic and the specific continually intersect.¹⁴⁴

It is this addressing of a particular, local context of conflict, in both the exploration of diverse and marginalised narratives and in the translation of the local into a wider, international framework, and the artist's critique of surveillance through the inverting of photographic representation, that is of most relevance in the work of Willie Doherty.

3.3.4.2 Analysis of examples

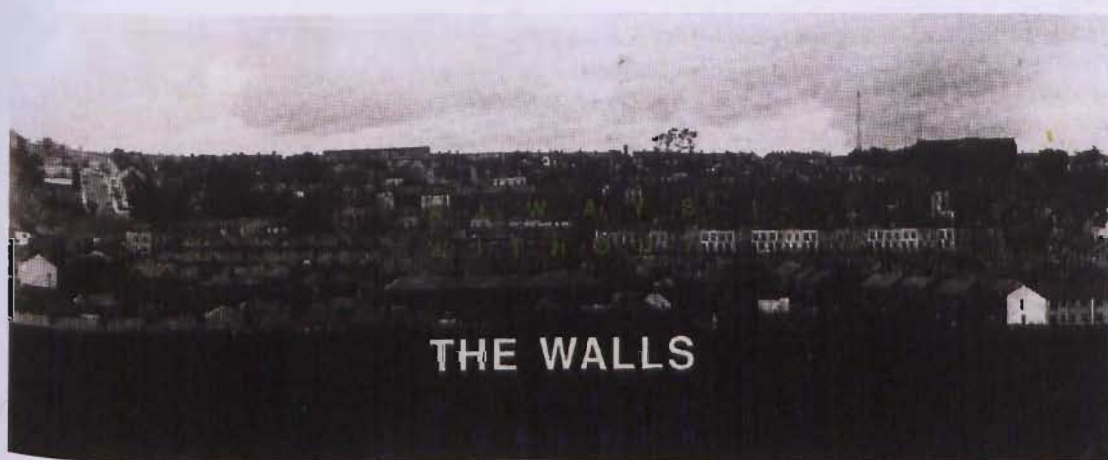
Unknown Depths is the title of an early exhibition by the artist, commissioned by the fFotogallery in 1990, in association with the Orchard Galley in Derry and the Third Eye Centre in Glasgow. In the introductory remarks to the catalogue essay, the Director of fFotogallery, Christopher Coppock, wrote that the exhibition marked an exploratory strand in Doherty's work that extended his interest and engagement with a 'sense of place' most closely identified with his native city of Derry in Northern Ireland, in that it commissioned the artist in the making of new work in response to the post-industrial cities of Cardiff and Glasgow. *Unknown Depths* also presented the first large-scale exhibition of Doherty's work in Britain, through an axis of Ireland/Wales/Scotland that broadened the approach to 'place' and acknowledged the tensions of an international, national and local set of concerns. Yet, notes Coppock, "The central issue however, remains the same: that of marginalised culture dominated by the value systems and perceptions of centralised power."¹⁴⁵ Although the series includes artwork with imagery from Belfast, Glasgow and Cardiff, it is works from the Derry series that are of interest here, specifically the photo-text series of the urban landscape and the city walls.¹⁴⁶ In the monochrome photo-text *The Walls* (fig.3.22), the image is of the Bogside, a residential majority nationalist/catholic area of Derry,

¹⁴⁴ Maeve Connolly, *The Place of Artists' Cinema: Space, Site and Screen* (Bristol: Intellect Books, 2009), 81.

¹⁴⁵ Christopher Coppock, Director, fFotogallery, in Foreword to *Unknown Depths*, published by fFotogallery, Cardiff, in association with the Orchard Gallery, Derry and the Third Eye Centre, Glasgow, 1990.

¹⁴⁶ The titles of the other works in the series are: *Fading Dreams* and *Evergreen Memories* (Dublin 1988), *Strategy: Sever*, *Strategy: Isolate* and *Fixed Parameter* (Belfast 1989), *Denial* and *Fantasy* (Cardiff 1990) and *Highland Mists* (Glasgow 1990).

viewed from a vantage point on the city walls, themselves a structure symbolic of unionist/protestant heritage in the city.¹⁴⁷ The image is overlaid with text in green and blue, each colour traditionally associated with Irish Catholicism (green) and British Protestant (blue) identity. The words “Within/Forever” in blue are arranged across the image of the walls, whilst “Always/Without” in green appears across the homes of the Bogside. The structuring of the image is unequivocal and almost severe in its horizontal arrangement of a panoramic view of the historic city walls, beyond which a band of housing stretches to the horizon. A further symmetrical banding of pale, cloudy sky provides a graduated tonal contrast to the darkness of the walls and the grey detailing of the terraced houses.



3.22 Willie Doherty, *The Walls*, overlooking the Bogside, Derry (1987). Black and white photograph with text 152.5 x 61cm. *Willie Doherty: Unknown Depths*. Cardiff: Ffotogallery in association with the Orchard Gallery, Derry and the Third Eye Centre, Glasgow, 1990.

The friction between the opposing positions is thus reflected in the tension between word and image, representing and reinforcing areas of inclusion and exclusion, and a form of ‘siege mentality’ that was prevalent in the communities across Northern

¹⁴⁷ Built between 1614 and 1619 as part of the Plantation of Derry, the original city Walls are still intact and have never been breached, despite sieges in 1641, 1649 and the Siege of Derry in 1689, which secured the protestant colonial settlement of the city. Now a major tourist attraction in Derry~Londonderry, the walls retain their historical potency as a literal manifestation of the cultural, symbolic and political divisions that came about as a result of colonial rule. Derry City Council <http://www.derryswalls.com/index.html>

Ireland at this time.¹⁴⁸ In “Seeing Beyond the Pale: The Photographic Works of Willie Doherty,”¹⁴⁹ an essay by author Jean Fisher in the catalogue *Unknown Depths* begins with Fisher quoting the artist’s comment on his disruption of both the trope of journalistic reportage and the tradition of landscape genre. Doherty states that his aim was “to try and reflect the way the terrain creates an understanding of place.”¹⁵⁰ From this standpoint Fisher addresses how the artwork critiques fixed ideas and representations – photographic, political, linguistic – through Doherty’s concerns with the experiential formations of cultural identity, implicating people and place equally. Here Fisher comments on the artist’s ‘positioning’ in relation to the camera of surveillance and object of study, and the position of the viewer in relation to their experience of the artwork. The author observes that Doherty installs the work in order to correspond to the original viewing position from which the photograph was taken, thus the orientation is questioned and cannot be appropriated as either neutral or ideal.

As we imagine that, with powerful lenses, we could penetrate the interiors of the facing windows, so we also become aware that those ‘eyes’ may see us. Indeed, were it not for the presence of this ‘gaze of the Other’ we should not be able to assume the sovereignty of a power that this position affords us. The *seeing/being seen* dyad is a question of both position and disposition: *I see you in the place I am not*. However, what ‘The Walls’ brings into relief is that narcissistic relation between oneself and one’s Other beyond the given boundary is inscribed with a profound uneasiness.¹⁵¹

In this evocation of ‘the Other’ which Fisher identifies as Nationalist, surveyed by the colonising power of Unionism, we/the viewer occupy the position of surveillance. And not just conceptually; security forces and equipment installed on the vantage

¹⁴⁸ As in the previous note, the phrase in the context of the history of Derry~Londonderry, the Siege of Derry, 1688 – 1689, was waged between the supporters of the protestant William of Orange (within the Walls) and the catholic James the Second (without the Walls). For a contemporary sense of the alternative cultural perspectives engendered within the city as a result of these historicised events, see <http://www.maidencityfestival.com/programme/events>
<http://www.museumoffreederry.org/index02.html>

¹⁴⁹ “The Pale was a fortified boundary around Dublin, constructed by the first English settlers to mark their jurisdiction from that of the ‘wild’ native Irish. The term ‘beyond the Pale’ has come to refer to transgressive behaviour.” Jean Fisher, “Seeing Beyond the Pale: The Photographic Works of Willie Doherty” in *Unknown Depths*, *note

¹⁵⁰ Willie Doherty, interview with Christopher Coppock, *Circa Art Magazine*, No 40, 1988, 26. Quoted in Jean Fisher, “Seeing Beyond the Pale: The Photographic Works of Willie Doherty,” 5.

¹⁵¹ *Ibid.*

point of the walls and throughout the city, bristled with recording and listening devices, particularly in what was understood to be nationalist areas of the city. Fisher comments on the 'uncanny resemblance' of this symbolic position, mimetic of the public, governing forces of control as they penetrate into the private and domestic domain, to Foucault's description of the panoptic mechanism and its operations within the city at this time.

The Panopticon is a *spatial* model of surveillance dependent (like the photograph, one of its primary instruments) on light and visibility, and whose efficiency and effectiveness is based on the fact that one need only put in place the apparatus of surveillance for the individual to assume that he is potentially under constant observation. For the observed at least, as Foucault comments: "Visibility is a trap"¹⁵²

Speaking about the ability of the structure to also encompass external surveillance and a sequence of inspections, Foucault himself described an arrangement that positions the 'viewer' and the 'viewed' in a reciprocal contract of 'viewing,' and describes an arrangement that is mimetic of the operations of the camera obscura.

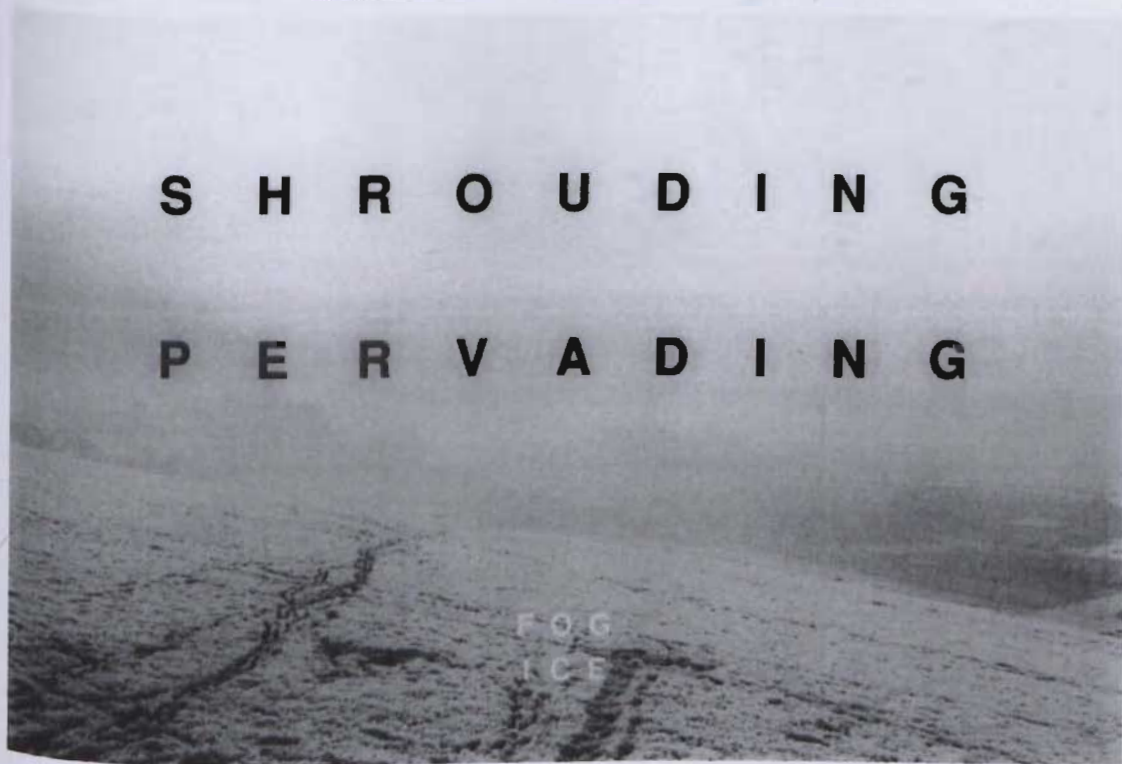
This Panopticon, subtly arranged so that an observer may observe, at a glance, so many different individuals, also enables everyone to come and observe any of the observers. *The seeing machine was once a sort of dark room into which individuals spied; it has become a transparent building in which the exercise of power may be supervised by society as a whole.*¹⁵³

Fisher's earlier comment on the spatial quality of both photography and the panoptic as being dependent on light and visibility, and of photography as a panoptic instrument, is also present in the images of *FOG/ICE* (fig.3.23), and the companion piece *Last Hours of Daylight* (fig.3.24). In *FOG/ICE* a frosty hillside above the city has overlaid text which refers to the fog 'SHROUDING' and 'PERVADING' the view below. In *Last Hours of Daylight* smoke from the chimneys is hanging in the

¹⁵² Ibid., 6.

¹⁵³ Michel Foucault, *Discipline and Punish: Birth of the Prison*, trans. Alan Sheridan (London: Penguin, 1977), 207. Author's italics.

evening air, obscuring the terraced rows of housing as it extends into the distance. The words 'STIFLING' and 'SURVEILLANCE' are printed across the haze. Here the axiom of 'visibility is a trap' is inverted, and blindness is conjured up by the weather and climatic conditions; the landscape remains veiled from view while the superimposed text invokes a sensation of imprisonment. The relation between text and image makes explicit and visible that which is implicit and covert within the landscape, subject to surveillance but also resistant to it. Here the operation of photography is as a critique of surveillance, countering its agency and performing a dual function, as noted by Fisher; "The veil that encloses the city's population in a claustrophobic silence, is also the veil that frustrates our *desire to see*."¹⁵⁴



3.23 Willie Doherty, *FOG/ICE* The Bogside, Derry (1985). Black and white photograph with text 183 x 122cm. *Willie Doherty: Unknown Depths*. Cardiff: Ffotogallery in association with the Orchard Gallery, Derry and the Third Eye Centre, Glasgow, 1990.

¹⁵⁴ Fisher, "The Photographic Works of Willie Doherty," 7. Original italics.



3.24 Willie Doherty, *LAST HOURS OF DAYLIGHT* The Bogside, Derry (1985).
Black and white photograph with text 183 x 122cm. *Willie Doherty: Unknown Depths*. Cardiff: Ffotogallery in association with the Orchard Gallery, Derry and the Third Eye Centre, Glasgow, 1990.

3.3.4.3 Conclusions

It is in this 'desire to see' that some of Doherty's concerns are encapsulated, and their relevance to the enquiry made evident. In the mediated conflict that was 'the Troubles' of Northern Ireland, in these images of Derry in particular, Doherty uses photography to 'see' in ways that challenge and problematise the mainstream, documentary images of these circumstances that were current during this time. It is through this use of photographic artwork as an experiential and nuanced critique of more limited and stereotypical representations, narrated through a particular relationship with place, that a sense of balance is contributed to the social record. The contribution serves to inform and destabilise preconceptions and fixed positions, both key standpoints in the examples of the earlier phototext images, made during the midst of the conflict, and in the later videoworks, made within an increasingly post-conflict environment and in other locales. In each phase a similar register of

ambiguity and contradiction is presented, balanced by a tension between public perceptions and personal identification with images and experience of conflict.

3.4 Chapter conclusions

There are two areas on which to conclude and revisit the primary aim as stated in the introduction, a 'discussion of how arts practice may contribute to the research and understanding of aspects of recent and contemporary conflict, with a cross-disciplinary value that has agency across empirical and artistic fields of study.' This discussion was balanced between the arguments for this contribution from the archaeological standpoint and the arts discipline, respectively. Both positions were staking similar claims from different perspectives, effectively strengthening the overall argument. Therefore, as part of the argument that 'arts practice has a particular role to play in the representation of the visible and invisible archaeologies of conflict,' the artwork as discussed 'addresses a relationship between visibility, landscape and conflict' through the instrumental and ideological application of photography and its relationship with the in/visible and culturally indexical representational image.

There are a number of conclusions that may be drawn from the arguments for shared practices and approaches to conflict. Of the archaeological methods of 'characterisation and interpretation' and the artistic consideration of these terms traced in the examples of *Cold War Pastoral* and *Stolzenhain* we saw that the archaeological process was reflected and diversified through the informed subjectivity in the approach of artists. The opportunity for provocation and broadening of the audience for dissonant heritage is referred to by Schofield in his conclusions to *Constructing Place: When Artists and Archaeologists Meet* as follows "...artists may be better able to capture and document the contemporary *character* of these places of conflict (their *Zeitgeist*) than archaeologists and historic geographers could ever achieve."¹⁵⁵ In the characterisation of contemporary conflict, Schofield is arguing for the strength of the overlap between empirical and artistic approaches, referring to E.O. Wilson's call for "trans-disciplinarity; for 'consilience'"

¹⁵⁵ Schofield, *Constructing Place*, 22.

Archaeologists are used to this. We routinely work closely with those in other disciplines to interpret the past, and we can do so equally well and equally effectively for the present.¹⁵⁶

The concept of social value and extending the public perception of contested sites and structures, in order to situate them in a “wider political and cultural context”¹⁵⁷ was referred to by the authors of *Re-mapping the Field: New Approaches in Conflict Archaeology*. In their positing of novel approaches to the concept of the ‘uncomfortable monument’, they suggested that artistic and scientific approaches may come together in order to create a transformative account of the histories, and potential future, of sites of dissonance. In some institutional contexts, this value is already established as part of a cross-disciplinary approach, as in the ‘Change and Creation’ approach to historic landscape and the ‘Contemporary Art in Historic Places’ of English Heritage, for example. The social interest and popularity of ‘screen archaeology’ and the value in the mediatisation of genealogy, landscape, history and environment, for example, is referred to by Purbrick in her introduction to the diversity and site-specificity of the essays in the publication *Contested Sites*.

The attempt to unravel layers of meaning that accrue to certain sites has never been the sole preserve of academics or heritage professionals. In one form or another it has always been a popular pursuit. To take any one of a number of examples, the BBC television series *Coast* promised to take its viewers on a journey that investigated the relationship between people and places.¹⁵⁸

Archaeologist Timothy Clack in his essay “Living archaeology: Conflict and Media” exploring the mediatisation of past conflicts and its impacts for transforming our understanding of the past,¹⁵⁹ similarly cites the public interest in past issues, amongst others, of recent history and sites of twentieth century conflict.¹⁶⁰ Therefore a cross-

¹⁵⁶ Ibid., 23.

¹⁵⁷ Schofield, Klausmeier, Purbrick, “Reflexivity and Record: Re-mapping Conflict Archaeology” in *Re-Mapping the Field*, 8.

¹⁵⁸ Louise Purbrick, editor, *Contested Spaces: Sites, Representations and Histories of Conflict* (Palgrave Macmillan, UK: 2007), 4.

¹⁵⁹ Timothy Clack, “Living Archaeology: Conflict and Media,” in *Re-Mapping the Field*, 87.

¹⁶⁰ Ibid. Clack refers to examples such as *Time Team*, *Time Flyers*, *Meet the Ancestors* and *Chronicle*, and notes that “Broadcast relating to archaeology in the United Kingdom regularly receives viewing figures in the order of 3-5 million per episode.”

disciplinary axis is already established as effective in attracting social support, and in the creation of evolving academic and research frameworks for a consideration of contemporary conflict.

Arts practice, as discussed, is functioning as a significant strand in this translation of sites and situations of recent and or contentious conflict history. My argument deepens this potential for contribution, in that arts practice involving the use of lens-based media, emerging as it does from a chronology as empirical optical device and as an aid to representational imagery, engages with the mediation of human sight in a form quite unlike other models of representation and image-making. Specifically, photography has an instrumental and ideological relationship with visibility that is inherent to the conceptual and operational functioning of the medium. Modern conflict, more than other forms of strategy and warfare from previous epochs, exemplifies the crucial significance of vision to the military project, and its extension through lens and image, to the military imagination of territorial and ideological conquest. This significance of vision, and its mediation through photography, I suggest, is equally the factor that situates the medium in a critical relationship to conflict and its cultural impacts upon landscape, diverse examples of which were discussed through the photographic artworks of Paglen, Farrell and Doherty. The work of each artist raised issues of cultural and territorial visibilities within the landscapes explored, and in so doing, pointed not only to the distinctions between conflicts, but also to the similarities in the deployment of the visible and the invisible as tactical measures of observation and circumvention, denial and disclosure, surveillance and separation.

CHAPTER FOUR: RE-IMAGINING THE DONEGAL LANDSCAPE

4.1 Introduction

4.2 MHAIRI SUTHERLAND: ARTS PRACTICE

4.2.1 Background: themes and catalogue

4.2.2 Background: context and discussion

4.3 DONEGAL: A CONTEMPORARY LANDSCAPE

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4.3.2 Geographies of the border

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4.4 STRATEGIES OF VISIBILITY: IRISH NEUTRALITY

4.4.1 Back ground to neutrality

4.4.2 Declaration of war and introduction of Emergency Powers

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4.4.4 Treaty ports and the war at sea

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4.4.6 War at sea off the Irish coast

4.4.7 Lough Swilly and the Inishowen peninsula

4.4.8 Swilly port fortifications: Dunree Fort and Lenan Battery

4.4.9 'Donegal corridor' operations 1940-1945

4.4.10 'Donegal corridor' landscape 2007-2011

4.5 CRITICAL REFLECTION

4.5.1 Relevance of historical case study

4.5.2 Aims of arts practice research

4.5.3 Methodology of arts practice research

Chapter 4: Re-imagined Landscape.

4. 1. Introduction

Previous chapters have discussed the constructed nature of human vision and cultural narratives of landscape, from the standpoint of the influence of opticality and the photographic medium, and underpinned by the assertion of the significance of vision and the image to the representations and operations of modern warfare and situations of conflict. This chapter continues a consideration of these influences through an account of the research that has taken place through historical sources and through arts practice, and is discussed in four related sections. Collectively, the sections constitute a discourse with a twofold aim: to present the context for the research, both in terms of the history of the arts practice, and in the historical account of Irish neutrality, to critically reflect on the significance of the selected material, and its interpretation through arts practice. As will be evident from the research as discussed, the selection of the material studied, although situated within a particular historical and geopolitical construct, has been undertaken in order to address issues of cultural visibility through arts practice, rather than prove or disprove the positioning of national neutrality during the Second World War. However, in conducting the research, I also hope that this account will also add to the new narratives of neutrality¹ that are emerging about the role of Ireland, and of its citizens, during this period of global conflict.

The first section, *Mhairi Sutherland: Introduction to arts practice*, presents examples of my previous artwork as evidence of a sustained interest in issues of conflict, landscape and site-specificity. The selected works span a decade from 1988 to 1999,

¹ As an indication of the research undertaken in the area of Irish neutrality and its contemporary significance, are some of the publications researched for this enquiry; John, P. Duggan, *Herr Hempel at the German Legation in Dublin 1937-1945* (Dublin: Irish Academic Press, 2003), John, P. Duggan, *Neutral Ireland and the Third Reich* (Dublin: Gill and Macmillan, 1985), Robert Fisk, *In Time of War: Ulster and the Price of Neutrality 1939-45* (London: Andre Deutsch, 1983), Dermot Keogh and Mervyn O'Driscoll, eds, *Ireland in World War Two: Neutrality and Survival* (Cork: Mercier Press, 2004), Trevor C. Salmon, *Unneutral Ireland: An Ambivalent and Unique Security Policy* (Oxford: Clarendon Press, 1989), Michael Kennedy, *Guarding Neutral Ireland: The Coast Watching Service and Military Intelligence 1939-1945* (Dublin: Four Courts Press, 2008) and Clair Wills, *That Neutral Island: A Cultural History of Ireland During the Second World War* (London: Faber and Faber, 2007).

and this broad introduction to the concerns of the work is intended to provide the contextual background for discussion of the research practice. The second element, *Donegal: A contemporary landscape* is an introduction to the landscape that will be discussed, and some of the factors that have contributed to its formation as it is currently understood. The third and fourth sections introduce and present some of the material of the case study, an exploration through arts practice of the historical circumstances of a rural Irish landscape marked by the traces of conflict. In the third, *Strategies of visibility: Irish neutrality*, the historical narrative of landscape framed by political and military strategy which has informed the arts practice, is detailed. The fourth, *Critical reflection*, is an analysis of the significance of this historical survey to the research, and reflects on the aims and methodologies of the case study and how these have been conducted through arts practice. This is achieved by a discussion of selected examples from the practice element of the thesis, *Arc of Fire*, which forms the following and final chapter of the thesis.

The historical research has selected landscapes of County Donegal in the Irish Republic. Inishowen, the largest and most northerly peninsula in Ireland, in the northwest; and in the southwest, a small area of land, sea and airspace, only seven miles in total. This seven mile territory was known as the 'Donegal Corridor' when it was flown as a covert military air corridor by the Allies over neutral Éire during the Second World War. The flight path came about as a result of a secret agreement between the British and Irish governments in order to assist Allied operations in the Battle of the Atlantic. In the Inishowen peninsula, the northern landscape is still punctuated by the traces of the earlier global conflict of the First World War. In 1914 Ireland was still under British rule, and Inishowen borders Lough Swilly.² This strategically significant deep water Lough was one of the three 'Treaty Ports' retained by Britain after Irish independence in 1922. The ports were returned to Irish jurisdiction in 1938,³ a change that controversially, rendered the ports unavailable to the Allies during the Second World War. Neither the air corridor nor the Inishowen peninsula were active battlefields of conflict but were, respectively, a site of

² Robert Fisk, *In Time of War: Ulster and the Price of Neutrality 1939-45* (London: Andre Deutsch, 1983) During the First World War Ireland was under British jurisdiction and 'Treaty Ports' of Lough Swilly, Berehaven and Queenstown/Cobh in Cork were military bases. The British Grand Fleet was anchored in Lough Swilly in October 1916, relocated from its base in Scapa Flow, Scotland, due to fear of submarines and landmines

³ Fisk, *In Time of War*, 2-6.

preparedness for warfare elsewhere, and defensively maintained against the threat of invasion. The engagement of these landscapes with the narratives of global conflict was as a result of their strategic proximity to the northern Atlantic, and consequent military value to the European littoral. Lough Swilly, the Treaty port of the Inishowen peninsula in the First World War, and the existence of the air corridor in the Second World War, were each geographically remote yet paradoxically central to elements of the global conflicts taking place in a wider Europe. Speaking of the air corridor, the activities of which were only made public in the early 1980's, the Irish historian Dr Michael Kennedy has said, "Arguably, were it not for the existence of the Donegal corridor, the outcome of the Battle of the Atlantic might have been very different..."⁴ And in 1938, close to the outbreak of war, the return to the Irish government of the Treaty ports, symbolic of a newly independent Ireland, led Winston Churchill to refer to the potentially ominous battleground of the Atlantic and the significance of the Treaty Ports as follows: "These ports are in fact 'the sentinel towers' of the western approaches, by which the 45 million in this island so enormously depend on foreign food for their daily bread..."⁵ And as war began, aside from the political disagreements and debates, the neutral status of the country did not prevent the conflict washing up along the western shores, nor stop it crashing into the landscape from the air. In the first years of the war there were many hundreds of bodies swept ashore from sinkings and torpedo attacks on shipping in the north Atlantic, many of whom were buried in war graves along the Irish western and northern coastlines. It was this toll upon lives and shipping in the Battle of the Atlantic that both gave rise to the public clamour for Allied access to the ports as the conflict developed, and which provided the conditions for the establishment of the covert air corridor.

The case study through arts practice and historical research was undertaken within a landscape where the tangible and intangible archaeologies and evidence of preparedness for conflict, range from the architectures of former military communities in the First World War, to the memorial plaques for the flight crews of aircraft that came down in the 1939 - 45 conflict. There is a further example of memorialisation

⁴ Michael Kennedy, *Guarding Neutral Ireland: The Coast Watching Service and Military Intelligence 1939-1945* (Dublin: Four Courts Press, 2008), 161.

⁵ Nicholas Mansergh, *Documents and Speeches on British Commonwealth Affairs 1931-1952* Vol 1 (OUP) 1953, 384-85 (House of Commons Debates Vol 335 coll 1094-1105 5.5.38). Quoted in Fisk, *In Time of War*, 37.

included that dates from a more recent and localised Irish conflict, that of 'the Troubles', a 1990 memorial plaque to a civilian on the Derry~Donegal border. This section begins with a discussion of the contemporary context of Donegal as a cultural landscape, and an exploration of the political and geographical markers of this border county. This is followed by a discussion of aspects relevant to Irish neutrality during the Second World War in Europe 1939-45, including the war at sea in the Atlantic, which engaged the issue of the Treaty Ports, and the defence of the coastline through establishment of the Irish Maritime and Coast Watching Service. Another feature of neutrality was the regime of state censorship, which suppressed the reporting of any references to the war in Europe, including the reporting of progress, accounts of battles and fatalities, and extended to the censoring of newspaper weather reports and the opening of private mail. The overt nature of censorship, however, also performed a dual function in presenting a visible expression of neutrality to the international community, whilst simultaneously acting as a screen that allowed covert and collaborative efforts in support of the Allies to go unreported.

In the fourth section, I argue that these collective archaeologies of conflict and neutrality within the landscape span the 'visible' and 'invisible' spectrum of military and political operations, and represent a particular position that was institutionally maintained during this time. As part of this argument I will discuss the evidence for this claim, through the archaeologies and remains that have been traced in the landscape, the archive, and the oral narrative. The critical reflection and analysis of the material is two-fold, reflecting on what is significant within the historical and political narrative, and discussing how these areas of significance have been interpreted through the arts practice research. This reflection has been placed within the thesis in order to allow an understanding of the complexity and wealth of historical research on the narratives of Irish neutrality that has been undertaken, and to reflect on how the relevant elements of this narrative have been addressed through arts practice. Therefore, the critical reflection will both look back to the historical narrative as unfolded within the chapter, and reflect on the artwork produced as a series of research outcomes through discussion of selected examples, and in anticipation of *Arc of Fire*, the following and final chapter of the thesis. The visual arts practice research is presented in the form of a website

<http://www.mhairisutherland.com> and a DVD copy, and forms the fifth and final chapter of the thesis.

4.2 Mhairi Sutherland: Arts practice

4.2.1 Background: themes and catalogue

Similar to the treatment of the artists discussed in chapter three, this section presents a series of artistic concerns and practice, and introduces the themes which provided the impetus for the research undertaken in this thesis. Beginning with examples from collaborative and artist-led projects, and culminating in the work of a solo exhibition, the discussion illustrates a consistent interest in how some of the processes of militarism interact with, and affect aspects of social and civic life. This has been explored and critiqued through approaches and exhibitions ranging from how an overt military and security presence affects everyday living, to an inquiry conducted within the metaphoric and literal fabric of military domesticity and housing, to an increasing interest in the geographies of land, sea and airspace territorialised through the activities of two global conflicts,⁶ and mediated, as Paul Virilio has theorised so effectively, through the practices of photography and film. Before Virilio, Benjamin spoke of the aestheticism of war by the Facists, and the potential of mass reproducibility of media and technology to advance, rather than limit warfare, “The destructiveness of war furnishes proof that society has not been mature enough to incorporate technology as its organ, that technology has not been sufficiently developed to cope with the elemental forces of society.”⁷ I would argue that this view of technology may be inverted however, and lens based activities employed as critique and witness to aspects of conflict. In earlier work, it was through the use of photography to explore the military subject that I became increasingly aware that the military subject, in turn, made particular use of photography. In the exhibition *Blackout* for example, in an exploration of the triumvirate of airbase, bunker and

⁶ For an introduction to the debates concerning the extent of land use for military purposes since the end of the Second World War, see John C.R. Childs, *The Military Use of Land: A History of the Defence Estate* (Bern: Peter Lang, 1998)

⁷ Walter Benjamin, “The Work of Art in the Age of Mechanical Reproduction” in *Illuminations*, trans. Harry Zohn (Fontana Press: London, 1992), 235.

cinema an interest began in the visibilities of conflict in the landscape, and in what could be both revealed and hidden through optical operations.

As detailed in the thesis introduction, I am a visual artist based in the north west of Ireland, originally from Scotland and initially trained in painting, drawing and sculpture. I completed a Masters Degree in Fine Art at the University of Ulster at Belfast in 1996, working in video and photography and since that time my work has been composed of still photography and video, sometimes incorporating wall drawings or text. The work has been exhibited in one person shows in the Regional Cultural Centre, Donegal, *Arc of Fire*, 2011, OMAC, Belfast, *Fig: YS*, 2008, Context Gallery, Derry, *Fathom*, 2002, and in Street Level Photoworks, Glasgow, *Blackout*, 1999. Group exhibitions have included exhibitions at the Ormeau Baths Gallery and the Catalyst Arts in Belfast, Street Level Photoworks and Intermedia in Glasgow, and the Douglas Hyde Gallery in Dublin. Awards have been received from the Scottish Arts Council (1997, 1999), the British Council (1986, 2000) and the Arts Council of Northern Ireland (2001, 2005). I experienced the climate of 'the Troubles' from the mid-1980's to the early 1990's, when I lived in Derry and was involved with the programme of the iconic Orchard Gallery.⁸ The east and west coasts of Scotland have also been a thematic concern in the work, as is an engagement with institutions that exert a territorialising influence over the land, sea and airspace, which have included the Royal Air Force (*Blackout* 1999), Ministry of Defence Housing (*Muster* 1998) and the Royal Navy (*Sub* 1996). *Arc of Fire* is the most recent articulation of interests that have explored elements of militarism, domesticity and landscape through engagement with territorial contexts.

4.2.2 Background: context and discussion

This section discusses selected artworks *Dance State*, *Target*, *Muster* and *Blackout* from a formative period of 1988-1998, in order to establish the thematic and contextual background for the research interests of *Arc of Fire*. An interest in working

⁸ The Orchard Gallery opened in 1979, and the then Director Declan McGonagle, was nominated for the Turner Prize in 1987, on the strength and quality of the Orchard Gallery programme. During the 1980's, a tumultuous period in Northern Irish history, the gallery established and maintained an international focus, exhibiting renown artists such as Richard Long, Anthony Gormley, Nancy Spero, Leon Gloub, Krzysztof Wodiczko and James Coleman. The Orchard Gallery closed in 1991.

in site-specific contexts, and in partnership with social, civic and other organisations began with my employment in 'Sitework', the public art team of the Orchard Gallery (1988 – 89). The team of six artists created a series of temporary installations in public and social spaces around the city of Derry over the course of a year. Locations included a local shopping centre, a television rental shop, a nightclub, and the banks and waterways of the River Foyle itself. The aim of 'Sitework' was to explore and respond to issues of relevance and agency for the city and its inhabitants, living through 'the Troubles' of that particular time. Themes included the high levels of emigration of young people taking place, and the regime of security and surveillance experienced on a daily and ongoing basis. Projects such as *Dance State* (fig.4.1) was a video filmed and shown in a local nightclub that juxtaposed video images with overlaid text referring to the security measures of the nightlife culture, and drawing parallels with the security measures taking place in the everyday, civic life of the city. The sculptural installation *Target* (fig.4.2) was composed of a series of life-size, painted figures that were installed along the walkway of the banks of the river Foyle. The figures were doubled-sided, with the same arrangement of target markings on head, chest, elbows and knees on each side, and faced both the city centre of Derry, and the British Army base at Ebrington, across the river Foyle. *Target* was intended to be highly visible, provocative and challenging,⁹ addressing the environment of both military and paramilitary violence and intimidation that were prevalent at the time.

⁹ The work generated conversation and debate in the city, questions were raised about the work in Derry City Council chamber, letters opposing and supporting the project were published in the local newspaper, *The Derry Journal*, and the Director of the Orchard Gallery, Declan McGonagle, gave a radio interview in order to clarify the aims of the work.



4.1 Sitework, *Dance State* (1988). video/colour/audio 7 minutes. Artist's collection.



4.2 Sitework, *Target* (1988). Dimensions life sized, painted wood. Artist's collection.

The *Muster* project was created by ‘Not in Kansas’, an artist-led organisation¹⁰ (1997–2005), that aimed to develop and promote new work from artists in Scotland and internationally, and to engage and interact with new publics, participants and partners. *Muster* was composed of the work of seven artists, installed in two houses on the Churchill Estate, Helensburgh, which housed the families of submariners at nearby HM Naval Base Clyde at Faslane. Collectively, the context of the project was framed by this location, and the addressing of this distinct military ‘family’ as a primary audience. In terms of my own work created for *Muster*, the negotiations were a significant element in the planning and execution, both as an artist, and as a curator of the project. This approach and the drawing of attention to these particular circumstances are referred to by the artist and writer Daniel Jewesbury, in his catalogue essay for *Muster*.

These ‘collaborations’ necessarily raise questions of permission and negotiation, which Sutherland places at the centre of her work...The careful phrasing of a proposal, as well as the ability to embrace some unforeseen circumstances and partnerships, are equally integral to the process; the goal of any negotiation is to see how much you can get away with.¹¹

The negotiations referred to by Jewesbury are the preparations involved in establishing access firstly, to personnel, and secondly, to areas of military life and territory, which I considered as an integral element of the nature of the overall work. Although this process of negotiation could be considered as intrinsic to much arts practice and projects that take place in site-specific contexts, or are socially or publicly engaged in some form, it has a particular resonance within a military context. For example, the planning of *Muster* (fig.4.3) in two vacant military-owned homes on the Churchill Estate, Helensburgh, involved security clearance and negotiation with the Ministry of Defence (MOD) Defence Housing Executive, as a housing estate is

¹⁰ ‘Not in Kansas’ was a limited company and arts organisation set up by artists Mhairi Sutherland, Rachel Mimiec and Karen L. Vaughan to create projects in social contexts outside the gallery (1997–2005). *Muster* (18 May – 20 June 1998) was an exhibition that commissioned seven artists to create new work installed on a military housing estate, specifically 1 & 2 Frobisher Estate, Churchill Estate in Helensburgh, the homes for HMS Neptune, the Naval Base Clyde at Faslane, the base for Trident class nuclear submarines.

¹¹ Daniel Jewesbury, “Loose Canons or, Our Drum Major is a Woman” in *Muster* (Glasgow: Not in Kansas, 1998), 25.

classed as a military base, complete with its own shops and military police force. *Muster* engaged seven artists¹² to respond to the context and site-specificity of the homes and their military location, as described by Jewesbury.

One unique characteristic of the Churchill Estate is the manner in which its inhabitants have their own, peculiarly distinct society. The families of submariners at the HM Naval Base Clyde at Faslane, they are somehow not quite civilians, and yet nor are they fully part of the 'military'. They are subject to the rules of both cultures and members of neither.¹³

It was this social space of both restriction and proximity to military operations that gave the project and the artworks their resonance, each artist engaging with these parameters whilst addressing their individual thematic concerns.



4.3 Not in Kansas, *Muster* (1998) Exhibition at 2 & 3 Frobisher Place, Churchill Estate, Helensburgh, Scotland.

¹² *Muster* artists were Kevin Henderson, Rachel Mimiec, Moira Melver, Nina Pope, Gary Perkins, Mhairi Sutherland and Karen L. Vaughan. HM Naval Base Clyde at Faslane is the base for the Trident class nuclear submarine.

¹³ Daniel Jewesbury, "Loose Canons," 24.

Blackout (figs.4.4 & 4.5) was a solo exhibition commission which approached three distinct sites with a relationship to conflict, visibility and the moving image.¹⁴ The airbase, the bunker, and the cinema were each locations with connections that were traced across temporalities and archives, the landscape and via direct negotiation with the military agency. Using still photography, video projection, transparencies and applied wall text, the work was based on research into these sites, including local library records of Second World War films shown in the local cinema in 1945, a former 1950's Cold war nuclear bunker, now a private museum,¹⁵ and access to the nearby RAF Leuchars airbase and the co-operation of a Tornado fighter pilot.



4.4 Mhairi Sutherland, *Blackout* (1999) exhibition detail, Streetlevel Photoworks, Glasgow, 4-29 April 2000.

¹⁴ *Blackout* was commissioned by the Crawford Arts Centre, St Andrews, Fife, Scotland (27 August – 17 October 1999), and toured to a number of venues nationally.

¹⁵ 'Scotland's Secret Bunker' <http://www.secretbunker.co.uk/>



4.5 Mhairi Sutherland, *Blackout* (1999) exhibition detail, Streetlevel Photoworks, Glasgow, 4-29 April 2000.

This relationship between landscape, militarism and critique, is here described by the writer Lorna J. Waite, in her catalogue essay for the exhibition *Blackout*.

This broad contour of northern identity bounded by the curve and pattern of the Forth sea and the Atlantic yields stories of ports and harbours, of departure and arrival, of lochs and seas, of boundaries of nature and borders of power. From the west coast fisherman of Loch Long, the crofter tending land in the shadow of Dounreay, to the farmer of the east watching low flying military jets, there is proximity to power, to the military, to institutions of defence, to the normality of secrecy and territorial exclusion, to the maintenance and defence of the British state. There is a dynamic and purpose and history which is unique to places where the civil and military meet. This is familiar territory to Mhairi Sutherland. This exploration of identity, on the role of the military in civil life in contemporary Scotland echo and resonate throughout the work in ‘Blackout.’¹⁶

¹⁶ Lorna J. Waite, “Hidden Interiors and Coded Realities,” in *Blackout* (Fife: Crawford Arts Centre, 1999) ISBN 0 906272 66 1

This is a body of work that has considered, over a number of years, the lesser known nature of preparedness for warfare – the domestic military interior, the pilots' changing room, the underground Cold War bunker - the base of the pyramid that extends towards the apex of 'lethal force' as described by Woodward, as a means of questioning the nature of military power and how it may be rendered visible across a range of contexts. This positioning is a more subtle and nuanced one than perhaps might be first suggested by the notion of 'critique', involving negotiation, access and permission to classified areas, rather than polemic or protest. The work described is intentionally ambiguous but challenging, sometimes uncomfortably so, as in *Target*, which drew an equivalence between the activities of 'paramilitary' and 'military' violence and refuted the polarised positions that reiterate common standpoints of 'them' and 'us', which would close off the potential of the work to open new directions, suggesting nuance and contradiction, rather than confrontation and retreat. In *Muster*, the primary audience and site-specificity of the work addressed the military 'family' itself, the Churchill Estate as part of the larger defence estate of HM Naval Base Clyde, known as Faslane, home to the nuclear deterrent submarine class.¹⁷ Militarism is too important an issue to be dealt with by only military and political forces. By definition, its impacts are deeply felt within the civic and social landscape and my argument that arts practice is particularly well placed to question and critique the overlooked and the unseen dimensions of the remote and the geopolitical, will be unfolded through the following study of a specific Irish landscape.

4.3 Donegal: A contemporary landscape

4.3.1 Cultural landscape of Donegal

Ireland's most northerly county of Donegal initially appears an unlikely location for a geopolitical landscape influential in a global, historicised conflict. The debates around Ireland's position of neutrality notwithstanding, this is perhaps based on a

¹⁷ Her Majesty's Naval Base Clyde (HMNB Faslane) "Is the Royal Navy's main presence in Scotland. It is home to the core of the Submarine Service, including the nation's nuclear deterrent and the new generation of hunter-killer submarines." <http://forcesfaslane.today.wes/> Accessed 10 June, 2012. There has been a permanent peace camp protest at Faslane since 1982, when Prime Minister Margaret Thatcher replaced the ageing Polaris deterrent with the powerful Trident Class. <http://www.bbc.co.uk/news/uk-scotland-18203818> Accessed 10 June 2012.

contemporary sense of the remoteness of the county, set at a geographical distance and metaphorical remove from the capital and more urbanised locales, all of which are located farther 'south'. Within the boundaries of the four provinces of Ulster, Munster, Leinster and Connacht, historically the county is part of the province of Ulster, although it is politically within the Irish Republic¹⁸ rather than the 'Ulster' that is also Northern Ireland.¹⁹ Donegal is the historical and geographical hinterland of Derry~Londonderry,²⁰ which is Northern Ireland's second largest city, and in travelling distance and access the county is considerably closer to Belfast than to Dublin. One of Ireland's largest counties, it has a low density of population and is known for the drama and scale of its 'unspoilt' landscape.²¹ As in all such geographic 'wildernesses' there are alternative dimensions to the mythic, ranging from the devastating effects of the Famine in the 1840's to the landlordism and evictions of the 1850's, each factors that contributed to the depopulated habitats and established a pattern of emigration which is unfortunately still very prevalent. Most recently, from the late 1990's to around 2006, an unsustainable building boom has now resulted in empty holiday home complexes and 'ghost estates' (fig.4.6) that were built in areas of great natural beauty, creating a parody of indigenous re-population and real growth, and negatively impacting on areas of the landscape.²²

¹⁸ John W. Blake, *Northern Ireland in the Second World War* (Belfast: Blackstaff Press, 2000), 4-6. The Government of Ireland Act 1920, in a Bill by Lloyd George was to "provide for the better government of Ireland" and "though there were nine counties in the historic province of Ulster, Northern Unionists were prepared, reluctantly, to waive their claim to Cavan, Donegal, and Monaghan, because the Nationalist element in those three counties predominated and the Unionists did not want to receive what they could not keep." This ensured a Protestant majority within the portioned state of Northern Ireland.

¹⁹ Fisk, *In Time of War*, 15-18. Following the Government of Ireland Act in 1920, the partition of Ireland into the six counties of Northern Ireland and the twenty six counties of the Republic of Ireland (the Free State) was established as a result of the 1921 Anglo-Irish Treaty, negotiated contentiously by Irish representatives Griffith, Collins, Barton, Duggan and Duffy, with the British Prime Minister Lloyd George, and was ratified in 1922.

²⁰ The use of two names for the city refers to the distinct identities of the nationalist and unionist populations, and is an ongoing civic debate. The most common way of representing this in written form is 'Derry/Londonderry' hence 'slash' city, as a colloquial term. However in 2011 the city was chosen to become the first ever UK City of Culture 2013, awarded to 'Derry~Londonderry.' Hence, I have chosen to use this new form.

²¹ Fáilte Ireland (Irish Tourist Board) <http://www.discoverireland.ie/Places-To-Go/Donegal> Accessed 3 November 2011. "Donegal promises wild landscapes blanketed in bog and heather, isolated white sandy beaches and a roughly hewn coastline. And when all of the cobwebs have been blown away, thriving little towns with cosy pubs, excellent seafood and a friendly welcome await. This county will certainly force you to kick back, slow down and admire the view."

²² Following the 2009 An Bord Pleanála report, Chairman John O'Connor has been critical of local authorities in Donegal, which has the highest planning record of overturning appealed planning decisions by Bord Pleanála, at 59.5%. The National Housing Development Survey published in January 2010, notes that this has resulted in 133 'ghost estates' throughout Donegal, one of the worst



4.6 Unfinished housing estate 'Crest of a Wave' in Bundoran, Donegal. Image: Cathal McNaughton, Reuters.

The sense of remoteness in Donegal has been exacerbated by a lack of investment in an adequate transport infrastructure,²³ despite there being previously an extensive nineteenth century rail network serving most of the county that was closed in 1953 and finally disassembled in 1959.²⁴ The Londonderry and Lough Swilly Railway Company was originally an extensive Victorian cross border railway network extending from the fishing port of Burtonport in the Gaeltacht area of the Rosses in west Donegal, to the market town of Carndonagh in the northern Inishowen peninsula. A transport service still exists in the Lough Swilly Bus Company, a much reduced bus route that operates from Derry and Letterkenny across the rural townlands of Donegal, serving principally the Fanad peninsula in the east (fig.4.7). North West Busways operate from Buncrana to Letterkenny, connecting with the Inishowen towns of Fahan, Bridgend and Newtowncunningham.²⁵

record nationally and particularly in rural areas, which is especially high considering the low density of population. <http://inishowennews.com/06Planning0780.htm> Accessed 10 November 2011.

²³ The Irish Rail Network, Iarnród Éireann ends in the neighbouring County of Sligo and does not extend into Donegal.

²⁴ <http://www.donegalrailway.com/cdr-history/> Accessed 14 June 2011.

²⁵ Loretta McNicholas and Rosita McFadden, "The People of Lough Swilly," in *Lough Swilly: A Living Landscape*, ed. Andrew Cooper (Dublin: Four Courts Press, 2011), 123.

and is the principle link road between East Donegal and Northern Ireland. On the northern side of the border, south west of Strabane, are the towns of Claudy and Castleterragh, as the boundary loops through the Bluestacks mountains and skirts the pilgrimage centre of Lough Derg. The border town of Pettigo is a few miles away from Lough Derg in the South, and the waterways of Lower Lough Erne in Fermanagh, in the North.²⁷ At the head of the waterways of Lower and Upper Lough Erne is the small market town of Belleek, famous for its pottery works and for the demarcation of the border, which runs through the town itself. Crossing the border from Northern Ireland to the Irish Republic at Belleek Bridge, spanning the River Erne as it narrows from the massive inland waterways of Lough Erne, the speed limits change from British miles to European kilometres on the N15 national road, the only immediately visible sign that the jurisdiction has also changed.

4.3.3 Politics of the border

In 2012, Northern Ireland and the border counties are in what is termed a 'post-conflict' situation following the cessation of over three decades of conflict and violence, during which time over three thousand people were killed and many more injured, bereaved and affected during the period of the Troubles from 1969 to 1998.²⁸ The momentum for a peaceful resolution began with initially secret talks between government representatives and paramilitaries leading to a number of ratified agreements, beginning with the 'Anglo-Irish Agreement' signed on 15 November 1985. This was significant for firstly, granting the Irish government a formal input into the running of Northern Ireland affairs, particularly security, and secondly, providing the incentive for Unionist negotiation on this arrangement, resulting in a

²⁷ The terms in common usage which are used to differentiate between the Republic of Ireland and Northern Ireland, include 'the Free State', the 'twenty-six counties', and 'the Republic' for the former, and 'Ulster', 'the Province', the 'North of Ireland' and 'the six counties' for the latter, I am using the terms 'South' and 'North' here as representative examples of these terms. Similar terms used to refer to the entire country include 'the Thirty-two Counties' and the 'Island of Ireland'.

²⁸ Martin Melaugh, "The Northern Ireland Conflict" *CAIN Conflict Archive on the Internet*, last modified 3 February 2006.

There are a number of key events that mark a spectrum of activities that can be understood to mark the beginning and end of 'the Troubles' but also to note that these are not definitively agreed. These include the Civil Rights March in Derry on 5 October 1968, to the beginning of the 'Battle of the Bogside', also in Derry on 12 August 1969, to the deployment of British troops on the 14 August 1969. The events signalling the end include the Omagh bomb of 15 August 1998, the statement issued by the Irish Republican Army (IRA) announcing the end of the 'armed campaign' on 28 July 2005, and the return of the agreed devolved government at Stormont on 8 May 2008.

<http://cain.ulst.ac.uk/faq/faq2.htm#when> Accessed 18 June 2011.

new, later agreement in 1998.²⁹ Following an IRA ceasefire in August 1994 and the growing indications from the Republican movement that the time of ‘armed struggle’ should cease, there began a long process of protracted negotiations amongst all those involved, beset by setbacks and further acts of violence and punctuated by the signing of the ‘Good Friday Agreement’ of April 10, 1998. The Agreement signalled the beginning of a peace process that eventually decommissioned paramilitary weapons and recognised the particular status of Northern Ireland within the United Kingdom, with a process of devolved government and the ratification of the Northern Ireland Stormont Assembly in 2005. The Agreement also outlined frameworks in which there might be continuing liaison and co-operation between the Irish and British governments on issues such as health, education and transport.³⁰

4. 4 Strategies of visibility: Irish neutrality

4.4.1 Background to neutrality

Irish independence from British rule was established in 1922, following the signing of the Anglo-Irish Treaty with Britain in 1921 and the founding of the Irish Free State. The Treaty contentiously partitioned the six counties of Northern Ireland, which remained part of the United Kingdom, from the twenty-six counties of the rest of Ireland. In his contemporary description of “Conflict in Northern Ireland: A Background Essay,” author John Darby describes Partition thus:

The 1921 settlement precipitated a civil war in the southern 26 counties, between those willing to accept the settlement and those who believed it was a betrayal. Northern Ireland, the name given to the new six county administration, had been created through demographic compromise. It was

²⁹ John Coakley, Brian Ó Caoindealbháin, and Robin Wilson, “Institutional Cooperation: the North-South Implementation Bodies” in *Crossing the Border: New Relationships between Northern Ireland and the Republic of Ireland*, eds, John Coakley and Liam O’Dowd ((Dublin: Irish Academic Press, 2007), 36.

³⁰ *Ibid.*, 37. The ‘Anglo-Irish Agreement’ was replaced by the ‘British-Irish Good Friday Agreement,’ which established a number of intergovernmental systems and cross-border funding structures.

essentially the largest area which could be comfortably held with a majority in favour of the union with Britain...³¹

Inscribed within the articles of the Treaty was British jurisdiction over the three 'Treaty Ports' of Berehaven (formerly Queenstown) and Cobh, both in County Cork, and Lough Swilly, in County Donegal, geographically all within the newly independent state but considered to be of such strategic interest that British control over them was retained until 1938.³² In the years between independence and the outbreak of the conflict in Europe in 1939, the Fianna Fáil party came to power in 1932, led by Eamon de Valera who became Taoiseach (Prime Minister). Often referred to as the architect of Ireland's policy of neutrality, de Valera began to assert independence early in the life of the government through a number of measures, such as abolishing the oath of allegiance to the monarchy by TD's³³ and downgrading the office of the British governor-general.³⁴ Ireland was still part of the Commonwealth, however, and the contentious issue of the partitioning of Northern Ireland and the retention of the Treaty Ports meant that there were many areas for resolution between the new State and the former imperial power. An amended constitution of 1937 (Bunreacht na hÉireann) replaced the earlier constitution of 1922 and named the emergent state 'Éire' or Ireland, replacing the term the 'Free State'.³⁵

4.4.2 Declaration of war and introduction of Emergency Powers

It was during these early years of the new State, government and constitution that the ground work for the later adoption of neutrality was prepared, in advance of what was unfortunately expected by the international community, the onset of renewed conflict

³¹ John Darby, "Conflict in Northern Ireland: A Background Essay" in *Facets of the Conflict in Northern Ireland*, ed. Seamus Dunn (UK: Macmillan, 1995) reproduced on CAIN <http://cain.ulst.ac.uk/othelem/facets.htm#chap2> Accessed 18 June 2011.

³² Peter Young, "Defence and the New Irish State 1919-1939" in *Ireland in World War Two: Neutrality and Survival*, eds. Dermot Keough and Mervyn O'Driscoll (Cork: Mercier Press, 2004), 22.

Article six gave Britain responsibility for protection of the seas of Britain and Ireland, until Ireland could maintain coastal defences, to be reviewed in five years. Article seven offered Britain such harbours and sea facilities as required.

³³ 'TD' is a member of the Irish parliament, the Dail meaning 'Teachta Dala', literally, representatives of the Dail.

³⁴ Helen Litton, *The World War 2 Years: The Irish Emergency an Illustrated History* (Dublin: Wolfhound Press, 2001), 14.

³⁵ Constitution Law, Article Four. <http://www.ucc.ie/law/irishlaw/legislation> Accessed 24 May 2011. Éire is the Gaeilge word for 'Ireland'.

in mainland Europe.³⁶ On the 1 September 1939 Hitler invaded Poland, evidence of the Nazi determination for *Lebensraum* ('living space') which demanded expansion and territorial conquest, previously demonstrated by the invasion of smaller geographical neighbours. This began with Austria in March 1938 and was followed by Czechoslovakia in March 1939. Following the invasion of Czechoslovakia, and the Nazi-Soviet Pact that was subsequently put in place, the British parliament responded by enacting an Emergency Powers Act on 24 August of the same year, and the next day secured a defensive alliance between Britain, France and Poland, in an attempt to prevent the ever increasing prospect of a German invasion of Poland. On the 2 September Nazi troops crossed over Polish borders, and a final and futile attempt was made by the British Prime Minister Neville Chamberlain in Parliament by suggesting to help open talks between Germany and Poland if Hitler would withdraw troops. This suggestion and Chamberlain's failed policy of appeasement in relation to Hitler's transgression of European borders was finally rejected by the Cabinet and members of the British Parliament. In Dublin, on the 2 September, de Valera put the long anticipated position of neutrality into motion in the Dáil by amending the constitution to include the clause 'in time of war' in order to encompass conflicts in which Ireland was not an active participant.³⁷ On Sunday 3 September 1939 the Prime Minister of Britain and Northern Ireland announced that Britain and France were now at war with Germany through a BBC broadcast. Chamberlain's radio announcement expressed his regret at the failure of attempts to prevent war once again taking hold across Europe. Referring to the demand that Germany withdraw its troops from Poland, he reiterated the oft quoted statement that, "no such undertaking has been received, and consequently this country is at war with Germany."³⁸

On the same day in Dublin, the Taoiseach announced in the Dáil the intention of the Irish Government to adopt a position of neutrality in the declared conflict, and the Oireachtas passed the Emergency Powers Act (1939), "An act to make provision for

³⁶ Seosamh Ó Longaigh, "Preparing Law for an Emergency, 1938-1939" in *Ireland in World War Two*, eds. Keough and O'Driscoll, 36. Following the Anglo-Irish Treaty there was ongoing opposition from the IRA and severe measures to deal with this preceded the draconian Emergency Act in 1939. These included the Treasonable Offences Act of 1925 and internment the following year.

³⁷ *Ibid.*, 40.

³⁸ Prime Minister Neville Chamberlain, broadcast on the BBC Home Service 03 September 1939, duration 12 minutes 38 seconds. Accessed 3 May 2011.

<http://www.bbc.co.uk/archive/ww2outbreak/7917.shtml>

securing the public safety and the preservation of the state in time of war.”³⁹ The Act was to remain in force throughout the duration of the war, until the 2 September 1946, and as a result the Second World War was known in Ireland as ‘the Emergency’. In Ireland, the Taoiseach also announced the crisis to the nation via a wireless broadcast following his address to the Dáil. In the broadcast he referred to the agreement of the Houses of the Oireachtas and the Seanad on the decision to adopt a position of neutrality and the aim to “keep our people out of the war” following the “almost inevitable, for months past”⁴⁰ indications of looming conflict in mainland Europe. He summarised the context for neutrality with a reference to the country’s historical and current position as follows:

I said that in the Dáil with our history, and with our experience of the last war, and with a part of our country still unjustly severed from us, we felt that no other decision and no other policy was possible.⁴¹

Eamon de Valera’s case for Irish neutrality had been comprehensively developed over the previous few years and the argument was by now firmly established and had popular support throughout the country, not least because of the practicalities; “It was generally acknowledged – even in Britain – that Ireland could not afford to fight; that if the country were to become caught up in the war it would last no time at all.”⁴² According to Irish historian Clair Wills, in her discussion of the Dail debates around the introduction of the Emergency Powers Bill, there was a small number of Senators and TD’s who raised “...the issue of sympathy for Britain, and the ethics of staying neutral while relying on British shipping for supplies...”⁴³ but, as Wills states, there was majority support for the position of neutrality within the population as the most viable option, and consequently no real imperative to politically defend the decision to introduce the Emergency Act. So despite the dissenting voices of some Fine Gael

³⁹ Clair Wills, *That Neutral Island: A Cultural History of Ireland during the Second World War* (London: Faber, 2007), 8.

⁴⁰ Eamon de Valera, *The Taoiseach Broadcasts to the Nation*, 3 September 1939, RTE archives. <http://www.rte.ie/laweb/> Accessed 6 May 2011.

⁴¹ *Ibid.*

⁴² Wills, *That Neutral Island*, 41. Clair Wills discussing the vulnerabilities of the emerging state, notwithstanding de Valera’s political efforts to distance the country from the previous imperial relationship with Britain.

⁴³ *Ibid.*, 47.

TD's⁴⁴ about the extensive and sweeping powers of the Emergency Powers Act and its introduction when the country itself was not at war, the Bill was passed without opposition.

The Bill was modelled on the British Act passed the previous week – all the powers necessary for protecting the state and its citizens in a volatile situation 'almost akin to war', for maintaining public order and suppressing dissent, and for regulating and controlling essential supplies such as basic foods, petrol, coal and the raw materials needed by industry.⁴⁵

4.4.3 *Emergency Powers and censorship*

The Emergency Powers Act allowed for the escalation of existing censorship legislation, and followed the Censorship of Films Act in 1923 and the Censorship of Publications Act of 1929. Both of these Acts laid the foundations for extensive restrictions on reporting of any events which might be related to the conflict, from the silencing of weather reports to the opening of private mail.⁴⁶ According to Litton, the policy was to influence the editorial content rather than insist on the removal of factual information, although "large areas of blank space in the middle of the page tended to give the game away."⁴⁷ All 'belligerents' were to be treated equally in the press, by ignoring all their respective activities. Under the Articles of the 1907 Hague Convention,⁴⁸ which defined the terms of neutrality for all countries that had declared themselves as such during a time of conflict, the term *belligerents* refers to any or all of those nations actively engaged in warfare. By reason of the diplomatic relationships established by Ireland prior to the outbreak of war and in the interests of international balance, representatives of the main Allied and Axis powers each maintained a legation in Dublin throughout the duration of the war. The

⁴⁴ Ó Longaigh, "Preparing Law for an Emergency, 1938-1939," 64. Fine Gael TD's Dr T.F. O'Higgins and John A. Costello expressed their reservations at the delegation powers to the executive, over matters such as compensation for compulsory acquisition of property, military and industrial conscription, and the trial of civilians by court martial.

⁴⁵ Wills, *That Neutral Island*, 46.

⁴⁶ Litton, *The World War Two Years*, 48.

⁴⁷ *Ibid.*, 49-50.

⁴⁸ International Humanitarian Law Treaties and Documents. Convention (V) requesting the Rights and Duties of Neutral Powers and Persons in case of War on Land, The Hague, 18 October 1907.

<http://www.icrc.org/ihl> Accessed 11 May 2011.

representatives of the chief belligerents were Sir John Mahaffey, the British representative and Dr Edouard Hempel, the German Ambassador. Also included were David Gray, the United States Ambassador, and the Italian and Japanese Consuls who also maintained offices in Dublin.⁴⁹

Not all neutral countries, notes Litton, were so prescriptive in their interpretation of neutrality and its manifest position in print and the media; in Switzerland, for example, correspondents operating from abroad were free to express their own opinions of the conflict in their reporting.⁵⁰ So in the overt censorship of the national press in Ireland, including banning the word 'Nazi' and requiring British newspapers sold daily in Ireland to also "bow to the Censorship Board,"⁵¹ national censorship of the reporting of the conflict was substantial and wide-ranging. Looking at the relationship between censorship and the reporting of the war at sea, however, specifically in terms of reporting the many bodies washed up along the western seaboard, Clair Wills raises questions about the interest and attention paid to these circumstances in the local press of counties Donegal, Sligo and Mayo, in contrast to the lack of discussion in the national press and the Dáil. Whether some of the reasons for this might be that censorship was less effective in relation to local press, in that the remains were seen as a local problem, or whether it was problematic to raise the issue of the payment for recovery and burial of foreign corpses, Wills concludes that: "No doubt the silence was due to a combination of these reasons, and there may well have been more self-censorship than official censorship of the news of the bodies."⁵² Photographs were also subject to censorship, although other images and pictorial representations of the effects of the war at sea, such as pen-and-ink drawings, cartoon and sketches were not according to Wills, appeared in a wide range of publications, from *Ireland's Own* to the *Dublin Opinion*.

But there were also drawings of empty lifeboats, planes shot down, ships in trouble in sight of the coast, dog-fights over the sea watched from an Irish headland, young women praying for the safety of sailors in trouble. The

⁴⁹ Litton, *The World War Two Years*, 32-33.

⁵⁰ *Ibid.*, 52.

⁵¹ *Ibid.*

⁵² Wills, *That Neutral Island*, 145.

politics of the ports may have been a closed debate, but not the tragedy occurring within sight of the shore.⁵³

This idea of 'self-censorship' sits alongside the practices of official censorship, suggesting practices more ambiguous than state controls but similarly effective in terms of in/visibility. By contrast, in the literature and cultural manifestations of the time, the form of the body and the deaths in the war at sea were clearly present, exemplified in the poem by Louis McNeice, and his dark, cannibalistic metaphor for Ireland's isolationism and misjudged sense of self-sufficiency, as evoked by his poem 'Neutrality'.

But then look eastward from your heart, there bulks
A continent, close, dark, as archetypal sin,
While to the west off your own shores the mackerel
Are fat – on the flesh of your kin.⁵⁴

4.4.4 Treaty ports and the war at sea

The *Irish Times* newspaper of the September 1939 weekend in which war was declared, notes Wills, brought out its first Sunday edition since the 1916 Easter Rising, with the government policy of neutrality headlining across all the newspapers. Also on that Sunday, within hours of Britain's declaration of war, a German U-boat torpedoed the British liner *Athenia* about 250 miles off Malin Head in Inishowen. En route from Liverpool to Montreal, 120 of the 1,100 passengers and crew were killed. Some 430 of the survivors were brought by the Norwegian tanker *Knute Nelson* into Galway.⁵⁵ This event preceded very many more tragedies at sea which were to take place over the course of the Battle of the Atlantic, that dimension of the conflict that was perhaps in closest proximity to Ireland and the effects of which were to bring the most vociferous calls, primarily from Britain but also from the United States, for the country to reject its position of neutrality. So from the very outset of conflict, the

⁵³ *Ibid.*, 146.

⁵⁴ Louis MacNeice, "Neutrality" 1942, verse quoted in Wills, *That Neutral Island*, 128.

⁵⁵ *Irish Times* archive of 6 September 1939. Accessed 25 May 2011.

<http://www.irishtimes.com/newspaper/opinion/2010/0906/1224278286278.html>

declaration of war and the cultural context of neutrality were inextricably linked, and discernible in Irish relationships with other nations.

The deep water harbours of Lough Swilly in Donegal, and Berehaven and Cobh in Cork, are the 'Treaty ports' operational as British bases during the First World War (1914-1918), and significant in British naval defence of the southern and western approaches from the Atlantic. As indicated, such was their strategic value to the former imperial power that control of the ports was retained by the British government after Irish independence and the partition of Northern Ireland was signalled by the Anglo-Irish Treaty in 1922. It was the amendments to the Constitution of 1937 and de Valera's efforts to consolidate Irish sovereignty that resulted in the return of the Treaty ports to Irish jurisdiction in 1938, preceding the outbreak of war in 1939. The decision was made by Prime Minister Chamberlain and was strongly opposed by the former First Seaford during the 1914-18 conflict, Winston Churchill. By this time the prospect of another global conflict was becoming apparent, notwithstanding Churchill's opposition to the return of the ports to Irish control, and de Valera's earlier assurance that the ports would not be used as bases from which to attack Britain.⁵⁶ The status of the Treaty Ports became one of the defining political issues in the context of Irish independence and subsequent neutrality during the Second World War. In Robert Fisk's opinion the issue of the Treaty ports exemplified the British thinking on the island of Ireland as a source of potential alarm.

Ireland itself was a geographical location that only touched British consciousness at times of insurrection or external danger. Throughout the Second World War, it was the pressing need for the Treaty ports and the fear that Germany might use Eire as a platform for an assault upon Britain that dominated British strategic thinking in Ireland.⁵⁷

⁵⁶ PRO CAB 24/262 Comm. Imp Def 4.2.36. (Public Records Office Kew, War Cabinet Archives) quoted in Fisk, *In Time of War*, 26. Fisk refers to the assurance given by de Valera in 1935, when negotiations about the control of the Ports to returning to Ireland were underway, in a statement made to the effect that the "Irish government would not allow their country to be made the base of attack on Great Britain." On May 5, 1938, Chamberlain, in a House of Commons debate clarifying the terms of the return of the Ports to Irish jurisdiction, maintained that de Valera had "announced his intention to put those ports into a proper state of defence" in order to make good his assurance that Irish territory would not be available to a foreign power for an attack on Britain. *Ibid.*, 36.

⁵⁷ Fisk, *In Time of War*, 470.

From this time and throughout the war, particularly during the early stages of the 'phoney war' before the fall of France in 1940, there were contentious arguments and exchanges between Churchill and de Valera over the Irish refusal to lease the ports back to Britain, publicised through parliamentary reports, the British press and voiced over the airways.⁵⁸ From an Irish perspective, leasing the ports to Britain would have signalled a public and visible dereliction of the terms of neutrality, of which Article 2 of the Hague Convention states: "Belligerents are forbidden to move troops or convoys of either munitions of war or supplies across the territory of a neutral Power."⁵⁹ Although, as will be discussed, the interpretation of this clause in the context of Irish neutrality was later distinctly and covertly in favour of the Allies, the undisguised use by the Royal Navy of the Treaty ports would have signalled Ireland's engagement by proxy as a participant in the conflict. Anticipating the outbreak of war and prior to the return of the ports to Irish jurisdiction in July 1938, Winston Churchill, in an (in)famous speech to the Houses of Parliament in May 1938, raged against their pending release.

These ports are in fact 'the sentinel towers' of the western approaches, by which the 45 million in this island so enormously depend on foreign food for their daily bread, and by which they carry on their trade, which is equally important to their existence...Now we are to give them up, unconditionally, to an Irish government led by men – I do not want to use hard words – whose rise to power has been proportionate to the animosity with which they have acted against this country, no doubt in pursuance of their own patriotic impulses and whose present position in power is based upon the violation of solemn Treaty engagements.⁶⁰

⁵⁸ Brian Girvin and Geoffrey Roberts, eds (Dublin: Four Courts Press, 2000), 78. Churchill's adversarial public position in relation to the lack of access to the ports continued throughout the conflict, even culminating in references in his Victory broadcast of 13 May 1945 to "...the approaches which the Southern Irish ports which could so easily have guarded were closed by the hostile aircraft and U-boats..."

⁵⁹ International Humanitarian Law Treaties and Documents. Convention (V) requesting the Rights and Duties of Neutral Powers and Persons in case of War on Land, The Hague, 18 October 1907. Accessed 11 May 2011. <http://www.icrc.org/ihl.nsf/FULL/200?OpenDocument>

⁶⁰ Mansergh, quoting House of Commons Debates Vol 335 coll 1094-1105 (5.5.38), 384. Quoted in Fisk, *In Time of War*, 37.

The speech was delivered by Churchill in his role as First Lord of the Admiralty prior to his becoming Prime Minister in May 1940, perhaps drawing on his background and experience as a naval tactician during the First World War, when the ports were in use as British naval bases and the complexities of warfare were heavily weighted in favour of sea power. And arguably, when conflict started in 1939, Churchill's argument for the significance of the ports appeared justified, as a result of the rapidly rising death toll due to attacks on merchant shipping and Allied convoys targeted by the German U-boats hunting in the Atlantic. Although the greatest losses in the Atlantic were between 1940 and 1943, during the 'Happy Time' of July to October 1940, over a thousand Allied ships were lost, one quarter of British tonnage.⁶¹ Although Churchill, as an advocate for naval sea power, clearly believed that access to the Treaty Ports would have been in the Allies favour in the war at sea, this was not necessarily the case. As we will see, the shift from sea to air power was exemplified by the sinking of the flagship of the German fleet *Bismark* in 1941, which signalled the decline of the surface raider and the ascent of aerial reconnaissance as a decisive factor in the arsenal of modern conflict. Winston Churchill became Prime Minister on 10 May 1940, and historian Wills describes the climate of opinion in Britain at this time as being one of "tremendous resentment against American isolationism, and a concerted press campaign against the Irish, which now focussed obsessively on the loss of the Treaty ports."⁶² This campaign was undoubtedly influenced by Churchill's own attitude on the return of the ports to Ireland in 1938 which he had bitterly opposed at the time. Wills supports this perspective with a view from historian Eunan O'Halpin in the following:

Undeniably however, Churchill's personal attitude to Irish neutrality was also a factor. As Eunan O'Halpin put it, Churchill 'regarded Irish neutrality almost as a personal affront'. Against those who advocated caution in squaring up to Ireland's independent stance he argued that there was no legitimacy to Ireland's neutrality – the country was, in his view, still under the crown and thus legally 'at war but skulking'. Right through the crisis in the Atlantic, and particularly after becoming Prime Minister, his comments were designed to

⁶¹ Wills, *That Neutral Island*, 114.

⁶² *Ibid.*

bully and threaten Ireland into entering the war and leasing the ports to Britain.⁶³

4.4.5 Defence of the Irish coastline

It was in this climate of hostility and with the threat of potential invasion from either of the 'belligerents' that the coastal defence of the island was being considered. Historian Clair Wills, in her discussion of the war at sea, speaks of a sense that "The state sat precariously in the middle of a blockaded area – to that extent it was 'in' the war, regardless of the lease of the ports."⁶⁴ Although censorship screened the extent of the debates taking place in Britain over the Treaty ports, the traffic and contact between the two countries ensured that British opinions and sensibilities on the subject were well enough known within Ireland. Wills continues by saying that for the communities living around Ireland's coastlines the consequences of the conflict were frequently experienced – in the autumn of 1940 up to three ships daily were being sunk in the Atlantic, many within sight or range of the Irish coast. Wills argues that "It would be hard to overestimate the importance of the idea of the coastline in the developing sense of Irish sovereignty during the war."⁶⁵ In demarcating the neutrality of the state, the geographical and political boundaries were both forming a symbolic and actual site of defence against encroachment.

Now the coast was defined as territory in itself, as limit and boundary to the state. The border with the North was repeatedly described as a 'frontier' between war and neutrality, but the coast was just as much a front, or front-line, in Irish defences.⁶⁶

This sense of fear and encroachment across 'borders', both political and territorial, was reinforced by the realities of difference taking place as a result of the war. Within British jurisdiction, Northern Ireland was engaged in the war, and travel and movement between the states could not have failed to reinforce the cultural

⁶³ *Ibid.*, 115.

⁶⁴ *Ibid.*, 133

⁶⁵ *Ibid.*

⁶⁶ *Ibid.*, 134. Wills suggests that, arguably, "Coastal representations of the borders of the state had the advantage of evading the issue of partition." And so could be developed both strategically and symbolically.

differences. As well as the threat of potential British incursion from Northern Ireland (Plan 'W')⁶⁷ there was a persistent fear of German invasion, a detailed plan of which was discovered after the war. (*Fall Gr n* - Operation 'Green').⁶⁸ Clair Wills describes the establishment of the coast watchers as a response to this pervasive atmosphere.

This maritime focus was natural during 1940, given the fear of invasion from the continent. One response to this fear was the inauguration of a system of coast-watching – rather like a modern version of the Martello towers that had ringed the Irish coast as lookout posts during the Napoleonic wars. The Marine and Coast Watching Service was a land based branch of the maritime force, specifically detailed to monitor signs of suspicious activity around the coast, and to provide early warning of invasion in any direction. The coast-watchers' task was to monitor the borders of the Irish state – to be alert to infringements of the integrity of the state not only from the sea but also from the air.⁶⁹

According to historian Michael Kennedy, in his publication *Guarding Neutral Ireland: The Coast Watching Service and Military Intelligence 1939-1945*, the initial plans for the inauguration of an Irish coast watching service by the Department of Defence in September 1938 did not specify the subsequent extent of the "observation of aircraft and submarines, the recovery of bodies and flotsam, the monitoring of attacks on air or naval craft or the reporting of drifting mines, all of which were to become primary duties of the Coast Watching Service as eventually constituted in April 1939".⁷⁰ Instead a more simplified emphasis was originally based on the monitoring of shipping and the movements of potentially subversive individuals around the coastline. From early plans to site 200 posts around the coastline, based on the older system of pre-1922 Napoleonic towers, and staffed by a volunteer force of 1,000 local men over the age of military service,⁷¹ the eventual implementation was of eighty-three posts, located in some of the most remote areas of coastline commanding vantage points over the sea and horizon and staffed by recruits aged

⁶⁷ Fisk, *In Time of War*, 203.

⁶⁸ *Ibid.*, 190.

⁶⁹ Wills, *That Neutral Island*, 134.

⁷⁰ Michael Kennedy, *Guarding Neutral Ireland: The Coast Watching Service and Military Intelligence 1939-1945*, 18.

⁷¹ *Ibid.*

between 17 and 30 years of age.⁷² The aim of the Coast Watching Service was defined as “thus passive defence and information gathering,”⁷³ and their findings contributed directly to the operations of the Irish Military Intelligence Services, G2. The information on all signs of activity around the coastline, seas and skies was recorded in the logbooks and passed to senior intelligence officers at G2 for analysis. The coast watchers’ information was part of the overall schematic of intelligence that was gathered from this and other sources.

Coastwatchers were limited by day-to-day visibility and the limits of the horizon. The course of events had to be extrapolated by G2 from other sources, including reports transmitted by Lloyds of shipping sunk, marine radio messages intercepted by Fort Dunree, information about survivors, and reports from Gardaí and lighthouse keepers.⁷⁴

Originally operating from tents, the coast watchers were later housed in single storey pre-cast concrete bunkers, built rapidly from 1939 to 1940, in a huge logistical undertaking by the Irish Defence Forces throughout the coastline from Ballagan point in Louth to Inishowen Head in Inishowen.⁷⁵ Unlike the bunkers of the Atlantic Wall where the aim was to repel invaders and protect those firing from inside, the defensive position here was predicated on maximum visibility and observation of the landscape of sea, sky and horizon beyond the bunker. This twenty-four hour system of surveillance was achieved by the coast watchers working in shifts, their viewing through the six-sided windows meticulously recorded in logbooks, the materiality of which has proved to be an authentic and durational account of the war as it took place around the Irish coastline.⁷⁶ As the war continued, the lookout post and their strategic position along the coastline became instrumental in another role, one which involved inscribing the landscape itself. From the summer of 1943, the word ‘EIRE’ was to be written out on the ground in white stones adjacent to the post, of a scale and position

⁷² *Ibid.*, 22.

⁷³ *Ibid.*, 41.

⁷⁴ Kennedy, *Guarding Neutral Ireland*, 122.

⁷⁵ *Ibid.*, 49.

⁷⁶ Cite Michael Kennedy’s work at the RIA in putting the logbooks online and give a direct URL.

that enabled it to be clearly visible to passing aircraft.⁷⁷ The rationale for the 'EIRE' sign was that it was intended to function as a clear visual reference to pilots that they were overflying neutral territory. However, the addition of a numbering system at the behest of the American legation in Dublin meant that the aerial markers of the signs were transformed into an aerial aid to navigation for Allied pilots, who were equipped with a key map for the system, in the wartime Memorandum as follows:

1. A system of marking the coastline of Eire to orient pilots flying in that district as to their location has been put into effect as follows:
 - a. The word 'EIRE' is spelled out in six (6) foot or larger block letters at eighty-three (83) points on the Eire coastline. These selected points are spaced between eight (8) and ten (10) miles apart and have been visibly numbered consecutively, running clockwise from Ballagan Point (1) on the East coast, South and around the coastline to Inishowen-Head (82), with the exception of point 83 which is located at Foileye.⁷⁸

This originally secret document entitled 'Briefing instructions: Northern Ireland and Eire' from March 1944, originated from the Office of the Commanding General of the Headquarters of the United States Strategic Air Forces in Europe, and was part of the briefing information for Allied crews who might encounter Irish airspace. This was only communicated to Allied pilots; the German Embassy was not informed of the significance of the numbered signs.⁷⁹ Therefore the literal inscription of the landscape was performing a dual function; firstly, the word 'EIRE' signified to pilots that they were clearly crossing over Irish airspace, and acted as a visible caution to 'belligerent' aircraft of Ireland's neutrality; and secondly, with the addition of the numbering system and key map, of assistance only to the Allies, the ostensible function of signifying the landscape as neutral was subverted by the play between these visible and invisible codes of conflict (fig.4.8).

⁷⁷ MA General Report on the Army for year 1 Apr. 1943-1 Mar. 44, in Kennedy, *Guarding Neutral Ireland*, 244. Ostensibly this was done in order "to reduce the number of aircraft landing because their crews had lost their bearings."

⁷⁸ TNA AIR 2/4735, 16 Mar. 1944 quoted in Kennedy, *Guarding Neutral Ireland*, 247.

⁷⁹ Fisk, *In Time of War*, 284, quoted in Kennedy, *Guarding Neutral Ireland*, 247.



4.8 Mhairi Sutherland. Remains of EIRE sign at Malin Head, LOP No. 80. (2008).

4.4.6 *War at sea off the Irish coast*

By 1940 the Allies were continuing to suffer defeat on mainland Europe with the surrender of France in Paris on the 20 May to the occupying German forces, followed by the evacuation at Dunkirk between the 26 May and the 04 June. A deep and widespread fear of invasion began to take hold in the British public imagination as the Axis powers moved towards the fringes of the European littoral, separated from Britain only by the English Channel, with the Battle of the Atlantic taking place throughout the course of the war. During September 1940 an average of three ships a day were being sunk by U-boat attacks, particularly in the area around Malin Head, where sea traffic was heaviest, and also in a widespread area of 200 miles off the Mayo coast, as noted in December of the same year by Fine Gael TD Richard Mulcahy.⁸⁰ Historian Michael Kennedy notes that the combination of U-boats and the aerial abilities of the Luftwaffe FW-200 Condors made the “roughly 250 square miles of sea off Bloody Foreland (Donegal) a cemetery for shipping.”⁸¹ So clearly

⁸⁰ Kennedy, *Guarding Neutral Ireland*, 114.

⁸¹ UCDA P71/171, note by Bryan, Air and Marine [Intelligence] in Kennedy, *Guarding Neutral Ireland*, 101.

Ireland's political neutrality was in a contrary position to the reality of its geographical situation as the war at sea raged around its shores and coastlines. The cumulative effect of the deaths at sea off the shores of neutral Ireland is suggested by Wills.

Not all British ships were lost off the Irish coast by any means, but the pattern of sinkings in the North Atlantic during the latter half of 1940 meant that Allied public opinion swung decisively against Irish neutrality, and in particular against the refusal to allow Britain to use naval and air facilities to aid Atlantic defence.⁸²

From July to October of 1940 the sea area off Malin Head was targeted heavily by German U-boats and was termed the 'Happy Time' by the operating crews, here described by one of the U-boat commanders.

...sank ships almost at will – at sea or in sight of land and safety, quietly or sending them up in huge fireballs. Sometimes nobody know where a ship had sunk, sometimes everybody knew, for the wreckage would float for days and bodies would wash onto beaches. Forty-two merchant ships, most of them carrying vital war cargo, were sunk in July [1940] alone, sixty-eight in August, sixty-six in September.⁸³

By 1945, over 40,000 allied sailors, mainly merchant seamen, thousands of airmen had been killed, and 15 millions tonnes of shipping lost. The Germans also suffered terrible losses in the Battle of the Atlantic, when nearly 28,000 submariners also died, and two-thirds of the U-boat fleet were lost.⁸⁴ As the war progressed, the Allied lack of access to the Treaty ports gained an almost metaphorical dimension, culturally symbolic of Ireland as isolated and the policy of neutrality as a form of withdrawal from the scale of international conflict. The response of British author and naval officer Nicolas Montserrat (1910-1979) to the losses in the Atlantic and the country's

⁸² Wills, *That Neutral Island*, 114

⁸³ Jordan Vause, *U-boat Ace: The Story of Wolfgang Lüth* (Annapolis, 2001), 56, quoted in Kennedy, *Guarding Neutral Ireland*, 100.

⁸⁴ Dermot Francis et al., *Atlantic Memorial: The Foyle and the Western Approaches 1939-1945* (2005), Derry City Council, Heritage and Museum Service, 63.

perceived position of isolationism is passionately evoked in his novel *The Cruel Sea*, written in 1951, in the aftermath of World War Two. It is notable not just for the strength of feeling in its condemnation of Irish neutrality, but also for its focus on the significance of the Treaty ports, and clearly reads as an indictment on their unavailability to the Allies.

To compute how many men and how many ships this was costing, month after month, was hardly possible; but the total was substantial and tragic. From these bases escorts could have sailed further out into the Atlantic, and provided additional cover for the hard-pressed convoys; from these bases, destroyers and corvettes could have been refuelled quickly, and tugs sent out to ships in distress; from these bases, the Battle of the Atlantic might have been fought on something like equal terms. As it was, the bases were denied: escorts had to go 'the long way round' to get to the battlefield, and return to harbour at least two days earlier than would have been necessary: the cost, in men and ships, added months to the struggle, and ran up a score which Irish eyes a-smiling on the day of Allied victory were not going to cancel.⁸⁵

Montserrat's writing connects the loss of life at sea directly to the lack of access to the Treaty ports. In reality however, the leasing of the Treaty ports and the very public withdrawal from the position of neutrality that would have followed, might have had very different consequences. For Ireland to lease the ports would have signalled a very visible deviation from the position of neutrality and Germany may have felt justified in invading Ireland, which was militarily ill-equipped to defend itself.

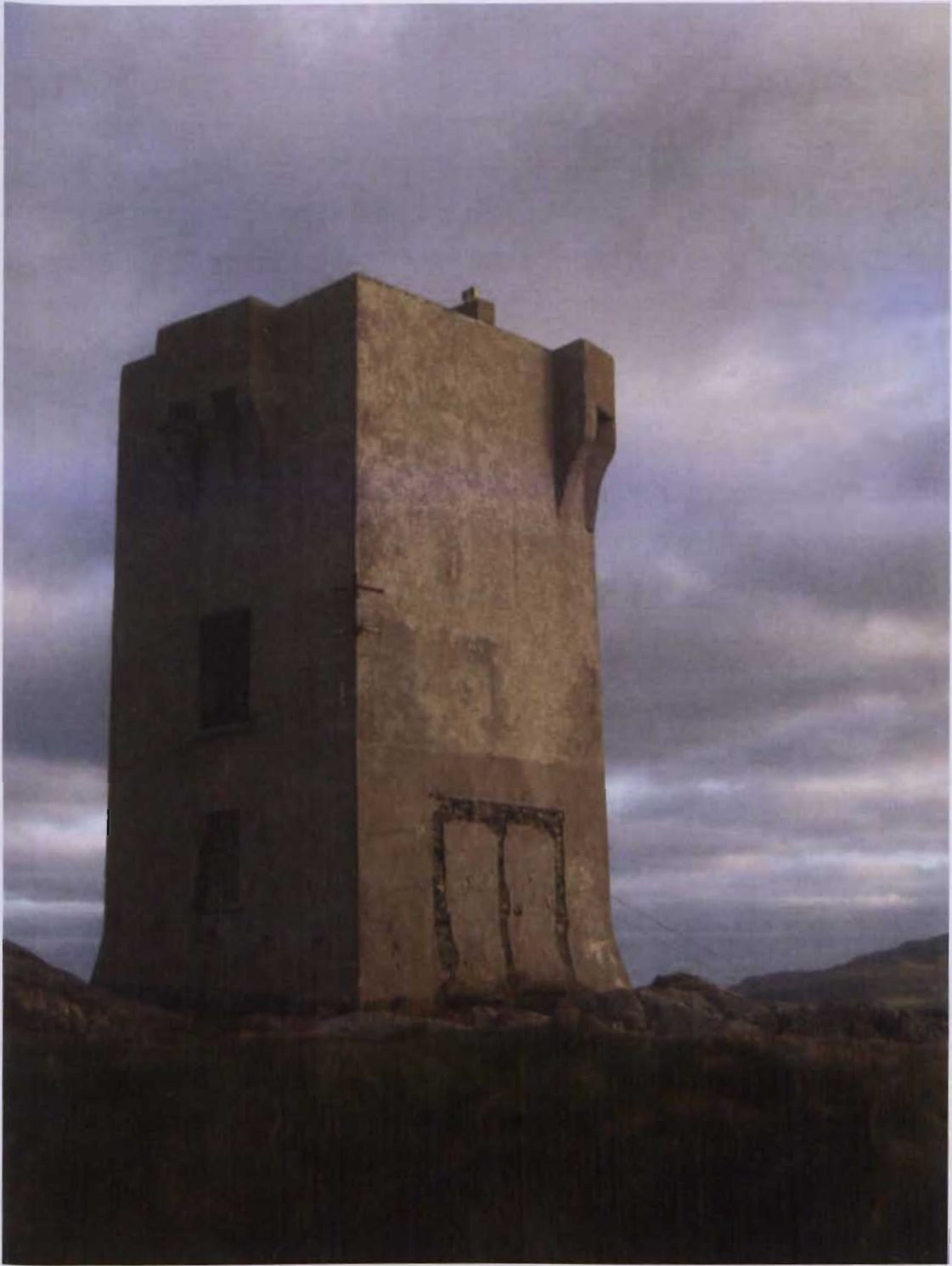
4.4.7 Lough Swilly and the Inishowen peninsula

The Treaty port of Lough Swilly, in Irish *Loch Súilí*, the 'Lake of Shadows,' is a deep water estuary in the north of Ireland bordered by the peninsulas of Fanad on the west and Inishowen to the east. Historically, the strategic situation of the Lough as a safe harbour from the rigours of the north Atlantic was long established before the events of the Second World War and the issue of access to the ports. Significant historical

⁸⁵ Wills, *That Neutral Island*, 119.

and military events have taken place over centuries on the waters of the Lough and the coastlines and landscapes of the peninsulas of Fanad and Inishowen. In 1607 the Flight of the Earls took place when the Irish chiefs of the O'Neill and the O'Donnell clans fled from the port of Rathmullan in Fanad to Rome and wider Europe, signalling the end of the Gaelic Brehon Laws and a pre-colonial way of life in Ireland. In 1798 Wolfe Tone, leader of the United Irishmen and the struggle for independence, was involved in a sea-battle assisted by the French fleet in the Swilly, when his battleship the *Hoche* was captured after a five hour battle with the English forces. Tone was subsequently captured and brought ashore to the garrison town of Buncrana, imprisoned and committed suicide whilst awaiting execution. Although this was the last time a foreign European force invaded Ireland, the British fear of further invasion by the French led to fortifications being built between 1800-1820, producing the round Napoleonic Martello Towers erected at Rathmullan and Knockalla in Fanad and Dunree, and the square tower built at Malin Head in Inishowen in 1806, known as Lloyds Tower because of its later use by Lloyds of London to observe shipping. (fig.4.9)⁸⁶

⁸⁶ Donal MacCarron, *Silent Sentinels: The Irish Treaty Forts* (Dublin: Nonsuch, 2008), 41-43, and *The Guns of Dunree*, a local history guide.



4.9 Mhairi Sutherland. Napoleonic Tower, (Lloyds Tower), Malin Head, Inishowen (2008)

4.4.8 Swilly port fortifications: Dunree Fort and Lenan Battery

Dunree Head rises 335ft from the narrow road and the shoreline of Crummies' Bay at the cliff top edge of Lough Swilly as it stretches uninterrupted towards the Atlantic and the horizon. Following the road and taking the left fork before the beach, a first glimpse of a military blockhouse and the concrete perimeter wall of a fortified camp can be seen on the hill, a form of habitation quite distinct from the homes and farms of 'the Parish,' the townland name for the Dunree locality. Fortifications have been situated on the cliff top edge of Dunree Head since the 1800's, beginning with the threat of Napoleonic invasion in the early eighteenth century and continuing through to the Crimean War of the mid-nineteenth, when the fort continued to expand and incorporate the military technology of each era. The earliest fortification was on a rocky outcrop separated from the land mass by a sheer drop to the sea and rocks below, defended by a drawbridge, and now a narrow walkway leading to the military museum on the site of the former fort.⁸⁷

In his discussion of the use and strategic significance of the Treaty ports to British naval defences, Irish historian Robert Fisk notes that from 1802 successive British governments continued to fortify and maintain Irish ports "...until a hundred years later they were among the finest defended harbours in the realm."⁸⁸ Fort Dunree was maintained as a site in readiness and preparedness for warfare, rather than for direct engagement, by both the British and Irish Defence Forces, including during 'the Emergency' during the Second World War. Most of the camp as currently exists was originally constructed as part of the British defences in the First World War, with later additions taking place throughout its period of active use, up until such time as troops were stood down at the end of the Second World War, and disbanded in 1952.⁸⁹

Currently in a state between dereliction and preservation, Fort Dunree has managed to stake a claim in the life of its community, hosting environmental, community and

⁸⁷ Fort Dunree Military Museum was opened in 1986, and provides an interpretative film, collection of coastal defence weaponry, artefacts and images, access to the underground bunkers, and the 'Rockhill Collection' of Irish Defence Forces at home and abroad. <http://www.dunree.ie/history.html> Accessed 7 May 2011.

⁸⁸ Fisk, *In Time of War*, 7.

⁸⁹ Coast Defence Artillery at Fort Dunree was disbanded in 1952, and the F.C.A used the fort for training in the 1950's and 60's, up until 1983. *The Guns of Dunree*.

cultural activities and hosting the input of artists and arts projects amongst the landscape and architectures of the former military camp.⁹⁰ Even though new activities are taking place within the site and a new identity as a cultural and environmental centre is being created, the camp is still in regular occasional use as a training ground for the Irish army of Western Command on United Nations peacekeeping missions abroad.⁹¹ The use of Fort Dunree for contemporary military training is partly because of the existence of the military architectures, not yet obsolete or entirely redundant of their original purpose, and partly because of the geography and the terrain, which includes a helicopter landing pad and anchorage in the deep water of the Lough for Irish naval ships.

The First World War buildings are clustered around the base of Dunree Hill, where the material record of a substantial former military community can be traced, with a main thoroughfare, garage, hospital, telephone exchange, mess halls and married quarters, and a later addition of a squash court. Accommodation blocks are still standing for 'C' and 'D' company, wood panelling can still be seen in the Officers' Mess, as can painted wooden tongue and groove in other buildings. Latrines are scattered throughout the camp, including a shower block. The distinctive green paint and peeling corrugated iron sheeting still encloses many of the remaining buildings. (fig.4.10)

⁹⁰ As a former Director of Artlink, a visual arts organisation based in Buncrana, Inishowen, I established an exhibition space at Fort Dunree in the former Hospital block in 2003, funded by Donegal County Council and the Arts Council of Ireland. In May 2010 the research practice outcomes of this thesis were installed in the site-specific exhibition 'Arc of Fire' in Fort Dunree.

⁹¹ Present on two training exercises, in February 2008 and March 2011, I photographed Irish defence Forces of Western Command in preparation for United Nations duties overseas at Fort Dunree.



4.10 Mhairi Sutherland. Former Camp architecture at Fort Dunree (2009).

Some of the stone built buildings are now used as offices and have been converted into gallery and exhibition spaces, the former First World War stables and blacksmiths' forge is now a café, a wildlife and environmental interactive installation is in the former canteen, and a contemporary visual arts programme takes place alongside a small permanent military museum situated in the Salhanda galleries.

Lenah Battery, further north along the coastline than Fort Dunree and therefore the closer port to the open sea along the 18-mile estuary of Lough Swilly, is now completely derelict, but with many traces of its military architecture still evident in the landscape (fig.4.11). Robert Fisk writes that during the 1914 -18 conflict the southern port of Berehaven (formerly Queenstown) and northern Lough Swilly were important assembly points for convoys, and served as bases for naval flotillas on Atlantic convoy escort patrols. Fisk notes that the forts were maintained to a particular

level during this period, and that this included redoubts, moated ramparts, ammunition stores, underwater torpedo tubes, machine guns, howitzers and heavy artillery.⁹²



4.11 Mhairi Sutherland. Lenan Battery signage (2009).

As discussed, the clamour for access to the ports during the later conflict of 1939-45 was based on this earlier history of fortification, and the strategic positioning of the Treaty ports in relation to British defensive tactics in the Atlantic. Fisk discusses the significance of the ports and their consequent retention after 1921 as part of the terms of the Anglo-Irish Treaty that gave the ports their appellation.

The black stone and concrete fortresses remained a formidable barrier against attack by Britain's enemies and a formidable achievement of military engineering, which could in theory withstand sieges of up to four months duration and protect more than a hundred warships...their occupation added

⁹² Fisk, *In Time of War*, 7. Lough Swilly forts were defended by two 9.2-inch, two 6-inch and four 4.5-inch guns and four machine guns. The gun mountings can be still seen at both forts, and two of the guns are installed at Fort Dunree where they remain as part of the military museum.

between 200 and 400 miles to the Royal Navy's radius of operations in the Atlantic.⁹³

However as the conflict of the Second World War continued, and access to the ports was not granted, the pattern of warfare and the theatre of operations themselves were changing. Churchill's implacable belief that control of the Atlantic shipping routes was best served by access to the Irish ports was becoming arguably an obsolete position as the dominance of aerial vision over the massed ranks of seagoing vessels was becoming apparent. These shifts in the practices of warfare from the visible and hence vulnerable surface raider at sea, to the underwater, invisible stealth of the submarine, combined with the speed and operations of aircraft, were becoming explicit and contrasted with the apparent significance of the ports, as inherent in the earlier demands for access. Within this context historian Michael Kennedy discusses the implications of the covert air corridor as follows:

As far as the British-Irish relations were concerned, 1941 saw the last attempt by London to use the southern Irish ports. The increased use of Lough Foyle and Derry and the nearby Northern Irish air bases reflect the focus of battle off the north-west coast and in the mid-Atlantic. Berehaven became strategically redundant and the Shannon estuary lost its attraction as the Derry air bases rose in importance. The deliberately understated purpose of the Donegal air corridor shows the increased role air power was playing in the Atlantic theatre. Allied aircraft were transiting Irish airspace with de Valera's agreement. Through the air corridor from Lough Erne Britain had obtained the access to Irish territory for her air forces that De Valera would never allow for British naval forces through the Treaty ports. Arguably, the war in the Atlantic might have been very different had it not been for the existence of the air corridor.⁹⁴

The existence of the 'Donegal corridor' only came into the public domain in the 1990's with the release of archives related to the role of Ireland during the Second World War and assistance given to the Allies as part of Eamon de Valera's policy of

⁹³ Ibid., 7-8. Fisk notes that it was "no idle metaphor" when Churchill referred to the ports as 'the sentinel towers of the western approaches' in his House of Commons speech of May 1938, arguing against the return of the ports to Irish jurisdiction later that year.

⁹⁴ Kennedy, *Guarding Neutral Ireland*, 161.

‘constructive ambiguity.’⁹⁵ This geopoliticised landscape was revealed as the scenario for a series of covert activities that both subverted the visible neutrality of the State, and affirmed the role of the visibilities in the strategising of modern conflict.

4.4.9 ‘Donegal corridor’ operations 1940-1945

In County Donegal the N15 national road runs from Sligo to Lifford via the county seat of Donegal Town and bypasses the towns of Ballyshannon and Bundoran. Diverting to the original road and taking the route through Ballyshannon, where the river Erne now passes under the Allingham Bridge, the town is known for its printing presses and history of local newspaper production. In the 1940’s, however, because of the censorship in force during ‘the Emergency’, the Allied flights that were visible and audible over the landscape went unreported in the press. The river Erne opens to the sea at Donegal Bay, where the seaside resort of Bundoran is situated along the coastal shores, facing the northwest Atlantic breakers. Situated south-west of Bundoran is the Irish Army’s Finner camp, established in 1890 and that Allied pilots flying the ‘Donegal corridor’ were instructed not to pass overhead in case of anti-aircraft fire.⁹⁶ Finner camp is currently the base of the Irish Army 28th Infantry Battalion, which was formed specifically in response to the onset of the Troubles in order to protect the area around the border and Irish citizens during the height of the violence in Northern Ireland.⁹⁷ The 28th Battalion are part of Western Command of the Irish Defence Forces which regularly trains at Fort Dunree for UN peacekeeping missions.

⁹⁵ Geoffrey Roberts, “Historians and Ireland’s War” in *Ireland and the Second World War: Politics, Society and Remembrance*, eds. Brian Girvin and Geoffrey Roberts (Four Courts Press, Ireland: 2000), 169. Roberts discusses author Tim Pat Coogan’s view in *De Valera: Long Fellow, Long Shadow* (London, 1993), 568, that the date of de Valera’s transition from ‘friendly neutrality’ to ‘benevolent neutrality’ as being 1942, after the US entry into the war, when it became obvious that the Allies were going to win. However, the air corridor was established from January 1941, which suggests that the covert activities in contravention of the policy of neutrality were taking place from an earlier date.

⁹⁶ Joe O’Loughlin, local historian (Belleek, Co Fermanagh), in discussion with the author, March 2008.

⁹⁷ *How We Remember* exhibition, Donegal County Council Museum, Letterkenny, Co. Donegal, visited 17 June 2011. Established on the 1 September 1973, their remit was to patrol and defend the border, and at one stage were considering incursion into the North in defence of Catholic households. ‘Camp Arrow’ was set up near Ballyraine, Letterkenny in order to monitor the ongoing border situation, and the 28th Battalion became the largest unit in the Army at the time, patrolling 81 crossings in the longest stretch of border between Northern Ireland and the Irish Republic.

Within this landscape the traces of the former ‘Donegal corridor’ can be found in the seven mile strip of land, sea and airspace flown by Allied seaplanes from 1941 to the end of the conflict in 1945. The air corridor was flown by Allied pilots in Catalina and Sunderland seaplanes that took off from the aquatic runway of lower Lough Erne and the R.A.F. base of Castle Archdale in Fermanagh, Northern Ireland.⁹⁸ The flight path rose over the border town of Belleek and followed the course of the river through the neutral landscape in Éire, avoiding the anti-aircraft guns of Finner camp, and over the towns of Ballyshannon and Bundoran, across Donegal Bay into the north west Atlantic. With no discernable difference in the terrain of the landscape, the Allied aircraft flying the air corridor had now passed from a belligerent state to a neutral state, from a jurisdiction that had declared war on Germany and the Axis powers, to one that had declared that it would take no part in the global conflict, nor assist any of those who were actively engaged in warfare. This short flight of four land miles and three miles of territorial waters was taken by Catalina and Sunderland seaplanes as the first leg of a much longer journey of between twelve and eighteen hours in order to protect the vulnerable ‘Black Gap’ of the mid-Atlantic, where U-boats were previously able to operate and attack Allied convoys and Merchant Fleet shipping with impunity.

It was against the background of devastating Allied losses at sea that a meeting between the Irish External Affairs and the British Air Ministry in December 1940 laid the ground for the establishment of a military air corridor. Details were finalised in a meeting between the British Representative in Dublin Sir John Mahaffey, and the Irish Taoiseach Eamon de Valera on 20 January, 1941. Mahaffey later stated that the covert nature and operations of the air corridor showed “a desire to help in directions which do not involve obvious dangers here of German reprisals.”⁹⁹ Beginning with an aerial reconnaissance survey of the landscape on Christmas Day 1940, the first flight of the corridor took off from R.A.F. Castle Archdale on 21 February 1941, in order to escort a damaged merchant ship to safe port.¹⁰⁰

From this date the air corridor came into rapid and frequent use as a politically covert and logistically straightforward means of avoiding the lengthy detour around the

⁹⁸ Fisk, *In Time of War*, 257; Roberts, “Historians and Ireland’s War,” 168.

⁹⁹ TNA PREM 3/131/3, memorandum by Mahaffey of meeting with de Valera, 20 Jan. 1941 quoted in Kennedy, *Guarding Neutral Ireland*, 142.

¹⁰⁰ *Ibid.*

Inishowen peninsula. The detour would have involved an extra two hours flying time and a distance of 200 miles flying from an airbase in Northern Ireland.¹⁰¹ By the end of 1941 the use of the air corridor was being “observed almost daily off the coast of Mayo, Sligo and Donegal and crossing our territory between Ballyshannon and Finner when moving to and from their base in Lough Erne” through the recordings made in the logbooks of the coast watchers.¹⁰² An example of the military effectiveness of the ‘Donegal corridor’ can be seen in the sinking of the German warship *Bismarck*. This event demonstrated the significance of the air corridor and the supremacy of reconnaissance and surveillance in aerial conflict over naval methods.

The ‘Donegal corridor’ and the flying boat base at Castle Archdale played a central role in the sinking of the German battleship *Bismarck* on 27 May 1941 in one of the most memorable naval engagements of the Second World War.¹⁰³

On the 24 May 1941 *Bismarck* sank the battleship *Hood*, the flagship of the Royal Navy at the time. From a crew of 1,419, only three survived as the *Hood* sank to the bottom within minutes.¹⁰⁴ This was the Royal Navy’s greatest single ship loss of the Second World War. By the 25 May *Bismarck* had escaped an Allied airstrike, was evading pursuit by naval vessels and appeared to be sailing to safety in French waters, whilst fuel problems were beginning to affect the speed of the hunting ships, making them vulnerable to U-boat attack.¹⁰⁵ Two reconnaissance aircraft, Catalina Z of 209 Squadron and Catalina M of 204 squadron of Coastal Command flying from Castle Archdale, joined the search on the night of the 25-6 May. Instructed by the head of Coastal Command, Air Marshal Sir Fredrick Bowhill, “to scout for *Bismarck* in an

¹⁰¹ Dermot Francis et al., *Atlantic Memorial: The Foyle and the Western Approaches 1939-1945* Derry City Council, Heritage and Museum Service, (2005), 69. Although further north, Allied airbases were also operational in Northern Ireland, with RAF Coastal Command operational in Ballykelly from June 1942. Other local bases close to Derry included Limavady, Eglinton and Maydown, all of which enabled long-range, shore-based and carrier-based aircraft to travel towards the ‘black gap’ of the Atlantic.

¹⁰² MA G2/X/315 Pt II, Western Command Monthly Report, November 1941, quoted in Kennedy, *Guarding Neutral Ireland*, 148.

¹⁰³ *Ibid.*, 142. Kennedy provides a detailed account of the operations that identified and sank the *Bismarck*, based on archival references compiled from (Irish) records and (British) Coastal Command. *Guarding Neutral Ireland*, 142-149.

¹⁰⁴ Fergus A. D’Arcy, *Remembering the War Dead: British Commonwealth and International War Graves in Ireland since 1914* (Office of Public Works: Dublin, 2007), 229.

¹⁰⁵ TNA ADM 234/322, Battle Summary No.5 (1950 edition), 20 quoted in Kennedy, *Guarding Neutral Ireland*, 143.

area to the west of Brest and south-west of Ireland, both aircraft flew along the 'Donegal corridor' and out over Donegal Bay. They climbed and turned west."¹⁰⁶ Kennedy continues to describe the sighting of *Bismarck* by the aircraft, as follows:

Z/209 reached the search area at 0945. At 1030 in poor visibility and flying below cloud at 500 feet the Catalina's aircrew spotted 'a dull black shape, which gradually took on the contours of a large warship' steaming in the south-east¹⁰⁷ Exploding anti-aircraft shells left no one mistaken; Z/209 had found *Bismarck* and radioed her position at 49° 36' North, 21° 47' West, almost 600 miles to the south-west of Annagh Head where her crew had last seen land at 0430 over neutral Ireland.¹⁰⁸

This was the first sighting of *Bismarck* since 0213 on the morning of the 25 May and when the information was received by the battleships *King George V* and *Renown*, the British fleet altered its course to make direct contact with *Bismarck*, which was sunk on May 27 1941, with only 114 survivors from a crew of 2,200. In conclusion to the events of the sinking of *Bismarck*, Kennedy refers to later British accounts from the Admiralty that downplayed the role of the air arm, perhaps because of "the fact that the *Bismarck* was lost by the Royal Navy, and found for them again by the R.A.F."¹⁰⁹ The significance of the air corridor is reinforced in Kennedy's summarising remarks on these events, "Had the aircraft not been able to use the 'Donegal Corridor' they would have had to fly north through Northern Ireland and around the Donegal coast wasting valuable time in their search for *Bismarck*."¹¹⁰ And "*Bismarck* was found when she was in a vulnerable position because Coastal Command aircraft were able to take a shortcut over neutral Irish territory with the agreement of the Irish government."¹¹¹

The increasing success of aerial reconnaissance throughout the conflict, both Luftwaffe and Royal Air Force operations, was rapidly proving to be a crucial form of

¹⁰⁶ Ibid.

¹⁰⁷ Ludovic Kennedy, *Pursuit: The sinking of the Bismarck* (London, 2001 edition), 152, quoted in Kennedy, *Guarding Neutral Ireland*, 145.

¹⁰⁸ Ibid., 145-146.

¹⁰⁹ Ibid., 148. TNA AIR 15/204, Slatter to Brown, 3 Sept. 1946.

¹¹⁰ Ibid., 145.

¹¹¹ Ibid., 148.

the Republic after top-secret discussions with Sir John Mahaffey, Britain's representative in Ireland in 1941.¹¹⁴

The plaques commemorate the existence of the air corridor and the loss of over 300 Allied aircrew who died on active service whilst flying the route of the 'Donegal corridor.'¹¹⁵ Recognition of the air corridor, its role in the Battle of the Atlantic and the loss of lives associated with the route, was being publicly acknowledged, sixty two years after the end of the conflict. Prior to this the air corridor had been locally known and narrated through the efforts of interested, individual inhabitants of the area, which has included local history publications, the marking of crash sites with memorial plaques and stones, and assisting relatives of individual crew members in their visits to aircraft crash sites.¹¹⁶ The existence of the air corridor was not made public until the early 1990's, with the release of the archives of Joseph P. Walshe, Secretary to the Department of External Affairs (now the Department of Foreign Affairs) during the conflict, and which included a letter from Viscount Cranbourne, the British Secretary of State for Dominion Affairs, and a member of Churchill's war cabinet. The letter was in the form of a report that detailed a list of fourteen points in which the Irish government had directly aided the Allied efforts during the war. The Irish application to join the United Nations in 1946, after the war ended, was being blocked by a veto by the Soviet Union, a permanent member of the Security Council. The Cranbourne report formed part of the submission in support of the Irish claim, and Ireland was finally admitted in 1955. Amongst the list of direct actions and interventions in support of the Allies, (b) refers to the agreement that established the Donegal air corridor: "They have agreed to use by our aircraft based on Lough Erne of a corridor over Southern Irish territory and territorial waters for the purpose of flying out to the Atlantic."¹¹⁷ Other considerations included the continued supply of meteorological reports, plans for a British radar station in defence against submarine

¹¹⁴ Anita Guidera, "Plaques mark secret wartime air corridor in Donegal" Thursday 19 April 2007, <http://www.independent.ie/national-news/plaques-mark-secret-wartime-air-corridor-in-donegal-44249.html> Accessed 22 March 2009.

¹¹⁵ Local historian and Belleek resident Joe O'Loughlin has included a list of all air crashes and fatalities of Sunderland and Catalina seaplane R.A.F and R.C.A.F aircrew based at Castle Archdale and Killydeas airfield, who died on land and at sea whilst on operations flying from or over the 'Donegal corridor' <http://www.joeoloughlin.co.uk/?m=200808> Accessed 10 May 2009.

¹¹⁶ Breege McCusker, *Castle Archdale and Fermanagh in World War Two* (Necarne Press: Fermanagh, 1993) and Joe O'Loughlin, *Voices of the Donegal Corridor* (Nonsuch: Dublin, 2005)

¹¹⁷ PRO (London) CAB 66/62; 21 Feb. 1945. In Ronan Fanning, *Independent Ireland*. (Dublin: Helicon, 1983), 124-25.

activity, the internment of German fighting personnel whilst Allied personnel were allowed to depart, the use by British ships and aircraft of two wireless direction-finding stations at Malin Head, and the submission of reports on submarine activity to the United Kingdom Representative's Office in Dublin from the Irish coast watching service.¹¹⁸

Despite the air corridor being locally known and embedded in the historiography of the area, the placing of a civic public memorial to the circumstances and fatalities of the corridor was not possible during the intervening period, according to local historian Joe O'Loughlin.

...a period of what they called civil disruption along the border for almost 30 years, when it just wasn't very prudent to talk about these things...¹¹⁹

'The Troubles' in Northern Ireland which emerged and continued from 1969 over the following three decades, effectively prevented any acknowledgement of historical Irish and British co-operation over a conflict as comparatively recent as the Second World War. In the Republic of Ireland too, the nationalist political tradition that led to the founding of the State meant that any Irish association with the Second World War was problematic for decades. This was a result of restrictions enshrined in the Emergency Powers legislation¹²⁰ such as, for example, the stigmatisation of Irish nationals who had 'deserted' the Irish Army after 1941, when the threat of invasion of Ireland had receded, and enlisted and fought in the British Army during the conflict. As a result up to 4,000 former soldiers were not entitled to unemployment or other state benefits, or employment in any civil service capacity for up to seven years, when they returned home to Ireland.¹²¹ The Irish government's lack of recognition of the contribution of Irish soldiers in the global conflict began to change with the opening

¹¹⁸ Ibid.

¹¹⁹ Interview with Joe O'Loughlin in Belleek, March 2010.

¹²⁰ Specifically the Emergency Power Order (362), 08 August 1945, known as the 'Starvation Order' for its effects on the families and dependents of returning soldiers.

<http://www.irishstatutebook.ie/1946/en/act/pub/0007/sec0013.html>

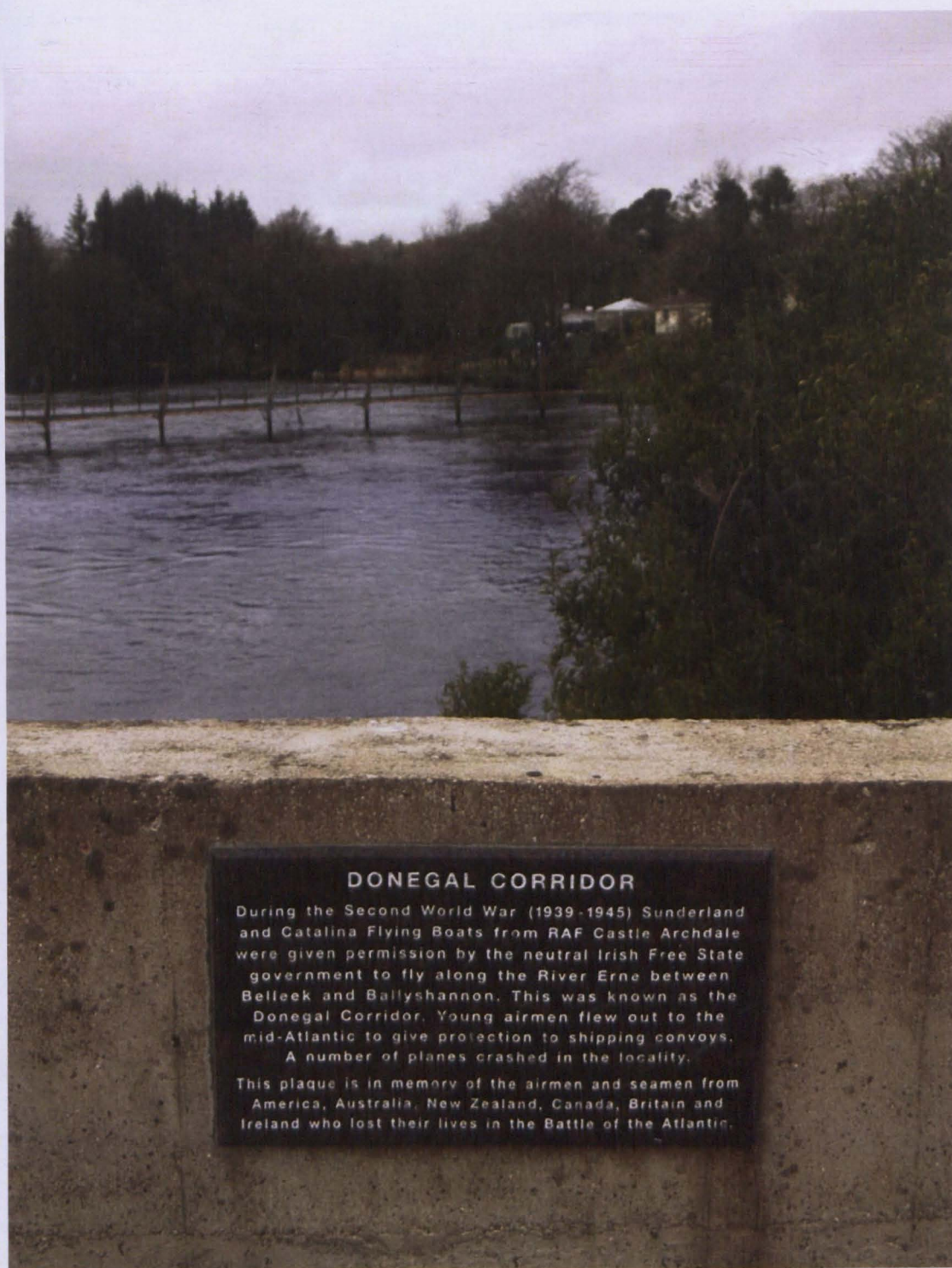
¹²¹ Jennifer O'Leary, "Pardons likely for Irish WW11 'deserters'" 2 February 2012. TD Alan Shatter, Irish Minister for Equality and Defence, speaking on, has recently raised the issue of a government 'pardon' for those named as deserters on the 'blacklist.' <http://bbc.co.uk/news/uk-northern-ireland-16860217> Accessed 20 February 2012.

of the renovated and completed Islandbridge war memorial, in 1994.¹²² This change was signalled as part of the tentative beginnings of what was to prove to be a lengthy and difficult peace process in Northern Ireland over the next ten years. The shift in the political climate and the gradual emergence of a post-conflict environment, particularly for communities living in the border areas, was positively referred to in the speeches from representatives of Fermanagh District Council and Donegal County Council at the plaque launch ceremonies.¹²³ In this case the civic efforts of individuals to collectively remember potentially contentious past events converged with the changing political context, and the literal and cultural invisibility of the former flight path and its operations could be brought into the visibility of the social domain.

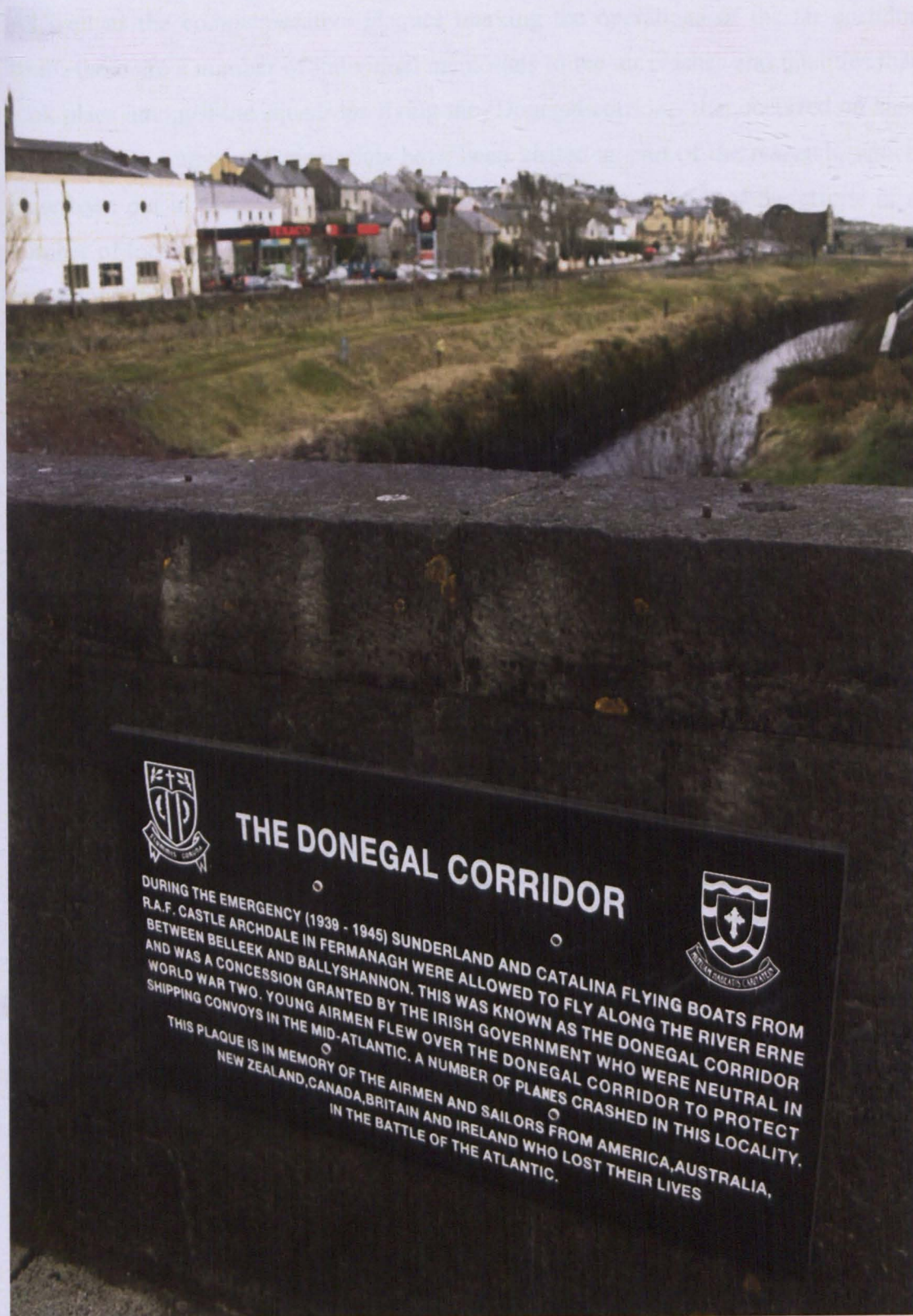
The materiality of the plaques themselves is understated and simple, set flat into the stone of the bridges that span the river Erne in each town. Although in a public place, they do not immediately claim attention, being positioned below eye level and without additional signage or interpretation panels. With traffic passing over the bridges behind the viewer the plaques are not ideally placed for pausing or for a period of reflection, as is more common practice when viewing memorials. In analysis, their significance lies in both where the plaques are sited, and in the wording of the texts. The plaques are site-specific, located directly under the flight path of the Catalina and Sunderland seaplanes as they would have passed over en route to the Atlantic during reconnaissance operations. In this, the operations of the air corridor have been simultaneously made visible, whilst underscoring the invisibility of the original context. In the wording of the texts, and in the ambiguous and differentiated reference to the 'Second World War' and 'the Emergency', is contained both the assertion, or 'visibility,' of the position of neutrality, and the paradox of subversion, its 'invisibility,' through the existence and operations of the air corridor itself. Six decades after the ending of the conflict, the ambivalence of its representations are still potent.

¹²² Geoffrey Roberts, "Neutrality, Identity and the Challenge of the 'Irish Volunteers'" in *Ireland in World War Two: Neutrality and Survival*, eds. Dermot Keogh and Mervyn O'Driscoll (Mercier Press: Cork, 2004), 284

¹²³ "Unveiling of the Donegal Corridor Memorial Stone," Allingham Bridge, Ballyshannon & Belleek Bridge, 18 April 2007. DVD, production Pat O'Loughlin.



4.12 Mhairi Sutherland. 'Donegal corridor' plaque on Belleek Bridge, Belleek, Co. Fermanagh, Northern Ireland (2009).



4.13 Mhairi Sutherland. 'Donegal corridor' plaque on Allingham Bridge, Ballyshannon, Co. Donegal, Republic of Ireland (2009).

As well as the commemorative plaques marking the operations of the air corridor itself, there are a number of individual memorials to the air crashes and fatalities that took place amongst the squadrons flying the 'Donegal corridor' that occurred on land and at sea. A number of memorials have been visited as part of the research, which have been put in place over a number of years mainly as a result of the efforts of a number of local people in the Belleek and Irvinestown areas of Fermanagh. Unlike a gravestone in a communal burial ground signifying the presence of the deceased, and a sense of return, albeit in death, these site-specific markers inscribe the landscape at the point of loss, an understated indicator of not only the death of an individual, but of the violence and endpoint of conflict itself. Examples of these inscriptions from the Second World War landscape of the air corridor, and the Lenan and Dunree forts of Inishowen, and a later example from period of 'the Troubles' on the Derry/Donegal border, will be discussed in an analysis together with other selected images from the arts practice research, in the following section.

4.5 Critical reflection and analysis

4.5.1 Relevance of historical case study

The exploration of the institutional position of neutrality during a period of global conflict has been made from the standpoint of historical research, and a reflection on the significance of the material of this chapter will be set out in order to complete the contextual framework preceding the interpretation through the arts practice. The aim of this chapter was, as stated in the introduction, two-fold: to present the context for the research, both in terms of the history of the arts practice, and in the historical account of Irish neutrality, and to critically reflect upon and analyse the selected material, and its interpretation through arts practice. The historiography of the Donegal landscape, with its signifiers and traces of global conflicts, have been discussed in order to unfold the practices of visibility and invisibility that have been decoded in the strategies of warfare and the archaeologies of conflict discernible in the landscape. This historical narrative of neutrality is the material through which the issues of visibility and invisibility have been raised in the activity and live research of arts practice. And although the issue of neutrality is an area of complexity and contradiction, and one that has a continuing political legacy for contemporary Ireland

in terms of relationship with other states and the developing peace process in Northern Ireland, my analysis of this material has been made from the perspective of its usefulness to the questions of the visibilities of conflict within the landscape, and how this may be interpreted, rather than from a position of either proving or disproving a question of neutrality. However, because of the volume and complexity of material and opinion on the theme, it has been necessary to go into a certain amount of detail in order to adequately reflect this, and in order to provide a framework for the research conducted through arts practice. Having shown this detailed historiography in the text, the points for analysis are more direct, and are concerned with the findings for cultural visibility as evidenced through the research.

The declaration of Ireland's neutrality on the 03 September 1939, was in response to war being declared on Germany by Britain and France, and marked a political and public position that was to be exemplified by a series of subsequent discourses and activities as the conflict in Europe progressed. In the landscape of Donegal, remote from Iveagh House in Dublin¹²⁴ but strategically adjacent to the northern Atlantic, some of the political decisions in support of neutral status could be clearly seen. As the debates over the refusal by Ireland to allow access to the Treaty Ports escalated in Britain and internationally, Fort Dunree on Lough Swilly was occupied by the Irish Defence Forces, as were Cobh and Berehaven in Cork. The architectures of defence of the vulnerable Irish coast also began in 1939, when the first of eighty-three concrete bunkers, the look out posts of the Coast Watching Service, began to be constructed on high vantage points around the coastline of the country. Staffed by local people, their task was to observe, record and report their findings to G2, the Irish Military Intelligence Service, providing an invaluable, phenomenological narrative of the proximity and effects of this global conflict as it took place in the seas and skies around Ireland. In this context, the activity of vision, 'the watch' was the first line of defence, and the existence of the LOP's an affirmation of neutrality, alert to the threat of invasion from the 'belligerents', and with the adjacent ground marked 'EIRE' to alert overflying aircraft. Combined with censorship of press, media and weather reports, as likely to be of benefit to the combatants, and the representations in Dublin

¹²⁴ Iveagh House is where the current Irish Department of Foreign Affairs is based, formerly the Department of External Affairs during the time of the Second World War.

of legations and embassies from both the Axis and the Allied Powers,¹²⁵ the apparatus of neutrality clearly operated in the civic and political gaze.

The reverse however, also holds true. The visible apparatus of neutrality also allowed the activities of “unneutrality”¹²⁶ a contravention of the Hague Convention on neutral status, through a ‘certain consideration’ afforded to the Allies. Political expediency, the assertion of national independence through retention of the Ports, resentment at continuing Partition and an under resourced Defence Force, were all contributing factors to both the overt stance of neutrality, and for the covert practices that also took place. As the refusal to lease the Ports continued these ‘sentinel towers,’ symbols of Irish independence and neutrality began to lose their potency in strategic terms, as the focus of the conflict shifted from the southern approaches after the fall of France in June 1940. As the emphasis moved further north, the closing of the ‘black gap’ in the northern Atlantic was crucial for Allied and merchant shipping. The air corridor was operational from February 1941, continuing until the end of the war. The political secrecy about the establishment and existence of the ‘Donegal corridor,’ with its geopolitical value, arguably more useful to the Allies than the return of the Ports in a changing technological climate, was an example of military invisibility, a clear case of ‘hiding in plain sight.’ Censorship of weather reports in local and national press outlets did not prohibit the interception of meteorological information by the Allies from easily accessed Irish sources; the crucial weather report for D-Day landing by the Allies in France 1944, predicting an unexpected break in conditions of poor visibility, was made available via Blacksod Meteorological Station in Co. Mayo.¹²⁷

From the operations of aerial reconnaissance by the Catalina and Sunderland seaplanes of the air corridor, to the observation and surveillance of the coastline from

¹²⁵ John P. Duggan, *Neutral Ireland and the Third Reich* (Dublin: Gill and MacMillan, 1985), 241. This diplomatic approach extended to Eamon de Valera’s controversial visit of condolence to Herr Eduard Hempel, the German Minister in Dublin, on the death of Adolf Hitler. Duggan states, “Hitler died on 30 April 1945 and, after his death was announced, de Valera accompanied by Joseph P. Walshe, the Secretary to the Department of External Affairs, paid a formal visit of condolence to the German Minister on 3 May 1945. This action brought about a cry of outrage from the Allied press.”

¹²⁶ I am using the ‘unneutral’ term from Trevor C. Salmon, author of *Unneutral Ireland: An Ambivalent and Unique Security Policy* (Oxford: Clarendon Press, 1989) one of the first revisionist publications on Ireland’s wartime neutrality that addressed co-operation with the Allies.

¹²⁷ A plaque commemorating this was unveiled at the former Blacksod lighthouse in 2004.

<http://www.met.ie/about/weatherobservingstations/belmullet.asp> Accessed 21 July 2011. Kennedy discusses the logistics of the report and its transmission, and the fact that the information was kept hidden until in 1980’s in *Guarding Neutral Ireland*, 268-272.

the bunkers of the coast watching service, to the literal inscription of the landscape by the plaques and stones commemorating the loss of individuals as a result of conflict, the primacy of vision in warfare has been described in terms of the actual and cultural rendering of the visible and the invisible. My argument that arts practice, photography specifically, because of its unique relationship with extended and artificial vision and subsequent instrumentality to modern conflict, whilst also part of the history of representation and image-making in art, can be used to critically address issues of the visible and the invisible. It is this claim that has determined the methodology and use of photography as a means of research and exploration of these issues of visibility, conflict and landscape. These outcomes are presented as the arts practice series *Arc of Fire*, a re-imagining of a particular Irish landscape and archaeologies of conflict which have been the subject of research, textually and visually. I will go on to discuss how this claim has been substantiated through the practice and the visual strategies, in the following section.

4.5.2 Aims of arts practice research

Arc of Fire is the title of the arts practice research element of this thesis, through which I have mapped elements of recent conflicts within a particular landscape. The methodology of the research was based the development of concerns as discussed, and was conducted through explorations into the narrative of this landscape. This was done in order to re-present the findings into the visibilities of twentieth century conflict, through the medium of photographic arts practice. The research was designed in order to demonstrate the relationship between photography and issues of visibility, by an exploration of its development through both empiricism and aestheticism. As a consequence, the functioning of photography as a critical lens through which artists may contextualise some of the archaeologies and landscapes of contemporary conflict, has been traced through specific examples, and made manifest through the arts practice research. The landscape was selected for a number of reasons; firstly, this was a landscape that was known to me, especially Inishowen, where I have lived and worked for a number of years. This familiarity and knowledge of the landscape allowed for a more intensive study than would have been the case with *Blackout* for example. Because of an interest in the convergence of conflict and landscape, I was interested in exploring this perspective, and in the potential richness

of 'decoding' this geographically remote, rural and coastal area. This territory was marked not just by the traces of a series of recent conflicts, but was also positioned at the political and cultural axis of a complex relationship between Ireland and Britain, North and South, collaboration and antagonism.

An awareness of this geography was balanced by a fresh approach to a lesser known area, the landscape of the 'Donegal corridor', the political existence of which I was unaware of before the research began in 2008. This secret military air corridor and its operations were unacknowledged for decades, and during the period of Ireland's neutrality was arguably highly instrumental in the Battle of the Atlantic. This amplified and extended the circumstances of militarism that could be evidenced, strengthening the case for an exploration of the covert and the culturally invisible as intrinsic elements of a geopolitical landscape. The archaeologies available in this landscape date from the overlapping traces of the conflicts of the First and Second World Wars, and 'the Troubles' in Northern Ireland. The landscape study encapsulated key concerns of how issues of conflict may be approached, and the potential for asking questions of how cultural visibility is constructed, in the tracing of tangible and intangible material, and through the interpretation of arts practice.

The second reason was the temporal distance involved, and a consideration of the issues from the perspective of a certain passage of time. This temporal relationship influenced the research avenues in a number of ways. This included a change to the way previous projects had been undertaken, where 'permission' was required when dealing with security conscious situations and personnel. Although this did not place any noticeable constraints on the earlier work, it was a factor in the background which I wished to modify in the context of this research. When contact with organisations such as the current Irish Defence Forces on training exercises took place, for example, this was in an observational capacity, rather than on a sustained or ongoing basis. Another temporal consideration was the post-conflict situation in Northern Ireland, which, because of the interrelatedness of historical factors as discussed, is a significant factor in the timing and positioning of discourses on conflicts and their impacts within the island of Ireland. This temporal factor has also connected the research to archaeological practice and a disciplinary interest in conflicts of the recent and contemporary past. As in some of the arts practice examples discussed, my

intention is that this work may contribute to the archaeological record as a means of understanding the diverse nature of conflict, particularly 'uncomfortable monuments,' through a nuanced and textured approach.

4.5.3 Methodology of arts practice research

In the act of visiting and reflecting on the selected historical circumstances within the landscape, the methodology was to address the constructed nature of the act of looking in itself, through the use of the lens based/photographic process in the making/creation of a new document/body of work. My objective was not to simply document the traces of conflict as I came across them in the landscape, connected as they were to the research conducted through the oral and archival narratives. The visual strategy was also to problematise the relationship between the visible and invisible 'evidence' that could be discerned within the archaeologies of the landscape. The interpretation of such evidence was based the extent of its cultural visibility, and was made through the use of photography as a reflective and critical medium. This is intended as counterpoint to a more institutional use of the medium as definitive and documentary, itself the more common form when addressing issues of conflict.

There were five main areas of military/political practice in terms of visibility identified in the landscape under research, and which were addressed by a corresponding visual strategy. The areas were; surveillance, reconnaissance, appropriation, inscription and defence. Through the use of photography to address these activities, my strategy engaged a number of visual approaches that were both formally related to these original/earlier activities, but were conceptually distinct in the use of photography as a form of interpretation and critique, rather than as an empirical and definitive mechanism. For example, the surveillance and monitoring of Irish shores and territorial waters by the (civic) coast watchers, whose information was logged and passed to the (military) intelligence branch, was revisited through the durational video process, in an exploration of past time and real time in the sequence filmed at the former LOP at Malin Head. The reconnaissance of the north Atlantic enabled by the secret existence and operations of the Allied pilots flying over the landscape of the 'Donegal corridor' was re-imagined through photographs which I took in a seaplane flight over the same geography. These images I juxtaposed with

contemporary aerial photographs sourced from Irish Army training exercises over Fort Dunree, Inishowen, and the montage of photographic stills are overlaid with the oral narrative of a local historian in the completed work. Appropriation of the landscape militarily is often preceded by appropriation pictorially, as discussed through the examples of nineteenth century photographic survey. My making of images that show the literal framing of the landscapes around Fort Dunree and of the Atlantic, were made from the viewpoint of the internal aperture of the bunker, and reveal a form of military vision in observation of the surrounding landscape. Inscription of the landscape was to be found in the texts in the wording of plaques and memorials, and in the significance of 'EIRE,' spelt out in white stones adjacent to the LOP's and numbered for the 'unneutral' benefit of Allied pilots navigating Irish airspace. The interpretation of these markings was made equally on the omission, and consequent invisibility, of what was included in the texts as written, and of the ambiguities and contradictions suggested by this interplay between presence and absence. Another approach was made in response to the most overt examples of military interest in the landscape, the evidence of defensive occupation, the military camp. The architectural archaeologies of the former bases of Lenan Battery and Fort Dunree, maintained by readiness by British and Irish forces in the First and Second World Wars respectively, were in contrast to the secrecy of the air corridor. The contrast, however, is phenomenological rather than ideological, as both are forms of military iteration, each occupying a particular place in the spectrum and deployment of visibility as a strategic act.

The methodology, informed by the overarching aim of addressing issues of cultural visibility within the landscape, therefore involved an exploration of situations which demonstrated these terms as indicated. These situations were characterised in the following terms: 'Territories' where tangible or intangible military presence and occupation of geographical space could be discerned, 'Architectures' as evidence of defensive structures and preparedness for warfare, 'Memorials' the site-specific markers and indicators of death in the landscape as a consequence of conflict, and 'Sources,' a series of images that connect the archival and live research elements of the overall work. These visual outcomes are grouped together under these headings in the *Arc of Fire* website. The use of photography as a medium was connected empirically, historically and artistically to representations of landscape, as indicated in

my introduction to the arguments for the use of photography in discussing the work of Paglen, Farrell and Doherty, in the preceding chapter.

It is my argument that photography, in its fusion of expressive subjectivity with optical technology, is fundamental to these images and what they reveal, in a way that would not be possible in any other medium. This relationship between landscape-conflict-photography in each of the artists' work, I hope to show, is predicated on the dimensions of conflict rendered visible and invisible within each landscape, and how this is represented within the artwork.¹²⁸

Therefore my methods in the making of artwork as a form of research were similar to previous artistic approaches and methods, but were positioned differently as part of an overall, wider framework of research and enquiry. This meant that although my working methods were unchanged, the visual outcomes have a relationship to the rest of the enquiry that is cohesive, and collectively presents a series of findings that can only be considered as a total, resolved body of work. The arts practice research can be viewed as a resolved body of artwork, but the overall enquiry is only fully comprehensible through the integration of textual account and arts practice. This integration will be discussed further in the findings and conclusions to the research. However, in terms of the visual strategy and the use of photography, I will define the working methods involved in making the images, and describe the intended relationship between the written and visual accounts of visibility, conflict and landscape. The visual strategy will be discussed through selected examples of images from different stages of the research process, and how the specificities of conflict – surveillance, reconnaissance, appropriation, inscription and defence – were explored through the corresponding photographic activity.

My intention was to connect this evidence across temporalities and particular phases of conflict, and to reveal both similarity and difference by creating images that exemplify some of the contradictions and co-existence of the known and lesser known aspects of this obliquely geopolitical landscape. The working methods began with a

¹²⁸ Chapter 3: Conflicted Territory, 3.3. Artistic Landscape, 3.3.1 Introduction.

series of drawings and workbook studies at the early stages of the research (2008), some of which were included in the exhibition *Fig Y.S.* at the OMAC, Belfast, 09 September – 11 October 2008. I intended a correlation between the discourse of the textual elements of the thesis and of the practice, in terms of reflecting aspects of the photographic chronology under discussion, and relating these processes to my own working practices. Although this did not translate to a mimetic adherence in using exactly the same processes, for instance, the making of images through either a camera obscura or a stereoscopic camera, I worked with processes that made reference to the aspects of photographic history as discussed. For example, the role of the camera obscura as an aid to drawing and the early photographic print as a direct contact, ‘cameraless’ process was the impetus for the *Obsolete* series of photogram prints (fig.4.13)¹²⁹ shown in the *Fig Y.S.* exhibition (2008).

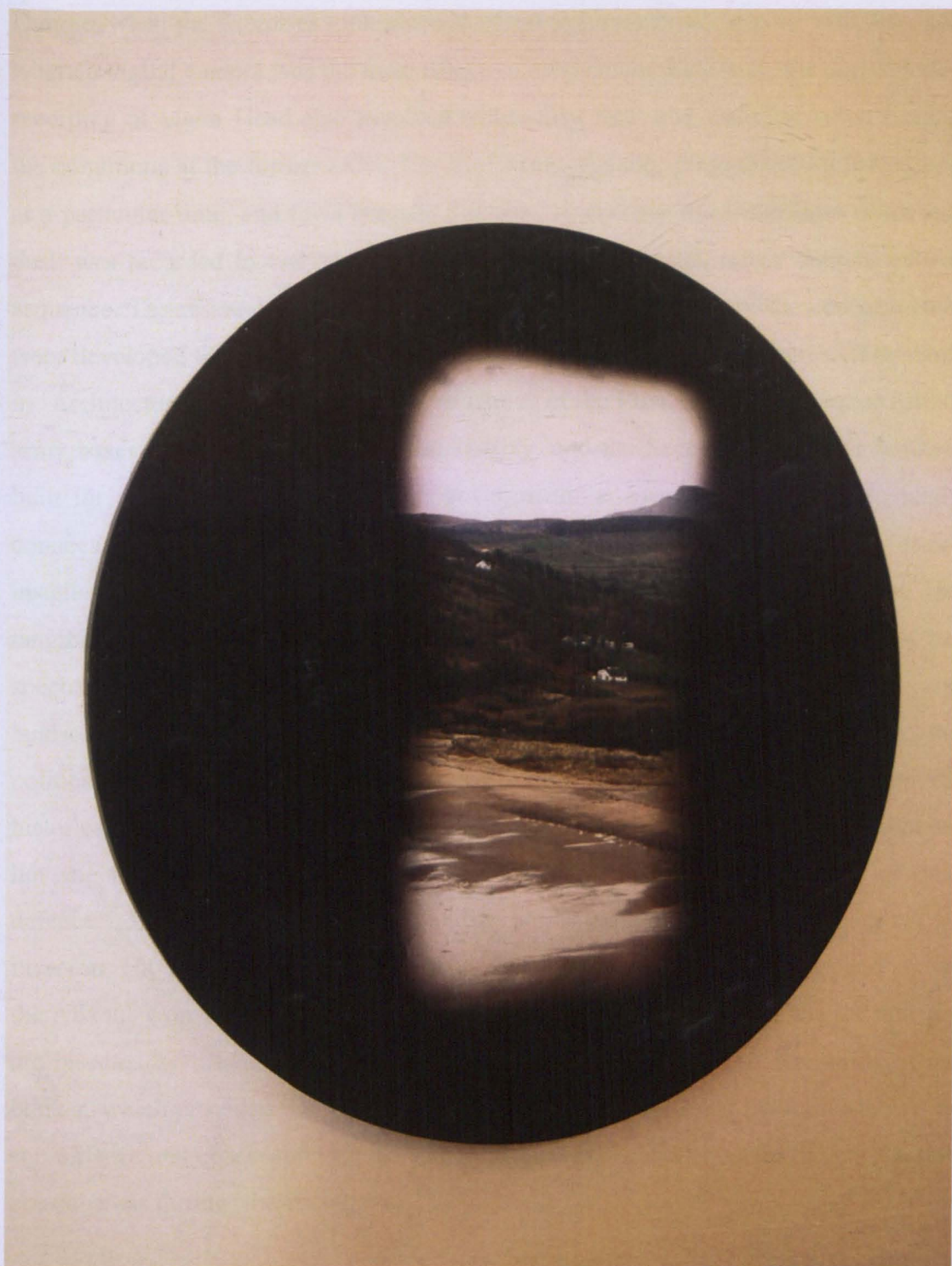


4.14 Mhairi Sutherland. *Obsolete* (2008). Photogram prints, 33cm x 27cm. Exhibition *Fig Y.S.* OMAC, Belfast.

¹²⁹ Essentially this is the same process as presented by William Fox Talbot in 1839, whereby a direct print is made by placing a template of either objects or a drawing on a transparent material, onto sensitised paper and exposing both to light. The image emerges when the sensitised paper is chemically developed.

The 'modern,' analogue camera which uses film, and where the latent image is developed from the negative/positive process, was the activity whereby images of the 'loopholes' in Fort Dunree pillboxes¹³⁰ were originally taken with colour slide print film and printed up as circular images and mounted on wood. This presentation amplified the idea of the eye, the lens and the camera, and the semi-sculptural shape was also intended to act as a form of visual punctuation in the exhibition, a definitive full stop, reflecting a militarised view of the landscape as abstracted from its context and subject to observation. The view through the 'loophole' is constrained and framed by the aperture, peripheral vision is reduced and the experience is resonant with the 'deep space' of the stereoscope, as are the images themselves, which show the same landscape, but are dissimilar images. The images were exhibited as *Loophole 1* and *Loophole 2* and show the landscape from within the interior of the pillbox, but from altered perspectives, taken from different viewing apertures within the pillbox. (fig.4.14)

¹³⁰ 'Loopholes' are the small, shuttered viewing apertures in the walls of military pillboxes, which allow limited viewing for defensive purposes, and for rifles if required.



4.14. Mhairi Sutherland, *Loophole 1* (2008). Colour slide print, mounted on wood. 77cm x 77cm. Exhibition *Fig. Y.S.*, OMAC, Belfast.

As the research continued alongside site visits to both Inishowen and the landscape of the 'Donegal corridor,' my use of a digital camera was increasing as result of being the most appropriate photographic process for the research being undertaken. This was influenced by factors such as being present at Irish Army training sessions at Fort

Dunree, when the exercises took place at speed and sometimes in poor visibility, and where a digital camera was the most effective mechanism. Similarly, the digital video recording at Malin Head also involved contrasting light and visibility when filming the conditions at the former LOP. The shots were digitally programmed to take place at a particular time, and for a specific duration, so that the transition from dawn and dusk was recorded in real time, and shown as a compressed, rather than an edited, sequence. The research interests in the tangible markings of the Inishowen peninsula were developed through a series of images grouped within 'Architectures.' The work in 'Architectures' maps the defensive structures of the First World War former British army bases at Fort Dunree and Lenan Battery, and the Second World War bunkers built for coastal defence by the Irish government, as overlapping and ideologically connected structures. The series explored the material presence of these former installations, and reflected on their original functions of protection and defence. The tangibility of these military architectures, even as derelict structures, is part of the spectrum that spans visibility to invisibility, and through which conflicts and landscapes are connected across temporal and cultural distances. In contrast to the political invisibility of the architectures of flight taking place in the air corridor, historically covert and subversive of the status of neutrality, the concrete bunkers housing the coast watchers were intended to function as the first line of national defence, affirming the status of neutrality whilst remaining alert to the threat of invasion. The following image (fig.4.16) is from the 'Architectures' series, and shows the Atlantic from LOP No. 80 at Malin Head, Inishowen. In the image the sea and sky are bisected by the horizon and all are framed by the vertical concrete struts of the bunker, which provided the panoramic vantage point that enabled the round-the-clock surveillance and observation by the coast watchers in what was one of the most active coastal areas during 'the Emergency.'

The video work *Malin Head LOP 7:23* was filmed from inside the derelict structure and is intended as an act of re-imagining this process of watchfulness, re-staging an observation period that encompassed dusk, sunset and dawn. The slow moving sequence presents an image of stillness and gradual, emerging change within the landscape and over the Atlantic horizon. The work alludes to the stasis of the still photographic image, and silently presents the function of the original watchers in their unbroken observation over the six-year period of the conflict. The 'view' is defined

and apportioned by the concrete framing of the bunker edifice. The archetype of the bunker form is reiterated across all forms of militarised landscape¹³¹ and this particular structure exemplifies the role of visibility and observation and its function in the military arsenal. The aperture in the concrete embrasure, whether fully open for complete visibility, as here, or narrowed to a ‘loophole’ embodies the mimetically optical in architectural form. The images in the ‘Architectures’ series reflect on the redundant functions of protection and defence and the role of military vision, the structures long empty of observers but where the framing of the landscape still observable in the panoptic, architectural model.



4.16 Mhairi Sutherland, from ‘Architectures’ series, *Arc of Fire* (2008). LOP No.80, Malin Head, Inishowen.

The images in ‘Territories’ have been composed primarily from site visits to Belleek and Bundoran, the land, sea and airspace of the flight corridor, and also includes some

¹³¹ In this I am in agreement with Schofield’s in his “Considering Virilio’s (1994) *Bunker Archaeology, Aftermath: Readings in the Archaeology of Contemporary Conflict* (New York: Springer, 2011), 2. Schofield describes ‘bunkers’ as, “all material culture of contemporary conflict”, and notably all of the monuments, structures, sites and buildings that remain legible in the twenty-first century, albeit as a diminishing and threatened resource.”

images of the geography of Dunree, Lenan and Malin. The series traces the air corridor from its beginnings as a runway on the waters of Lough Erne and the R.A.F base of Castle Archdale on its shores, to the cliffs of Magho overlooking the Lough, and following its course as the waters became the River Erne, crossing the border at Belleek and onto the towns of Ballyshannon and Bundoran in the Republic of Ireland. From here the Catalina and Sunderland seaplanes continued their flight path over Donegal Bay and the three miles of territorial Irish waters before crossing into the Northern Atlantic. This image (fig.4.17) from the 'Territories' series shows the coastal town of Bundoran, with the territorial waters of Donegal Bay and the Atlantic. The image is purposely innocuous and transitional, showing a fragmented view that reflects the secrecy of the wartime air corridor. This image, as are the others in the series, is intentionally distanced and understated, its intended meaning only fully present when viewed in context with the rest of the sequence and the textual information.



4.17 Mhairi Sutherland, from 'Territories' series, *Arc of Fire* (2009). Bundoran, Donegal Bay.

The former reconnaissance activities enabled by the landscape of the 'Donegal corridor' is the subject of the photographic and audio sequence, *Recon*. This work was

created through a juxtaposition of aerial photography images from a seaplane flight over the landscape of the former corridor, and aerial images taken by Irish Army on training exercises at Fort Dunree, with an audio narration from by Joe O'Loughlin.¹³² I took the photographs of the former air corridor route in a seaplane flight in 2009, which flew over some of the landscape as it crossed from Northern Ireland to the Irish Republic. Taking off from Enniskillen Airport on the shores of Lough Erne, which was formerly St Angelo's airport during the Second World War airfield, the flight followed the course of Lough Erne, and flew over Donegal Town and Ballyshannon. The pilot then circled over the waters of Donegal Bay at Bundoran before returning inwards and landing on the waters of Lough Eske in County Donegal. The audio narrative that accompanies the images is from a conversation recorded with Joe O'Loughlin, who speaks about the local knowledge of the air corridor, in contrast to the national position of neutrality in which the situation was circumscribed. He also speaks of the transfer of the remains of Allied pilots at the border, as a result of air crashes, which were conducted with dignity and military honours by the representative of the Irish army and authorities. The narrative was originally exhibited in the *Arc of Fire* exhibition as an audio work in the former Fort Dunree blockhouse, which was used as a temporary morgue during the Second World War

The literal inscription of conflict within the landscape is to be found in the various plaques, memorials and commemorative stones in the landscapes of both the air corridor and the Inishowen peninsula. The examples which have been explored are grouped together within 'Memorials,' and also include images of research undertaken on a specific memorial on the Donegal border with Derry, connecting issues of visibility across time and periods of conflict. The images have been created, as have all the sequences, through an exploration of levels of cultural visibility, in order to interpret and present a body of work that attempts to contextualise these materials within the landscape. The images in 'Memorials', however, are on a differently scaled, more human register, than the tangible and intangible traces of conflict visualised territorially and architecturally. These images connect the preparedness for warfare with its endpoint, the consequences of conflict and the marking of death in

¹³² My flight following the path of the 'Donegal corridor' was on 25 May 2009, arranged with the kind assistance of Joe O'Loughlin and pilot Hamish Mitchell. The aerial images of Fort Dunree were taken by the Irish Army in February 2008, and are used courtesy of Fort Dunree Manager, David Magee.

the landscape. The operations of the 'Donegal corridor' for example, have been marked by plaques and commemorative stones at crash sites for decades before the more public acknowledgement of its existence through the plaques mounted on the Belleek and Allingham bridges in 2007. Of over 300 fatalities associated with the operations of the air corridor from the Allied Squadrons stationed at Castle Archdale, many were shot down or lost at sea in direct engagement. However, many of the crashes and fatalities in the terrain of the flight path occurred because of problems with visibility, weather conditions and a lack of familiarity with the landscape, and took place when aircraft were flying out or returning from a mission. In this series the images are of memorials, rather than graves or burial places,¹³³ and they signify the site where death occurred, often in geographically remote landscapes where relatives and families occasionally or regularly visit.¹³⁴ The sequence has been created from the sites of memorials from the period of the Second World War and one from time of 'the Troubles' in Northern Ireland. The landscapes are those of the air corridor, the Inishowen peninsula and the Derry/Donegal border, and are each representative of the diversity of conflict across different time periods, yet collectively the memorials punctuate the landscape for similar reasons.

Of the examples that will be discussed here, I will begin with a memorial image of the Second World War (1941) and from 'the Troubles' (1990), in order to illustrate the linkages between cultural visibilities in the social and geographical landscape, and across differences of conflict and time. The memorials and their positioning within the landscape have two areas in common: their site-specificity, and existence as a result of conflict. There are also elements that are dissimilar and distinct to each circumstance, and reflective of the differences between the conflicts. The first example is an image of a small memorial plaque mounted on the wall of a former forge in the remote area of Lenan, at the foot of the Urris hills in Inishowen,

¹³³ There is one image of a war grave, which refers to two airmen whose remains were not recovered from a crash into Lough Erne, and subsequently the war grave at Magho, overlooking Lough Erne marks their passing. There are two stones, and the plaque one reads; "WAR GRAVE. Sunderland W4036 of 201 Squadron, R.A.F. sank on Lough Erne on November 18th 1943. Flt/Lt. Douglas J. Dolphin, R.C.A.F. (Skipper) age 23. Sgt. Elvert Parry, R.A.F. Age 20. Killed. Buried Flintshire, Wales. Remember all airmen based in Lough Erne who died in World War II."

¹³⁴ Local historians Joe O'Loughlin and Breege McCusker have assisted a number of families and relatives from Britain, Canada and the United States, to locate and visit the commemorative materials. Details in "The Donegal Corridor and Irish Neutrality during WW2" <http://joeoloughlin.co.uk/?p=68>

commemorating the crew of a Second World War air crash. (figs. 4.17 & 4.18) The text on the plaque reads as follows:

“Erected in memory of the crew of a Wellington Bomber W5653 of No 221 Squadron, R.A.F, who died in a crash on Urris, April 11th, 1941 and whose bodies were laid out in this forge before transfer to Dunree, and burial in Britain. Erected by the WW11 Irish Wreckology Group.”¹³⁵

On this date the crew flying the Wellington were returning from escort operations in the Atlantic to Coastal Command base near Limavady, County Derry in Northern Ireland. In poor visibility and dense low cloud the estuary of Lough Swilly may have been mistaken for Lough Foyle, which the pilot would have used as a sightline for position and descent. Instead of descending safely above the Foyle to the east, the aircraft crashed into Cnoc Iorras (417m) in the Urris hillside, west of the landmark ‘Gap of Mamore.’¹³⁶ There were no survivors from the crew of six, whose names are not listed on the plaque. The names are: F/O Alfred Patrick Cattley, P/O James Leonard Montague, Sgt. John Bateman, Sgt. Francis Kenneth Basil Whalley, Sgt. Fredrick George Neill and Sgt. Brinley Francis Badman.¹³⁷

¹³⁵ The “WWII Irish Wreckology Group” have undertaken research into air crashes of the Second World War over Ireland. Based in Belfast, the group has published *Down in a Free State: Wartime Air Crashes and Forced Landings in Eire 1939-1945*, (1999) and *Wings over the Foyle: a history of Limavady Airfield*, (1995). John Quinn, of the group, erected the plaque on the forge which was unveiled at a ceremony in April 1995. *Down in a Free State: Wartime Air Crashes and Forced Landings in Eire 1939-1945*, 52.

¹³⁶ *Ibid.*, 42-43.

¹³⁷ *Ibid.*, 39-42.



4.18 Mhairi Sutherland, from 'Memorials' series, *Arc of Fire* (2009). Urris, Inishowen, (2009).



4.19 Mhairi Sutherland, detail from 'Memorials' series, *Arc of Fire* (2009) Urris, Inishowen, (2009).

The second memorial (figs.4.20 & 4.21) is located on the side of the busy Buncrana Road in the area of Coshquin, on the site of the former British Army Permanent Vehicle Checkpoint (PVCP), on the border between Derry and Donegal. The text is as follows:

“In memory of Patsy Gillespie civilian husband and father 24th October 1990. Lord that he may be an instrument of your peace. Presented by the soldiers.”¹³⁸

On this date Mr. Gillespie was abducted by members of the IRA and his family threatened if he did not comply with instructions. His vehicle was loaded with explosives and he was ordered to drive to the checkpoint at Coshquin. On arrival the bomb was remotely detonated, killing Patsy Gillespie and five British Army soldiers instantly. The names of the soldiers, all from the King’s Regiment, are not included on the memorial.¹³⁹ The names are: Kingsman Stephen Beecham, L/Cpl. Stephen Burrows, Kingsman Vincent Smith, Kingsman David Sweeney and Kingsman Paul Worrall.

There are a number of points that can be made in relation to what the images reveal about levels of visibility, and its encodings through text, or lack of text, as is the case in these examples. Firstly, to begin with the points of similarity and difference between the memorial plaques, and the levels of cultural visibility which, I am arguing, can be discerned in the absences, and the rendering ‘invisible’, of these markings in the landscape, and contextualised through arts practice. Certainly there are differences in the nature of the conflicts, between global warfare and a localised, nationally focussed conflict, differences also marked by the temporal distance between the events. In the earlier example the deaths were caused by an accident, albeit when engaged on active service, whilst in the more recent example the deaths were as a result of a direct attack. However, the memorials are also marked by their similarities and connections. In each, there are six deaths that have resulted from conflict. The names of the soldiers that have died are absent from each memorial, although arguably, the reasons may be different. In the civilian memorial to Patsy Gillespie, commissioned by the British Army, the names of the soldiers are absent. In an email message received from Dr Martin Melaugh, Director of CAIN (Conflict Archive on the Internet), 18 November 2010, Dr Melaugh suggested that “If the

¹³⁸ The memorial to Patsy Gillespie, a civilian who worked as a chef at military base in Derry was commissioned by the British Army in 1996.

<http://cain.ulst.ac.uk/victims/memorials/static/photos/673.html>

¹³⁹ The names of the five soldiers of the King’s Regiment (now The Duke of Lancaster’s Regiment) who died at Coshquin are included on ‘Northern Ireland Memorial Stone,’ in St John’s Gardens, Liverpool.

memorial had included the names of the soldiers who also died then there would have been a chance that the memorial would be vandalised.” He continues by saying that although there were memorials to British soldiers in Northern Ireland, it was his understanding that memorials to the security forces are within buildings such as “Army bases, police stations, churches, Orange Halls, etc.” It is not always the case that the names of foreign soldiers are absent from memorials in the Republic of Ireland and certainly not in the context of the official war graves of many nationalities that are maintained throughout the island of Ireland.¹⁴⁰ However, this memorial has a particular sensitivity, both because of the horrific nature of the event, and because of the context and location of the memorial on the site of a former border checkpoint. I am drawing attention to these particular memorials as indicators of a cultural invisibility and absence, and where the landscape is marked by the complexities of territorial conflicts. In both of these cases the political identity of the landscape is subtly implicated in the absence of the names of the individuals who died: in Inishowen the Allied pilots were flying over ‘neutral’ Eire, and on the Derry/Donegal border the British Army checkpoint was maintained as part of the operations, military and paramilitary, of ‘the Troubles.’ As in the example of the ‘Donegal corridor’ plaques, erected sixty two years after the end of the Second World War, cultural visibilities and acknowledgement of covert and contested situations, are contingent on political and civic events, and site-specific memorials and markings are amongst the most challenging signifiers of an ‘uncomfortable monument,’ punctuating the landscape with a visible sense of collective, social and personal memory and recollection, whilst underscoring the invisibility of disavowal and denial .

¹⁴⁰ In Ireland, North and South, are the graves of at least 3,800 dead of the First World War, and over 1,900 of the Second World War, of Irish, British, Commonwealth and international origins. Over decades their graves have been marked as official war graves, and permanent memorials, through the work of the Commonwealth War Graves commission (CWGC) and the Office of Public Works (OPW). From Professor Fergus D’Arcy’s excellent publication *Remembering the War Dead: British Commonwealth and International War Graves in Ireland since 1914*, Stationery Office, OPW, Dublin (2006), the first comprehensive survey of war graves in Ireland, and the political complexities of their existence. These include the Commonwealth War Graves at Glasnevin, Dublin and the Glencree German War Cemetary in Wicklow. In Donegal, there are fifty-nine war graves in thirty burial places, as there is in many coastal graveyards, the remains of those who died in the Battle of the Atlantic.



4.20 Mhairi Sutherland, from 'Memorials' series, *Arc of Fire* (2009) Coshquin, Derry/Donegal border.



4.21 Mhairi Sutherland. Detail from 'Memorials' series, *Arc of Fire*, (2009) Coshquin, Derry/Donegal border.

Chapter 5: ARC OF FIRE



of a concern with the use of photographic art practice as a means of explanation and critique of aspects of landscapes and culture. These themes are evident throughout the material of the thesis, and in the approach to earlier projects and exhibitions, which

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(Please view the work in Google Chrome)

of a concern with the use of photographic art practice as a means of explanation and critique of aspects of landscapes and culture. These themes are evident throughout the material of the thesis, and in the approach to earlier projects and exhibitions, which

6. CONCLUSIONS:

- 6.1 Questions and major claims
- 6.1.2 Parameters and limits
- 6.1.3 Evidence for the claims
- 6.1.4 What was at stake?
- 6.1.5 How may an approach through arts practice contribute to the material record and analysis of contemporary conflict?

6. Conclusions:

6.1 *Questions and major claims*

What are the visible and invisible archaeologies of conflict in the landscape and how may these be represented through arts practice? The overarching question prompting the enquiry connected three main areas: the visibilities of conflict, the contextualisation of the remains of conflict within the landscape, and an interpretation of this context informed and defined through art practice. These related areas are part of a concern with the use of photographic arts practice as a means of exploration and critique of aspects of landscape and militarism. These themes are evident throughout the material of the thesis, and in the approach to earlier projects and exhibitions, such as military systems of organisation, site-specificity, and the contradictions inherent within the photographic medium. The thesis has been approached as an opportunity to address themes previously touched upon, and develop these through the research. In an investigation of these themes, I have drawn on a series of practices and other disciplines in support of my principle claim, which is that arts practice, photography in particular, has a significant interpretative value and contribution to make to the discourses and understandings of modern conflict. As part of this claim, I have argued for the value of an interdisciplinary approach, particularly when considering the impacts upon the geographical and cultural landscape, enabled by a methodology which characterised the tangible and intangible remains of conflict and militarism.

6.1.2 Parameters and limits

Before considering the evidence for this claim, I will describe the rationale used for the methodology and the selection of the research material, in order to establish the parameters of the study and to set it in a wider context. In addition to the overarching question as detailed above, there were a number of related questions that guided the methodology, and the placing of the arts practice alongside other models of enquiry. These questions included asking, What is at stake in approaching the often contradictory and overlapping evidence of conflict in the landscape and the archive through arts practice? How will an approach prioritising arts practice contribute to the material record and analysis of contemporary conflict? And in a consideration of how conflict is approached through other disciplines, how is a treatment through arts practice substantially divergent from the methods of a historian, geographer or archaeologist. These questions influenced the choice of methodology and the theoretical claims of the research, positioned within a wider climate of post-conflict and reconciliation issues, and with an awareness of the role of arts practice in engaging such issues. The methodological approach was the research and presentation of arts practice as a model of critique, in the form of a both image and textual representations. The rationale for the selection of the material of study was guided by the levels of cultural visibility and civic awareness in relation to the prospective, historical landscapes and what was known, or less known, and in the public domain of commonly held knowledge. For example, the issue of the Treaty ports and the history of the Inishowen peninsula is widely 'known' in terms of their symbolism as a bulwark of Irish neutrality during the Second World War, and the inscription of 'EIRE' at Malin Head a signifier of the national neutral status, which is still occasionally 're-written' and consequently is one of the last few remaining signs still visible in the landscape. In contrast, the existence and operations of the 'Donegal corridor' are relatively 'unknown' and its' narration contributes another dimension to this strategic, geopolitical landscape and the contradictory and complex history of Irish-British relationships. Although the initial approach arose from previous artistic concerns with themes of militarism, this research was predicated upon and led by a focus on the landscape and the tangible and intangible remains of conflict, rather than

an emphasis on contemporary military activities.¹ This was done in order to contextualise and reflect upon a series of conflict markings, and to create interpretations based on these interrelationships, rather than focus on the military prioritising of interests which may be served by an interaction with landscape. It was this awareness of the archaeologies of past conflicts, and of their connections to current political and civic relationships, that provided the contextual framework through which the research was conducted, and which motivated the interest in cross-disciplinary approaches.

6.1.3 Evidence for the claims

From the discussions of the culturally constructed nature of vision begun in chapter one, reflected in the divergent histories of the optical devices of pre-photographic eras, and the emergence of print photography in the nineteenth century, the dualities of sight and representation, landscape and culture, conflict and technology, have been discussed through the works of scientists, photographers, theorists and artists. Across different temporal periods and geographies, my intention has been to research the relations between formations of sight, image and landscape, and an institutional, military interest in strategies of the visible and the invisible, in order to construct an argument through the constituent elements of the visual image and a textual narrative. As an example, I would like to draw attention to a number of images previously discussed from O'Sullivan, Paglen and Sutherland that support the argument that photography has a particular application in constructing and shaping ideas of landscape. As we have seen, this can take place through an appropriating and institutional use of the medium, but can function equally as a redemptive and critical form, in this case through the medium of arts practice.

Although the impetus for each image series is distinct and separated by time and place, the examples of O'Sullivan's images for the military cartography of the Wheeler survey, Paglen's re-visiting of the *Tufa Domes* in the same landscape, and my images of the observation post of Malin Head LOP in Donegal, each present evidence of the military interest in landscape, and how a claim to landscape may be

¹ The research involved two site visits to Irish Army Western Command training exercises at Fort Dunree, in 2008 and 2011.

staked through visual processes. In the first instance, the institutionally commissioned images of Timothy O'Sullivan can be understood as expressing the territorial and empirical agenda pictorially, their legacy is nuanced and contradictory, reflecting these same qualities as inherent to the history of photography itself. This legacy is two-fold; the images are indeed prescient of the extent of development, military and otherwise, undertaken and ongoing in this landscape, and were part of the survey data gathered in order to further these aims. Yet there is a contradiction indicated by their status and inclusion within the 'exhibitionality' of early twentieth century landscape depiction through the medium of photography, and it is this axis of representation between the aesthetic and the empirical, that gives these images their visual power, and which make evident the dualism of the photographic medium. This evidential legacy is also what motivates the equally critical and aestheticised images by Trevor Paglen, through which he represents the operations of the military agency currently inhabiting this landscape, addressing the cartographic project imaged by O'Sullivan in reverse, not furthering the aims but revealing of the strategies of visibility used to achieve them. This is not technology in service of the "aesthetics of war"² as in the Futurist agenda described by Benjamin, or the union between war and photography powerfully illuminated by Virilio. Rather, this is the critical use of imaging technologies used in order to disassemble the sureties of sight and destabilise the directness of military vision. In my sequence of images created of the LOP No.80 at Malin Head, both in the video work filmed from inside the bunker, and in the series of images showing timed, partial 'views' of the structure as situated in the landscape, my intention was to similarly underscore the operations of sight, and allude to the its value in the territorial arsenal. In these images of a derelict and defunct former look out post, the visual activities of surveillance and observation, logged and reported for the benefit of military intelligence as part of the preparedness for potential incursion by a belligerent force, has a parallel in Paglen's evocation of the contemporary invisibilities of conflict in the landscape, and both are predicated on the archaeologies and sites of former appropriations. This reiteration of the concrete bunker form is a landmark that rings the Irish coastline with derelict former architectures of watchfulness, part of the symbolism and practices of national neutrality. Here to was the evidence of the 'unneutral,' the contradictory practice involved in the numbering

² Benjamin, "The Work of Art in the Age of Mechanical Reproduction," 235.

of the LOP's, a visual reference to which can still be seen in the image of the now indistinct 'EIRE' sign at Malin Head. Therefore, these connections between appropriation, inscription, defence and reconnaissance of the Irish landscape in Donegal at a time of global conflict have been made explored through the narrative and historical accounts, and through the arts practice research in the specific landscapes, culminating in their being made explicit through the photographic practice and presentation of these series of images. Throughout, the aim in undertaking the practice, and in selecting the artists for discussion, was to signify photographic activity as a critical and redemptive process, particularly in situations where the deployment of visibility and use of photography would have been as an element of institutional strategy, as in nineteenth century survey expeditions, or twenty first century satellite surveillance, for example. Perhaps not unsurprisingly, in a selection of artworks that represent issues of visibility and invisibility, there is also a quality of visual ambiguity in many of the images discussed, and I would argue that this strengthens the case for an effective use of photography as critique, rather than as polemic, or manifesto. Doherty's consistent, nuanced photographic and language based imaging of aspects of 'the Troubles' in Northern Ireland over decades, refute the polarisations and mainstream narratives of the conflict. His oeuvre critiques the validity of such narratives by the recounting of other, experiential stories through the use of photography as a redemptive practice, which effectively reclaims and destabilises the fixed positions of mediated images and journalistic reporting.

Another way in which the archaeologies of conflict may be identified and represented through arts practice is within the context of site-specificity, both in terms of events marked by a material record within the landscape, and as an arts practice approach. The capacity to re-visit and re-imagine a particular set of circumstances is a method that addresses a number of relevant issues. Firstly, the concept of the archaeological record being added to through the creation of a new document, is referred to by artist Angus Boulton in his filmic interpretation of the former nuclear bunker facility *Stolzenhain*. Site-specificity is also implicit in the formation of the 'absent present' theorised by archaeologists Buchli and Lucas, where the past is not only 'uncovered' through traditional methods, but also made anew through contemporary interpretation. Although Buchli and Lucas have argued that archaeology is uniquely positioned in order to undertake both discovery and creation, my contention is that arts practice

similarly has a particular contribution to make to the re-imagining of the material record for contemporary analysis, and that these complementary practices may be usefully shared.

Secondly, although both archaeological and arts practices may undertake research and investigation at particular places, the nature of a site-specific arts practice involves exploration of the subject matter 'in situ' and presentation of an interpretation in the context of where the original events or issues took place. This collapsing of a temporal and spatial distance echoes the methodology of contemporary archaeology, whilst re-activating original events in a dynamic and interpretative form through the model of public exhibition or performance, contextualises previous events in the light of relevant and current concerns. This was the intention in situating the *Arc of Fire* exhibition at Fort Dunree, in order to present a new, visual narrative that presented the contradictions and invisibilities of the research, set within the archaeologies of a former Treaty port fortification. The site-specific nature of the work both looked back to a political position during 'the Emergency' and forward to its current use as a museum and cultural space, overlaid by the recurrent use of the landscape of the Fort as a training base for the modern Irish Defence Forces. Therefore the positioning of the work in this particular site intensified the contradictions and tensions reflecting through the research itself, whilst also drawing attention to the interrelationships between civic and military space, and the cyclical, contingent nature of military occupation of landscape.

6.1.4 What was at stake?

In terms of what was to be achieved by the presentation of a visual narrative as exhibition, and as part of the overall cohesive enquiry into a landscape and the circumstances of historical conflict, and how these may be represented, I will return to the question of what is at stake in approaching the often contradictory and overlapping evidence of conflict in the landscape and the archive through arts practice. In undertaking this research through an approach that encompassed critical thinking, historical narratives and arts practice, what was at stake was the capacity of this approach to address the critical issues as identified, and to present the outcomes of a methodology that was scholarly and subjective, nuanced and analytical. In short,

what was at stake was the argument that this approach is successful, and capable of formulating and presenting an original contribution to the field. Therefore, a selected survey of the evolution of human sight and its mediation through technology, the emergence of photography and the influences of visibility on formations of landscape, the primacy of vision to the military project and a critical evaluation of the position and landscapes of Irish neutrality during a period of global conflict, have all been addressed in order to produce a contribution that advocates the value of arts practice research as an interdisciplinary approach in a number of fields. This contribution is of an alternative perspective and new record on issues of historical, political and civic concern, created through the model presented, and where both the archive and the cultural landscape have been engaged through visibility as a conceptual and process based activity.

In this contribution I am arguing that an approach made through arts practice, which includes the capacity and the impetus to draw on the material of other disciplines – historical, archaeological, geographical – produces a new ‘way of seeing’ the record of the archive and the materiality of the landscape, one which troubles orthodox or assumed narratives. Specifically, the claim is that photographic arts practice may function equally well as a critical and redemptive activity, in a counter-relationship to the use of photography as a means of institutional regulation. Therefore, I am suggesting that photographic arts practice, because of its position as intersecting both the empirical and the aesthetic discourses, may be used as a model of Mirzoeff’s “reverse appropriation,”³ and of an approach implicitly accepting of contradiction and ambiguity, which effectively displaces the polarisation inherent in conflicted situations. One of my aims in reflecting on the visibilities within the archive and the landscape in the production of interpretative imagery was to add another layer to the existing record. This was not done in order to illustrate the ‘evidence’ but to problematise the existing material, suggesting overlap and ambivalence, and to make visible that which was overlooked and covert, including the strategies of institutional visibility as exemplified by the military and political operations as discussed. As in Tagg’s comment on the use of nineteenth century photography as an apparatus of

³ Nicolas Mirzoeff “On Visibility” in *Journal of Visual Culture*, Vol. 5 (1) (2006): 54, http://nicolasmirzoeff.com/images/mirzoeff_visibility.pdf accessed 05 December 2012.

state control, "Like the state, the camera is never neutral."⁴ In full awareness of the 'unneutral' status of my camera, it was a key consideration of the research that the images were created in series, partial, fragmentary, and not immediately accessible or explicable. The images as created refuse the appellations of either 'snapshot' or 'documentary,' both photographic canons, preferring instead to suggest that the image is part of a wider frame of reference, and are to be approached as exploratory and probing, rather than definitive or totalising. The 'views' of O'Sullivan reflected the splintering of a landscape being apportioned for cartographic and scientific study, whereas in these contemporary images the legacies and materialities of military interests are themselves the focus of study. In this the photographic practice is tangential to a more documentary use, and instead the purpose was to create imagery more reflexively, raising contestations about the nature of 'evidence' in the landscape and in the narrative accounts of neutrality.

I have argued throughout that the use of photography was fundamental to this approach and implementation of the research for a number of reasons. One of these refers to the practice of gathering visual material in support of the arguments of the construction and mediation of sight and landscape, and of overt political positioning and covert military activities. The emergence of photography in the nineteenth century, too, was explored as a contradictory paradigm almost immediately split into the binary divisions of aesthetics and empiricism. Conflict and tension is at the heart of the history of photography. In addressing questions of conflict, landscape and history in the Donegal geographies, I intentionally focussed on the material of the contemporary landscape and the textual narratives, and purposely did not re-interpret historical photographs of the period under review. As the project of contemporary archaeology suggests that the documents of the recent past are as valid as subjects of study as those more distanced in time, so the reverse may equally be true, as contemporary images become part of historical record, their conditionality here succinctly described by Tagg.

Histories are not backdrops to set off the performance of images. They are scored into paltry paper signs, in what they do and do not do, in what they

⁴ Tagg, *Burden of Representation*, 63.

encompass and exclude, in the ways in which they open on to or resist a repertoire of uses in which they can be meaningful or productive. Photographs are never 'evidence' of history; they are themselves the historical.⁵

The discussion which began with examples from the archaeological discipline of the potential value of arts practice as part of a portfolio of shared and integrated research approaches then developed the argument from the informed position of an artist. In discussing the work of artists who have explored aspects of conflict and landscape, not specifically as research or from within an archaeological framework, my aim was to amplify and extend the discussion of potential relevance through examples of arts practice which reflected the varying levels of visibility, ambiguity and contradiction in the situations and record of contemporary conflict. The work of the selected artists, and the outcomes presented as *Arc of Fire*, reflect a range of visual languages articulating a photographic focus on conflict, whilst re-claiming the practices of appropriation, disavowal and surveillance, and re-presenting images of revelation and contradiction, acts of witness and memorialisation, and resistance to sectarianism and polarised positions.

It has been shown that although the disciplines involved have access to the same evidential sources of the archive, the landscape, and the material record, the characterisations produced through cultural geography, conflict archaeology and arts practice respectively, produce interpretations that are both distinct and complementary. In terms of outcomes and representation for example, although scholarship and different forms of research in many subject matters may enter the area of public and civic discourse at various levels, whether through publication, electronic media, and media discussion, not all outputs are necessarily intended for dissemination beyond the disciplinary boundaries. In arts practice, however, whether as performance or as visual media, the output of 'exhibitionality,' of showing and telling in the public space, and addressing a range of audiences through direct means of exhibition and performance, is a major element of the practice, and is the element of the discipline through which ideas and approaches can be fundamentally tested, argued over and brought to public interest and attention. However, through increasing

⁵ Ibid., 65.

mediatisation and the growing popularity of archaeological and genealogical broadcasts and programming, an interest in past events is evolving as a space for shared discourses, and a forum is being created for the social role of archaeology, including diverse and problematic issues of conflict.⁶

6.1.5 How may an approach through arts practice contribute to the material record and analysis of contemporary conflict?

In terms of relevance, this research is historically situated in order to both reflect back upon, and to look forward to contemporary life and current situations, and is chiming with recent events. This is evident in both the political and civic changes in Irish and Northern Irish society, and in the increasing cultural ‘visibility’ of previously unacknowledged circumstances from previous conflicts. In undertaking the research, the context was considered in light of the geographical and political proximity of a post-conflict situation in Northern Ireland. Here the benefits of new political and civic approaches to the assumed positions of past conflicts have revolutionised a previously entrenched political impasse of decades. This research has been undertaken during a period in contemporary Irish history that has seen historic elements of change in the Irish-British relationship, arguably as a dividend of the peace process which has been underway, with many setbacks, since the IRA and Loyalist ceasefires of 1994. This has included the visit of Queen Elizabeth II to the Republic, the first time a British monarch has paid a state visit since Queen Victoria, when Ireland was a subject of the British empire. The itinerary included the paying of respects to the Irish and British fallen of the First and Second World Wars at Islandbridge,⁷ and also a visit to the memorial to the Irish War of Independence in the Garden of Remembrance in Parnell Square, Dublin. The Irish Minister for Justice, Equality and Defence, Alan Shatter, has very recently issued a pardon on behalf of the Irish government to the ‘deserters’ from the Irish Defence Forces during the Second World War, who left to join the British Army and fight with the Allies, and who were subsequently ‘blacklisted’ on their return home.⁸ In the North too, as a result of the changing nature of the

⁶ The ‘Donegal corridor’ was featured in an episode of *Coast*, broadcast 18 October 2011, BBC 2, discussed by Dr Michael Kennedy.

⁷ Garden of Remembrance, 17 May and Islandbridge National War Memorial Gardens in Dublin, 18 May 2011.

⁸ Announced in Dáil Eireann by Minister Shatter on 12 June 2012.

relationship between Ireland and Britain, there have been similar events mirroring the seismic political shifts. On 27 June 2012, Northern Ireland's Deputy First Minister and Sinn Fein leader shook hands with "the English Queen"⁹ during a Jubilee visit to Belfast, a simple act of historic political significance that signalled the progress of all stakeholders in the Northern Ireland peace process over the previous decades. The plaques commemorating a secret air corridor erected in two rural Irish towns on either side of the border in 2007 did not attract so much attention perhaps, but are significantly part of the same changing patterns in the political and social chronology.

Throughout, the discourse has asserted the value of the visual narrative, drawing on the narratives of history, geography and archaeology in the creation of a cohesive and textured interpretation, underpinned by the centrality of conflict to the overall argument. Moreover, my claim that arts practice, photography specifically, has a significant interpretative value and contribution to make to the discourses and understandings of modern conflict, has been made on the basis of the research conducted into the visual influence on formations of landscape, the creativity of archaeology, and the critical use of photography by artists. Therefore, the claim for the creative, critical and redemptive use of the visual and the photographic medium through arts practice has been strengthened by the research, not only from the informed position of an arts practitioner, but additionally from the perspective of how these practices may be significant for other, related disciplines, and for the understanding of the effects of conflict in a social and civic context.

⁹ As described by Sinn Fein Dublin councillor, Mary Lou McDonald, Friday 22 June 2012, interviewed on *Morning Ireland*, RTE 1, when discussing the impending visit of Queen Elizabeth II to Belfast as part of the Jubilee tour. It was to be debated in the Sinn Fein Ard Comhairle later that day, whether Martin McGuinness, as a former commander in the IRA and figurehead of Republicanism for three decades, would indeed shake hands with a British monarch.

BIBLIOGRAPHY:

- Ackerman, James S. *Distance Points: Essays in Theory and Renaissance Art and Architecture*. Massachusetts: MIT Press, 1991.
- Adam, Peter. *The Arts of the Third Reich*. London: Thames and Hudson, 1992.
- Aristotle. *The Works of Aristotle*. Translated into English under the editorship of W.D.Ross, Vol. 7, *Problemata*, translated by E.S Forster. Oxford: Clarendon Press, 1971. First edition 1927.
- Aulich, Jim, Graham Dawson and Louise Purbrick, editors. *Contested Spaces: Sites, Representations and Histories of Conflict*. UK: Palgrave Macmillan, 2007.
- Barnes, Martin and Kate Best. *TWILIGHT: Photography in the Magic Hour*. London: Merrell Publishers Ltd, 2006.
- Barthes, Roland. *Image Music Text*. Translated by Stephen Heath. London: Fontana Press, 1977.
- Barthes, Roland. *Camera Lucida: Reflection on Photography*. New York: Hill and Wang, 1982. Originally published by Editions du Seuil, France as *La Chambre Claire*.
- Beck, L. J. *The Metaphysics of Descartes: A Study of the Meditations*. Oxford: Oxford University Press, 1965.
- Beaudry, Mary C. and Dan Hicks. *The Cambridge Companion to Historical Archaeology*. Cambridge: Cambridge University Press, 2006.
- Benjamin, Walter. *Illuminations: Essays and Reflections*. Translated by Harry Zohn. Oxon: Fontana Press, 1992. First published in Great Britain by Johnathon Cape, 1970. Translated from the German *Schriften* © Suhrkamp Verlag, Frankfurt-am-Main, 1955.
- Berger, John. *Ways of Seeing*. London: Penguin, 1972. (reissued edition 2008)
- Blake, John W. *Northern Ireland in the Second World War*. Belfast: Blackstaff Press, 2000. Originally published Her Majesty's Stationery Office, 1956.
- Bondi, Liz, Joyce Davidson and Mick Smith, editors. *Emotional Geographies*. UK: Ashgate, 2007.
- Cooper, Andrew, editor. *Lough Swilly: A Living Landscape*. Dublin: Four Courts Press, 2011.
- Brennan, Theresa and Martin Jay. *Vision in Context: Historical and Contemporary Perspectives on Sight*. New York: Routledge, 1996.
- Brittain, David, editor. *Creative Camera – Thirty Years of Writing*. Manchester: Manchester University Press, 2000.
- Brothers, Caroline. *War and Photography*. London: Routledge, 1997.
- Brookman, Philip. Contributions from Marta Braun, Andy Grundberg, Corey Keller, Rebecca Solnit. *Eadweard Muybridge*. London: Tate Publishing, 2010.
- Brontë, Emily. *Wuthering Heights*, Penguin, 1984. Originally published 1847.
- Büchler, Pavel. *Ghost Stories: Stray Thoughts on Photography and Film*. Edited by Giles Lane and Brandon LaBelle. UK: Proboscis, 1999.
- Buchli, Voçtor and Gavin Lucas, editors. *Archaeologies of the Contemporary Past*. London: Routledge, 2001.
- Bunnell, Peter C. *Inside the Photograph: Writings on Twentieth-Century Photography*. New York: Aperture, 2009.
- Burgin, Victor. *The Remembered Film*. London: Reaktion Books, 2004.
- Burnett, Ron. *How Images Think*. Massachusetts: MIT Press, 2004.
- Campany, David. *Photography and Cinema (Exposures)*. London: Reaktion Books, 2008.
- Campany, David. *Art and Photography*. London: Phaidon Press, 2003.

- Company, David. *The Cinematic: Whitechapel Documents of Contemporary Art*. Massachusetts: MIT Press, 2007.
- Cartwright, Lisa and Marita Sturken. *Practices of Looking: An Introduction to Visual Culture*. USA: Oxford University Press, 2001.
- Chandler, Edward. *Photography in Ireland: The Nineteenth Century*. Dublin: Edmund Burke, 2001. Grant aided by the Heritage Council.
- Childs, John C.R. *The Military Use of Land: A History of the Defence Estate*. Bern: Peter Lang, 1998.
- Clausewitz, Karl Von, with notes by F.N Maude, Vol. 3. *On War*. Routledge, 1908.
- Clements, Bill. *Defending the North: The Fortifications of Ulster 1796-1956*. Newtonards: Colourpoint, 2003.
- Coakley, John and Liam O'Dowd, editors. *Crossing the Border: New Relationships between Northern Ireland and the Republic of Ireland*. Dublin: Irish Academic Press, 2007.
- Cocroft, Wayne and Roger Thomas. *The Cold War: Building for Nuclear Confrontation 1946-1989*. English Heritage, 2003.
- Cook, Alice and Gwyn Kirk. *Greenham Women Everywhere*. London: Pluto Press, 1983.
- Connolly, Maeve. *The Place of Artists' Cinema: Space, Site and Screen*. Bristol: Intellect Books, 2009.
- Cooper, Andrew, editor. *Lough Swilly: A Living Landscape*. Dublin: Four Courts Press, 2011.
- Cosgrove, Denis E. *Social Formation and Symbolic Landscape*. Madison: University of Wisconsin Press, 1998. 2nd edition, first edition 1984.
- Cosgrove, Denis E. *The Palladian Landscape: Geographical Change and its Cultural Representations in Sixteenth-Century Italy*. London: Leicester University Press, 1993.
- Crandell, Jordan, Brian Holmes and Brian Weibel. *Drive*. Ostfildren: Hatje Cantz Verlag, 2003.
- Crary, Jonathon. *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century*. Massachusetts: MIT Press, 1992. Originally published MIT Press, 1990.
- Cummingham, John M. with Linda MacMahon and Taryn Gleeson, editors. *Conflict and Resolution Earagail Arts Festival Exhibitions 2006*. Letterkenny Arts Centre: Donegal, 2006.
- Daniels, Stephen. *Fields of Vision: Landscape Imagery and National Identity in England and the United States*. UK: Polity Press, 1993.
- D'Arcy, Fergus A. *Remembering the War Dead: British Commonwealth and International War Graves in Ireland since 1914*. Dublin: The Stationery Office Government Publications: Dublin, 2007.
- Da Vinci, Leonardo. *The Notebooks of Leonardo da Vinci*. Edited by Irma A. Richter. Oxford: Oxford University Press, 1952.
- Debord, Guy. *Society of the Spectacle*. Translated by Donald Nicholson-Smith. New York: Zone Books, 1995. Originally published in France as *La société du spectacle* in 1967 by Buchet-Chastel.
- De Certeau, Michel. *The Practice of Everyday Life*. Translated by Steven Rendall. Berkeley: University of California Press, 1984.
- Der Derian, James. *Virtuous War: Mapping The Military-Industrial-Media-Entertainment Network*. New York: Routledge, 2009. 2nd edition, first published Westview Press, 2001.

- De Landa, Manuel. *War in the Age of Intelligent Machines*. New York: Zone Books, 1991.
- Deleuze, Gilles and Félix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. Translated by Brian Massumi. Minneapolis, University of Minnesota Press, 1987.
- Der Derian, James, editor. *The Virilio Reader*. Oxford: Wiley-Blackwell, 1998.
- Descartes, René, *Descartes Philosophical Writings*. Translated and edited by Elizabeth Anscombe and Peter Thomas Geach. UK: Nelson's University Paperbacks for Open University, 1970. Originally published The Nelson Philosophical Texts series, 1954.
- Descartes, René. *Discourse on Method, Optics, Geometry and Meteorology*. Translated by Paul J. Olsch. Indianapolis, IN, 1965.
- Doane, Mary Ann. *The Emergence of Cinematic Time: Modernity, Contingency, The Archive*. Harvard: Harvard University Press, 2002.
- Doherty, Willie. *No Smoke Without Fire*. London: Matt's Gallery, 1996.
- Dorrian, Mark and Gillian Rose, editors. *Deterritorialisations: Revisioning Landscapes and Politics*. London: Black Dog Publishing, 2003.
- Duggan, John, P. *Neutral Ireland and the Third Reich*. Dublin: Gill and Macmillan, 1985.
- Duggan, John, P. *Herr Hempel at the German Legation in Dublin 1937-1945*. Dublin: Irish Academic Press, 2003.
- Elkins, James, editor. *Photography Theory*. US: Routledge and University College Cork, 2007.
- Fairclough, Graham, Rodney Harrison, John H. Jameson Jr., and John Schofield. Editors, *The Heritage Reader*. Oxon: Routledge, 2008.
- Fanning, Ronan. *Independent Ireland*. Dublin: Helicon, 1983.
- Farrell, David. *Innocent Landscapes*. UK: Dewi Lewis publishing, 2002.
- Faslane, members of the Peace Camp. *Faslane: Diary of a Peace Camp*. Edinburgh: Polygon Books, 1984.
- Fisher, Jean. *Willie Doherty: Unknown Depths*. Cardiff: Ffotogallery in association with the Orchard Gallery, Derry and the Third Eye Centre, Glasgow, 1990.
- Fisk, Robert. *In Time of War: Ulster and the Price of Neutrality 1939-45*. London: Andre Deutsch, 1983.
- Foster, Hal, editor. *Vision and Visuality*. New York Dia Art Foundation: The New Press, 1988.
- Foucault, Michel. *Discipline and Punish: The Birth of the Prison*. Translated by Alan Sheridan. London: Penguin, 1977.
- Foucault, Michel. *Security, Territory, Population (Lectures at the Collège de France)*. Translated by Graham Burchell. UK: Palgrave MacMillan, 2009. Originally published Éditions du Seuil/Gallimard, 2004.
- Francis, Dermot, Brian Lacey and Jim Mullan. *Atlantic Memorial: The Foyle and the Western Approaches 1939-1945*. Derry City Council Heritage and Museum Service, 2005.
- Girvin, Brian and Geoffrey Roberts, editors. *Ireland and the Second World War: Politics, Society and Remembrance*. Dublin: Four Courts Press, 2000.
- Godson, Chris, Colin Renfrew and Elizabeth DeMarras, editors. *Substance, Memory, Display: Archaeology and Art*. McDonald Institute for Archaeological Research, University of Cambridge, 2004.
- Gordon, Ian E. *Theories of Visual Perception*. UK: John Wiley & Sons, 2001. Second edition.

- Gould, Richard A. and Michael B. Schiffer, editors. *Modern Material Culture: The Archaeology of Us*. University of Michigan: Academic Press, 1981.
- Graves-Brown, Paul, editor. *Matter, Materiality and Modern Culture*. London: Routledge, 2000.
- Greene, David and Joanna Lowry, editors. *Stillness and Time – Photography and the Moving Image*. Manchester: Photoworks, 2006.
- Halbwachs, Maurice. *On Collective Memory*. Edited and translated by Lewis A. Coser. Chicago: University of Chicago Press, 1992.
- Harvey, David. *The Condition of Postmodernity*. Massachusetts: Blackwell, 1993. Originally published 1990, Blackwell.
- Haughey, Anthony. *Borderlines: Personal Stories and Experiences from the Border Counties*. Dublin: Gallery of Photography, 2006..
- Hicks, Dan and Mary C. Beaudry, editors. *The Cambridge Companion to Historical Archaeology*. Cambridge: Cambridge University Press, 2006.
- Hockney, David. *Secret Knowledge: Rediscovering the Lost Techniques of the Old Masters*. London: Thames and Hudson, 2006. Second edition.
- Horne, John. *Our War: Ireland and the Great War*, the 2008 Thomas Davis Lecture Series, editor. Dublin: Royal Irish Academy, 2008.
- Jarman, Neil. *Material Conflicts: Parades and Visual Displays in Northern Ireland*. Oxford: Berg, 1997.
- Jay, Martin. *Downcast Eyes: the Denigration of Vision in Twentieth Century French Thought*. Berkeley: University of California Press, 1994.
- Johnston, R.J. *The Dictionary of Human Geography*. Oxford: Blackwell, 1981.
- Jurovics, Toby, Carol M. Johnson, Glenn Willumson and William F. Stapp. Foreword by Page Stegner. *Framing the West: The Survey Photographs of Timothy H. O'Sullivan*. New Haven and London: Yale University Press, published in association with the Smithsonian American Art Museum and the Library of Congress, 2010.
- Kelly, Mary Pat. *Home Away from Home: The Yanks in Ireland*. Belfast: Appletree Press, 1994.
- Kelsey, Robin and Blake Stimson, editors. *The Meaning of Photography*. New Haven and London: Yale University Press, 2008.
- Kennedy, Michael. *Guarding Neutral Ireland: The Coast Watching Service and Military Intelligence 1939-1945*. Dublin: Four Courts Press, 2008.
- Keogh, Dermot and Mervyn O'Driscoll, editors. *Ireland in World War Two: Neutrality and Survival*. Cork: Mercier Press, 2004.
- Kippin, John. *Cold War Pastoral: Greenham Common*. London: Black Dog Publishing, 2001.
- Krauss, Rosalind. *The Optical Unconscious*. Massachusetts: MIT Press, 1994.
- Kuhn, Annette and Emiko McAlister, editors. *Locating Memory: Photographic Acts*. New York: Berghahn Books, 2006.
- Lant, Antonia. *Blackout: Reinventing Women for Wartime British Cinema*. Princeton: Princeton University Press, 1991.
- Lefebvre, Henri. *The Production of Space* Translated by Donald Nicholson-Smith. Oxford: Blackwell, 2000. Originally published 1991.
- Lippard, Lucy R. *The Lure of the Local: Senses of Place in a Multicentred Society*. New York: The New Press, 1998.
- Lister, Martin, editor. *The Photographic Image in Digital Culture*. London: Routledge, 2005. originally published Routledge 1995.
- Lipkin, Jonathon. *Photography Reborn – Image making in the Digital Era*. New York: Abrams, 2005.

- Litton, Helen. *The World War II Years: The Irish Emergency and Illustrated History*. Dublin: Wolfhound Press, 2001.
- MacCarron, Donal. *Silent Sentinels: The Irish Treaty Forts*. Dublin: Nonsuch, 2008.
- MacCarron, Donal. *Landfall Ireland: The Story of Allied and German Aircraft which came down in Éire in World War Two*. Newtownards: Colourpoint, 2003.
- McCusker, Breege. *Castle Archdale and Fermanagh in World War II*. Fermanagh: Necarne Press, 1993.
- McAvera, Brian. *Icons of the North: Collective Histories of Northern Irish Art*. Belfast: Golden Thread Gallery, 2006.
- Mackel, Ciaran. *Impact of the Conflict on Public Space and Architecture*. A Troubles Archive Essay. Belfast: Arts Council of Northern Ireland, undated.
- McMahon, Sean. *A History of County Derry*. Dublin: Gill and Macmillan, 2004.
- Members, Faslane Peace Camp. *Faslane: Diary of a Peace Camp*. Edinburgh: Polygon Books, 1984.
- Mirzoeff, Nicolas. editor. *The Visual Culture Reader*. New York: Routledge, 2002. Second edition, originally published 1998.
- Mitchell, W.J.T, editor. *Landscape and Power*. Chicago: University of Chicago Press, 2002. Second edition.
- Mitchell, W.J.T, (1992) *The Reconfigured Eye: Visual Truth in the Post-Photographic Era*. Massachusetts: MIT Press, 1994.
- Mulvey, Laura. *Death 24 x a Second: Stillness and the Moving Image*. London: Reaktion Books, 2006.
- O'Loughlin, Joe. *Voices of The Donegal Corridor*. Dublin: Nonsuch, 2005.
- O'Toole, Fintan. *Lie of the Land*. Dublin: Gallery of Photography, 1995.
- Paglen, Trevor, with an essay by Rebecca Solnit. *Invisible: Covert Operations and Classified Landscapes*. New York: Aperture, 2010.
- Pearson, Chris, Peter Coates and Tim Cole, editors. *Revealing Militarized Landscapes: from Gettysberg to Salisbury Plain*. London: Continuum, 2010.
- Quinn, John. *Down in a Free State: Wartime Air Crashes and Forced Landings in Éire 1039-1945*. Belfast: Shanway, 1999.
- Ricoeur, Paul *Memory, History, Forgetting*. Translated by. Kathleen Blamey & David Pellauer. Chicago: University of Chicago Press, 2004.
- Ritchin, Fred. *In Our Own Image: The Coming Revolution in Photography*. New York: Aperture, 1999.
- Rose, Gillian. *Feminism and Geography: The Limits of Geographical Knowledge*. Cambridge: Polity Press, 1993.
- Rouse, Sarah. *Into the Light: An Illustrated Guide to the Photographic Collections in the National Library of Ireland*. Dublin: National Library of Ireland, 1998.
- Salmon, Trevor C. *Unneutral Ireland: An Ambivalent and Unique Security Policy*. Oxford: Clarendon Press, 1989.
- Sandweiss, Martha A. *Print the Legend: Photography and the American West*. New Haven: Yale University Press, 2002.
- Schofield, John, William Gray Johnson and Colleen M. Beck, editors. *Matériel Culture: The Archaeology of Twentieth-Century Conflict*. Oxon: Routledge, 2002.
- Schofield, John. *Constructing Place: When Artists and Archaeologists Meet*. Proboscis, Liquid Geography series, 2006. eBook available at www.diffusion.org.uk
- Schofield, John. *Combat Archaeology: Material Culture and Modern Conflict*. London: Duckworth, 2005.
- Schofield, John. *Aftermath: Readings in the Archaeology of Contemporary Conflict*. New York: Springer, 2011.

- Schofield, John, Axel Klausmeier and Louise Purbrick, editors. *Re-Mapping the Field: New Approaches in Conflict Archaeology*. Berlin/Bonn: Westkreutz-Verlag, 2006.
- Scott, J.F. *The Scientific Work of René Descartes (1596 – 1650)*. London: Taylor and Francis, 1976.
- Sebag-Montefiore, Hugh. *Enigma: The Battle for the Code*. London: Phoenix, 2001.
- Schofield, John. *Aftermath: Readings in the Archaeology of Recent Conflict*. New York: Springer, 2011.
- Shapiro, Michael J. *Violent Cartographies: Mapping Cultures of War*. Minneapolis: University of Minnesota Press, 1997.
- Smith, Joel. *Edward Steichen: The Early Years*. Princeton: Princeton University Press, 1999.
- Sontang, Susan. *On Photography*. New York: Picador, 1977. Originally published 1973.
- Sontang, Susan. *Regarding the Pain of Others*. New York: Picador, 2003.
- Solnit, Rebecca. *Wanderlust: A History of Walking*. London: Verso, 2002.
- Solnit, Rebecca. *Storming the Gates of Paradise: Landscapes for Politics*. Berkeley: University of California Press, 2007.
- Solnit, Rebecca. *River of Shadows: Eadweard Muybridge and the Technological Wild West*. New York: Penguin Viking, 2003.
- Stimson, Blake. *The Pivot of the World: Photography and its Nation*. Massachusetts: MIT Press, 2006.
- Tagg, John. *The Burden of Representation: Essays on Photographies and Histories*. Minneapolis: University of Minnesota Press, 1993. Originally published 1988, Palgrave MacMillan.
- Tagg, John. *The Disciplinary Frame: Photographic Truths and the Capture of Meaning*. Minneapolis: University of Minnesota Press, 2009.
- Tóibín, Colm. *Walking Along the Border*. London: Queen Anne Press, 1987.
- Trachtenberg, Alan, editor. *Classic Essays on Photography*. US: Leete's Island Books, 1980.
- Uzzell, David and Roy Ballantyne, editors. *Contemporary Issues in Heritage & Environmental Interpretation*. London: The Stationery Office, 1988.
- Wade, Nicholas J, and Michael Swanston. *Visual Perception: An Introduction*. London: Routledge, 1991.
- Wall, Jeff and Peter Galassi. *Jeff Wall – Selected Essays and Interviews*. New York: The Museum of Modern Art, 2007.
- Weaver, Mike, editor. *The Art of Photography 1839-1989*. Photographs selected by Daniel Wolf with Mike Weaver and Norman Rosenthal. New Haven and London: Yale University Press, 1989.
- Weizman, Eyal. *Hollow Land: Israel's Architecture of Occupation*. London: Verso, 2007.
- Wells, Liz, editor. *Photography: A Critical Introduction*. London: Routledge, 2009, Fourth edition. First published 1996.
- Wells, Liz, Kate Newton and Catherine Fehily, editors. *Shifting Horizons: Womens Landscape Photography Now (2000)* New York: I.B Tauris & Co, 2000. Copyright IRIS – The Women's Photography Project, 2000.
- Werner, Herbert A. *Iron Coffins: A U-Boat Commander's War 1939-1945*. London: Cassell Military Paperbacks, 2002. Originally published 1969, Cassell.
- Wills, Clair. *That Neutral Island: A Cultural History of Ireland During the Second World War*. London: Faber and Faber, 2007.

- Williams, Val. *Warworks: Women, Photography and the Iconography of War*. London: Virago Press, 1995.
- Winter, Jay and Emmanuel Sivan, editors. *War and Remembrance in the Twentieth Century*. Cambridge: Cambridge University Press, 2000. Originally published 1999.
- Wolton, W. John. *Locke and the Compass of Human Understanding: A Selective Commentary on the 'Essay'*. Cambridge University Press, Cambridge, 1970.
- Woodward, Rachel. *Military Geographies*. Oxford: Blackwell, 2004.
- Wylie, Charles. *Willie Doherty: Requisite Distance: Ghost Story and Landscape* (Dallas Museum of Art Publications). Yale University Press, 2009.
- Wylie, John. *Landscape*. Oxford: Routledge, 2007.
- Virilio, Paul. *Desert Screen: War at the Speed of Light*. Translated by Michael Degener. London: Continuum, 2005. Originally published in France under the title *L'Ecran du desert* by Editions Galilée 1991.
- Virilio, Paul. *Bunker Archaeology*. Translated by George French. New York: Princeton Architectural Press, 2009. Originally published for the exhibition: *Bunker Archaeology*, Paul Virilio. Museum of Decorative Arts in Paris from December 1957 through February 1976. The pictures were taken by Paul Virilio from 1958 to 1961.
- Virilio, P (2007) *City of Panic*. Berg.
- Virilio, Paul. *War and Cinema: The Logistics of Perception*. Translated by Patrick Camiller. London: Verso, 1989. Originally published 1984.
- Virilio, Paul. *Desert Screen: War at the Speed of Light*. Translated by Michael Degener. London: Continuum, 2005. Originally published 1991.

ONLINE ARTICLES AND JOURNALS:

- Ackerman, James S. "Leonardo's Eye." *Journal of the Warburg and Courtauld Institutes*, Vol. 41. Published by The Warburg Institute. (1978): 108-146
<http://www.jstor.org/stable/750865>
- Ackerman, James S. "The Photographic Picturesque." *Artibus et Historiae*, Vol. 24. No. 48 (2003): 73-94. <http://www.jstor.org/stable/1483732>
- Chen-Morris, Raz. "Shadows of Instruction: Optics and Classical Authorities in Kepler's *Somnium*." *Journal of the History of Ideas*, Vol. 66, No.2. Published by the University of Pennsylvania Press. (April 2005): 223-243.
<http://www.jstor.org/stable/3654248>
- Daniel, Malcolm. "The Daguerreian Age in France 1839-1855." *Helibrunn Timeline of Art History*. New York: The Metropolitan Museum of Art, 2000.
http://www.metmuseum.org/toah/hd/fdag/hd_fdag.htm (October 2004)
- Donegal County Council. *An Straitéis, Donegal County Council Strategy 2002 – 2012*. "County Donegal – An Overview."
<http://donegalcoco.ie/services/communityculturalenterprise/Publications/pubs.htm>
- Falco, Charles M. "The Hockney-Falco Thesis." *Art – Optics*
<http://www.optics.arizona.edu/ssd/art-optics/index.html>

- Falco, Charles M. "Ibn Al-Haytham and the Origins of Modern Image Analysis." (Abstract) <http://www.optics.arizona.edu/ssd/FalcoPlenaryUAE.pdf>
- Gorman, Michael John. "Art, History and Optics: New Light on the Hockney Thesis." *Leonardo*, Vol.36, No.4 The MIT Press (2003): 295-301. <http://www.jstor.org/stable/1577325>
- Holmes, Oliver Wendall. "The Stereoscope and the Stereograph," *The Atlantic Monthly*, Vol. 3, (June 1859):739-742. <http://www.theatlantic.com/magazine/archive/1859/06/the-stereoscope-and-the-stereograph/3361/>
- Hunt, James L. "The Roget Illusion, the Anorthoscope and the Persistence of Vision." *Am.J.Phys.*, Vol.71, No. 8. (August 2003): 774-777. www.physics.uoguelph.ca/phyjlh/morph/Roget.pdf
- Hunterian Art Gallery, Glasgow. "Making, Meaning and Market: 17th century Dutch Painting from the Hunterian Art Gallery." <http://www.hatii.arts.gla.ac.uk/dutch/landscape.htm>
- Kelsey, Robin E. "Viewing the Archive: Timothy O'Sullivan's Photographs for the Wheeler Survey, 1871-74." *The Art Bulletin*, Vol. 85, No. 4. (December 2003): 702-723. <http://www.jstor.org/stable/3177366>
- Kemp, Martin. "Leonardo and the Visual Pyramid." *Journal of the Warburg and Courtauld Institutes*, Vol. 40. Published by The Warburg Institute. (1977):128-149 <http://www.jstor.org/stable/750993>
- Kiang, Tanya. "Dark Wonder." *CIRCA*, 96. Summer (2001): 22-24. <http://recirca.com/backissues/c96/astk.shtml>
- Krauss, Rosalind. "Photography's Discursive Spaces: Landscape/View." *Art Journal*, Vol. 42, No.4. The Crisis in the Discipline (Winter 1982): 311-319. <http://www.jstor.org/stable/776691>
- Mitchell, W.J.T. "Showing Seeing: A Critique of Visual Culture." *Journal of Visual Culture*, Vol.1, No.2. (August 2002): 165-181. <http://www9.georgetown.edu/faculty/irvinem/theory/Mitchell-ShowingSeeing.pdf>
- Mirzoeff, Nicolas. "On Visuality." *Journal of Visual Culture*, (2006) Vol. 5 (1): 53-79 http://nicolasmirzoeff.com/images/mirzoeff_visuality.pdf
- Pratt, Julius W. "The Origin of "Manifest Destiny." " *The American Historical Review*, Vol. 32, No. 4. The University of Chicago Press (July 1927): 795-798. <http://www.jstor.org/stable/1837859>
- Rashed, Roshdi. "A Polymath in the 10th Century." *Science*, Vol. 297. (2 August 2002): 773. <http://www.sciencemag.org/content/297/5582/773.full.pdf>

Schaaf, Larry J. "Transcript of original letter from Charles Wheatstone to W.H. Fox Talbot at Lacock Abbey, 15 December 1840." *Talbot Correspondence Project*, <http://foxtalbot.dmu.ac.uk/>

Solbert, Oscar N., Beaumont Newhall and James G. Card, eds. "Portrait of the Inventor," *Image: Journal of Photography of the George Eastman House* Vol.1, No.4. (April 1952): 1-4. http://www.eastmanhome.org/files/GEH_1952_01_04.pdf

Spiro, Lisa. "A Brief History of Stereographs and Stereoscopes." *Connexions*. (October 30, 2006): 1-6. <http://cnx.org/content/m13784/1.5/>

Talbot, William Henry Fox. "An Account of Some Recent Improvements in Photography." *Abstracts of the Papers Printed in the Philosophical Transactions of the Royal Society of London*, Vol. 4 (1837 – 1843): 313-316. <http://www.jstor.org/stable/110751>

Tate Britain, *Eadweard Muybridge* exhibition, Tate Britain, 8 September 2010 -16 January 2011. http://www.tate.org.uk/britain/exhibitions/eadweardmuybridge_room2.shtm

Wade, Nicholas J. "Guest Editorial Charles Wheatstone (1802-1875)." *Perception*, Vol. 31. (2002): 265-272. <http://www.perceptionweb.com/perception/perc0302/editorial.pdf>

ESSAYS, CHAPTERS IN PUBLICATIONS AND JOURNAL ARTICLES:

Adams, Ann Jensen. "Competing Communities in the "Great Bog of Europe" Identity and Seventeenth-Century Dutch Landscape Painting." In *Landscape and Power*, edited by W.J.T. Mitchell, 35-76. Chicago: University of Chicago Press, 2002. Second edition.

Benjamin, Walter. "The Work of Art in the Age of Mechanical Reproduction." In *Illuminations*, translated by Harry Zohn, 211-244. London: Fontana Press, 1992. Originally published in Great Britain by Jonathon Cape, 1970.

Buchli, Victor and Gavin Lucas. "Presencing Absence." In *Archaeologies of the Contemporary Past*, edited by Victor Buchli and Gavin Lucas, 171-174. London: Routledge, 2001.

Buchli, Victor and Gavin Lucas. "The Absent Present: Archaeologies of the Recent Past." In *Archaeologies of the Contemporary Past*, edited by Victor Buchli and Gavin Lucas, 3-17. London: Routledge, 2001.

Coakley, John, Brian Ó Caoindealbháin, and Robin Wilson. "Institutional Cooperation: the North-South Implementation Bodies." In *Crossing the Border: New Relationships between Northern Ireland and the Republic of Ireland*, edited by John Coakley and Liam O'Dowd. Dublin: Irish Academic Press, 2007.

- Darby, John. "Conflict in Northern Ireland: A Background Essay." In *Facets of the Conflict in Northern Ireland*, edited by Seamus Dunn. UK: Macmillan, 1995.
- Gombrich, E.H. "Standards of Truth: The Arrested Image and the Moving Eye." In *The Language of Images*, edited by W.J.T. Mitchell, 181-217. Chicago: University of Chicago Press, 1980.
- Jewesbury, Daniel. "Loose Canons or, Our Drum Major is a Woman" in *Muster*, 24-28. Glasgow: Not in Kansas, 1998.
- Kriebel, T. Sabine. "Theories of Photography: A Short History." In *Photography Theory: The Art Seminar Series*, edited by James Elkins. New York and University College Cork: Routledge, 2007.
- Lucas, Gavin. "Historical Archaeology and Time." In *The Cambridge Companion to Historical Archaeology*, edited by Mary C. Beaudry and Dan Hicks, 34-47. Cambridge: Cambridge University Press, 2006.
- Mitchell, W.J.T. "Imperial Landscape." In *Landscape and Power*, edited by W.J.T. Mitchell. Chicago: University of Chicago Press, 2002. Second edition.
- Olivier, Laurent. "The Archaeology of the Contemporary Past," In *Archaeologies of the Contemporary Past*, edited by Victor Buchli and Gavin Lucas, 175-188. London: Routledge, 2001.
- Ó Longaigh, Seosamh. "Preparing Law for an Emergency, 1938-1939." In *Ireland in World War Two: Neutrality and Survival*, edited by Dermot Keogh and Mervyn O'Driscoll, 36-47. Cork: Mercier Press, 2004.
- Price, Derrick and Liz Wells. "Thinking About Photography: Debates, Historically and Now." In *Photography: A Critical Introduction*, edited by Liz Wells, 11-64. Routledge, 2009. Fourth edition.
- Roberts, Geoffrey. "Neutrality, Identity and the Challenge of the 'Irish Volunteers.'" In *Ireland in World War Two: Neutrality and Survival*, edited by Dermot Keogh and Mervyn O'Driscoll, 274-284. Cork: Mercier Press, 2004.
- Schofield, John. "Landscape and People: Contemporary Archaeology, Communities and Artistic Practice." Paper presented at the Graduate School of Creative Arts and Media, National College of Art and Design (NCAD), Dublin, October 22, 2009.
- Schofield, John and William Gray Johnson "Archaeology, Heritage and the Recent and Contemporary Past." In *The Cambridge Companion to Historical Archaeology*, edited by Mary C. Beaudry and Dan Hicks, 104-122. Cambridge: Cambridge University Press, 2006.
- Snyder, Joel. "Picturing Vision." In *The Language of Images*, edited by W.J.T. Mitchell, 219-246. Chicago: University of Chicago Press, 1980.

looked like the image produced by the camera, it was how to make a machine that produced an image like the one they painted.³⁹

As in the earlier indication of visual projections and *Magiae Naturalis*, Snyder also refers to an account published by Giovanni Battista della Porta in 1558, as being one of the first pictorial applications of the camera obscura,⁴⁰ although it was not until later in the seventeenth century that cameras were in wider production as aids to artists in drawing and representational painting.⁴¹ He continues by saying that the modifications evolved with the addition of initially crude lenses and mirrors, and with artists themselves working with camera makers in order to refine and produce the best pictorial results that could be achieved through the camera. Specialised lenses began to be produced, with artists making specific demands on lens makers about the focal length of lenses, in relation to the demands of different subjects, such as landscape and portraiture. This relationship and early collaboration between artists and manufacturers in “relation of purpose to design”⁴² is significant, as it demonstrates that the camera makers of the later seventeenth and eighteenth centuries were modifying the empirical apparatus of the camera obscura in order to meet the specific, spatial demands of artists and the depiction of realism through the painted image.

1.2.5 Optical influence - the Hockney-Falco thesis

The significance of the camera obscura in the production of representational painting is also the proposition of the Hockney-Falco thesis on the influence of opticality in European painting pre-dating the Renaissance. Although it is not within the scope of this enquiry to discuss the Hockney-Falco thesis in detail,⁴³ the crux of the argument is a controversial account of how optical aids may have been introduced at an earlier stage, and as such are more influential to the history of art than previously acknowledged. The principle argument by artist David Hockney in collaboration with physicist Charles Falco is the claim that artists were using optical devices – the

³⁹ Ibid., 232.

⁴⁰ Giovan Battista della Porta, *De I miracoli et meravigliosi effetti dalla natura prodotti libri IV* (Venice 1560), bk. 4, pp.139-45) Snyder in ‘Picturing Vision’, 233.

⁴¹ Ibid.

⁴² Ibid.

⁴³ For more information on the details of the Hockney-Falco thesis, including counter-arguments from Dr David Stork, and website of physicist Charles Falco <http://www.optics.arizona.edu/ssd/art-optics/index.html> and <http://www.webexhibits.org/hockneyoptics/post/stork.html>

modern warfare, successfully elevating and extending the range of vision, and consequently, of targeted bombing raids. The calls for the return of the Treaty ports subsided as the course of the war changed after the fall of France in 1940 and with the German occupation of French ports, access to the southern Irish ports was no longer so urgent for the Allies. The 'logistics of perception' were shifting decisively from the sea power of surface ships to the sights of aircraft and the stealth of the submarine. The operations of the 'Donegal corridor', later increased by Coastal Command stationed at the airfields of Eglinton, Ballykelly and Limavady between April 1941 and June 1942,¹¹² near Derry in Northern Ireland reflected the focus of conflict off the north-west coast of Ireland and in the mid-Atlantic. As observed by Michael Kennedy, "Through the air corridor from Lough Erne Britain had obtained the access to Irish territory for her air forces that de Valera would never allow for British naval forces through the Treaty ports."¹¹³

4.4.10 'Donegal corridor' landscape 2007-2011

On Wednesday 18 April, 2007, two granite plaques were unveiled on two bridges in towns in the north west of Ireland, in Ballyshannon, Co Donegal, and in Belleek, Co Fermanagh. The wording on each plaque is almost identical and is in memory of the Allied forces, sailors and aircrew, who lost their lives in the Battle of the Atlantic flying the 'Donegal corridor'. Where the wording changes is in the reference to 'World War Two' on the Belleek plaque in Northern Ireland, and 'the Emergency' on the Ballyshannon plaque on the Allingham Bridge in the Republic of Ireland. Reporting on the commemoration, the national newspaper the *Irish Independent* refers to the ceremony of the installation of the plaques as "Plaques mark secret wartime air corridor in Donegal"

A secret wartime deal enabling Allied planes to fly over the Republic on Atlantic convoy protection missions was commemorated yesterday in special ceremonies in counties Donegal and Fermanagh. The then Taoiseach, Eamon De Valera, secretly relaxed Ireland's neutrality to enable the planes to overfly

¹¹² Dermot Francis et al., *Atlantic Memorial*, 72-82.

¹¹³ Kennedy, *Guarding Neutral Ireland*, 161.

Snyder, Joel. "Territorial Photography." In *Landscape and Power*, edited by W.J.T Mitchell. Chicago: University of Chicago Press, 2002. Second edition.

Snyder, Joel. "Assessments." In *Photography Theory: The Art Seminar Series*, edited by James Elkins. New York and University College Cork: Routledge, 2007.

Young, Peter. "Defence and the New Irish State 1919-1939." In *Ireland in World War Two: Neutrality and Survival*, edited by Dermot Keough and Mervyn O'Driscoll, 21-35. Cork: Mercier Press, 2004.

1.3 CD copy of thesis (colour illustrations to accompany black and white copy of thesis)