

Interrupting Time: A Photographic Examination of the Perception of Urban Temporality



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Thesis submitted for the degree of
Doctor of Philosophy (PhD)
2012

Declaration

I certify that this thesis, *Interrupting Time: A Photographic Examination of the Perception of Urban Temporality*, is the result of my own work.

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Acknowledgements

First and foremost, I wish to thank Michael Keith for his unwavering dedication and tireless belief in this project. I will be forever grateful for his inspiring words of wisdom and invaluable guidance. I wish to thank Paul Halliday for his insightful guidance and his unsurpassed enthusiasm, which have continually motivated me throughout this research. I also wish to thank my parents for their overwhelming amount of encouragement and support – I could not have made it through this endeavour without them. I would like to thank Stew for all of his support and his constant belief in me and in this project. I am grateful to all of my friends who have been a continual source of encouragement and have always been there for me, especially Lisa, Holly and Rachel. And to all of my family who have constantly had faith in me. Thank you also to Bridget Ward and Martin Spaul for all of your help.

Abstract

This thesis examines how time is perceived in the urban realm and what role the visual field plays in this perception. My research aims to gain insight into how a unified sense of time is reconciled with the fractured nature of urban temporality. I will investigate the perception of urban temporality in terms of the notion of duration, as theorised by Henri Bergson and Gilles Deleuze.

Fusing artistic photographic practice and sociological theory to interrogate the virtual realm of the city, this thesis attempts to present a nuanced reading of the everyday urban sphere, de-familiarising the everyday in the tradition of Surrealism and transforming the mundane into the sublime. My aim is to make apparent unnoticed or unconscious everyday activities in order to examine the relationship between the individual and the whole of the city, using the moving image as the basis for this investigation. By breaking down moving images into stills and examining the relationship between the still and moving image, I will interrogate the ways that moving images can help us to understand the relationship between the parts and the whole. I will present three photographic projects, each exploring a different yet interrelated element of perception (difference and repetition, the panorama, and light) from a nuanced perspective in order to disrupt existing notions of these elements.

In researching the virtual urban realm, I consider whether it is possible to go beyond representation and beyond the human realm (as Deleuze proposed) in order to reach a domain of pure difference and pure presence. By interacting with the urban sphere in a dynamic capacity, a new understanding of the virtual life of the city begins to emerge, which I will argue has potentially important ramifications upon visual sociological research.

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Introduction

The city is a site of myriad spectacle. The amount of visual information that must be taken in by the eye within the urban realm is overwhelming – an impressive feat of perception by the human mind. Glancing and gazing, sifting and sorting through the dizzying array of visual stimuli within the city – a dense web of bodies, objects, buildings, and lights continually shifting and colliding – the eye and the mind work furiously in an attempt to make sense of this multitude of images. As John Berger states, “In no other form of society in history has there been such a concentration of images, such a density of visual messages” (1972:129).

The way the mind interprets the external world and the way the body acts in response to this external world are fundamental to daily existence, in particular in the urban realm where the concentration of bodies and objects is heightened. In this thesis I will examine perception of the urban sphere from a Bergsonian and Deleuzian point of view, using images as the basis for this investigation. I will consider the relationship of images and movement within the perception of urban temporality. Specifically, I will look at the intersection of images that exist within the mind (internal realm or the virtual) and images that exist in the outside world (external realm or the actual). I will examine the perception of the urban sphere in terms of imagery, using Bergson’s notion that matter is “the aggregate of images” (Bergson 1997:8); for Bergson, all matter is image (Rodowick 1997:28).

The internal realm of images and the external realm of images are not opposed, nor is it possible to separate the two. Keith Ansell Pearson explains that for Bergson “to ask whether the universe exists only in our thought, or outside of our thought, is to put the problem in terms that are insoluble, even if we suppose them to be intelligible” (Bergson cited by Ansell Pearson 2002:148). Bergson proposes that the external realm and our perception of this realm make up a greater whole, whereby the universe is an open system consisting of constant movement – it is this movement that is essential within

formulating matter as image. In perception, the body and mind break up the perceived world into parts or images in order to distinguish and make sense of phenomena. Although these parts are contained within the whole, they do not stand in for the whole; they represent a unique portion of that whole rather than replicating it in its entirety. The brain is continuously reacting to the movement of these parts or images and producing “internal movements” in response (Ansell Pearson 2002:146). In addition to all matter being equivalent to image, all image is equivalent to movement, with images continuously acting and reacting to each other (Marrati 2008:29). There is a gap between received movement and executed movement which allows us to cut out from the whole that which interests us and then choose our response accordingly (Marrati 2008:33).

Following Bergson, I want to argue that the external environment and our internal perception of it ultimately make up one greater whole, yet in our everyday perception of the urban realm, where nuances are intensified and subtle shifts have wide-reaching impacts, the perceived differences between the internal and external realm of images (or virtual and actual), are significant. I want to argue that the internal response, which occurs within perception, may appear distinct from the external realm of images, although they are part of the same whole and are continually influencing each other. I will examine the perception of urban temporality in terms of the notion of duration, using the moving image as the basis of this investigation. The optical illusion of the moving image is an important model for the analysis of perception of temporality – the mind interprets the fast succession of still images that make up the moving image as a unified whole, thereby illustrating the perceived disjuncture between internal and external realms. Within my research I am looking at how moving images, which occur within the brain, collide with the moving images of the outside world in order to create a unified sense of temporality through duration. In other words, how do moving images allow us to perceive time within the urban realm? How can moving images help us to understand the relationship between the parts and the whole (in this case, the individual and the city)?

I will look at the moving image as a metaphor for perception. In particular, I will utilise the writings of Henri Bergson and Gilles Deleuze as the basis for my theoretical analysis in combination with my art practice, incorporating a methodology of breaking down moving images into stills and examining the relationship between the still and moving image. I will examine the relationship between perception and the moving image in three parts – this thesis presents three photographic projects each exploring a different yet interrelated element of perception: difference and repetition, the panorama, and light. These elements will be interrogated in terms of their roles within the perception of urban temporality and within the moving image itself. The photographic projects within this thesis aim to present these aspects of perception from a nuanced perspective in order to disrupt existing notions of the panorama, light, and difference and repetition within urban temporality.

Analysing the moving image in terms of its parts (still images which make up the illusion of movement), this thesis considers the relationship between the part and the whole of the image within representation and within perception. Each image that makes up the whole (of perception and of the moving image), shares qualities of this whole yet it is not identical to the whole. Each individual part is connected to the whole and shapes the whole, while continuously becoming along with the whole. This expansion and contraction of the parts within the whole is where perception is rooted and where the convergence and divergence of the virtual and actual reside. In researching this process of becoming, I am considering whether it is possible to go beyond representation and beyond the human realm (as Deleuze proposed) in order to reach a domain of pure difference and pure presence (which I will argue is akin to the sublime). In this thesis I will interrogate the tensions that lie within this seemingly impossible task of representing the unrepresentable; I will argue that within this apparently futile process, the elusive nature of the virtual and duration begin to emerge.

Chapter 1: *Sociology and the Visual: An Interdisciplinary Approach to Photographing Time in the City*

As Victor Burgin proposed, the city is both “an actually existing physical environment, *and* a city in a novel, a film, a photograph” (Burgin cited by James Donald 1999:8). The images that we perceive within the physical urban realm are juxtaposed with the images of the city already existing within the mind’s eye through memory and imagination, influenced in part by the visual representations of the city through photography and film. The city imaginary (see Bridge and Watson 2000, Donald 1999, Pile 2005) is an integral component of the metropolis, of equal importance as the physical urban realm. Robert Park determined the city to be a ‘state of mind’ (Park cited by Pile 2005:1) while Georg Simmel emphasised the ‘mental life’ of the metropolis in his ruminations upon the modern city experience (1997).

The intersection of the ‘mental life’ and physical life of the city is where my research takes hold. Through a visual reading of the urban everyday, I am investigating how temporality (and spatiality) within the city are perceived through images. Specifically, I am considering the relationship between the visual component of the city (both internal and external imagery) and the perception of time. In this thesis, I will argue that mental and physical images of the metropolis are inseparable (after Bergson); in other words, the virtual image of the city that we hold in our mind is affected by and in return affects the actual urban sphere. The virtual and actual urban realms are parts of the same whole, continually shifting and shaping each other to generate perception. While the mental and physical images of the city are ultimately indivisible, however, I will also argue that it is useful to look at the perceived differences between these two types of images – differences which exist actually and not virtually – in order to gain insight into the perception of the time and space of the city. The differences that occur between internal and external images of the city help us to decipher the relationship between individual and the whole of the metropolis (while maintaining that the city as a whole is impossible to define absolutely).

Employing an interdisciplinary approach to this investigation, I am utilising visual arts practice as a method for examining the perception of urban temporality. I have created new images of the city using photographic technology (both still and moving images) in order to inform my investigation of the relationship between time and the visual.

Sociology and the Visual

Photography and the moving image have significantly shaped the city imaginary and simultaneously have been shaped by the city. The rise of the modern metropolis coincided with the emergence of photography and the moving image, with the city being a focus of photography and film since these forms of visual representation came into being. The city has also been the focus of sociological inquiry since the beginning of the discipline (see Engels 1845, Dubois 1899, Burgess 1925, Mumford 1937, Wirth 1938). Furthermore, sociology and photography originated at the same time, as has often been noted¹ (Becker 1974, Emmison and Smith 2000). It follows, therefore, that photography is a likely tool for sociological investigation of the urban realm. Photography was not linked overtly to sociology from the time of its inception; however, early photography shared some similarities with sociology in its exploration and observation of society (Becker 1974)² and this led to an incorporation of photography by sociology at the beginning of the 20th century, with *The American Journal of Sociology* including photographs in its early volumes (Stasz 1979, Emmison and Smith 2002:23, Becker 1974, Knowles & Sweetman 2004:3) between the years 1896-1916. In the period immediately following, however, photographs ceased to be included in the

¹ Howard Becker explains, "if you count sociology's birth as the publication of Comte's work which gave it its name, and photography's birth as the date in 1839 when Daguerre made public his method for fixing an image on a metal plate" (1974). In 1839 Comte published *Cours de Philosophie Positive* and Daguerre publicly announced his photographic technique to the French Academy of Sciences (Emmison and Smith 2000:22) .

² Photography has been used as a device for social reform objectives, with many early photographers, including Jacob Riis and Lewis Hine, depicting the poverty and difficult conditions that characterised much of urban life at the beginning of the 20th century (Stout 1999, Clarke 1997, Becker 1974). The documentary tradition and photo-journalism arose from this social reform photography.

journal and there was an overall decrease in the use of photography within sociological research.

There was a resurgence of interest in the visual in the 1960's with John Collier's work (*Visual Anthropology: Photography as Research Method* 1967) and in the 1970's with Howard Becker's seminal text 'Photography and Sociology' (1974). As Clarice Stasz has documented, in the 1970's "isolated sociologists from around the country simultaneously began to explore the uses of film and photography for research and theory" with a network supporting this type of work ensuing (Stasz 1979:131). Douglas Harper's work in the 1980's (1979, 1982, 1987) was groundbreaking in its use of photography and ethnography, propelling him to become an influential figure in the establishment of visual sociology as a discipline in its own right – with Michael Emmison and Philip Smith declaring that Harper "has claims to being the most vocal advocate of contemporary visual research" (Emmison and Smith 2000:28). This upsurge in the visual within sociology led to the founding of the International Visual Sociology Association in 1981 and the publication of the journal *Visual Sociology* (Chaplin 1994:222), which subsequently became *Visual Studies* in its current form (Douglas Harper was the founding editor).

Despite the establishment of visual sociology as a recognised sub-discipline in recent decades, it has been widely acknowledged that the visual has remained marginalised within sociology (see Becker 1974, Chaplin 1994, Knowles & Sweetman 2007). Visual sociology has been "slow to engage with the visual beyond using it as a recording method and support for a word-based discipline" (Pink 2007:12-13). Sociological research has tended to use photography to document findings within ethnographic research or as supporting material for theoretical texts. Images have often been secondary to the written work and have been used as tools to illustrate the sociological findings. Other uses of images have been in studies utilising photo-elicitation as well as participant-led photography (Harper 2002, Rose 2007). Visual representation has been regarded as ambiguous and "highly subjective" as well as "problematic" as compared with written forms of representation

(Knowles and Sweetman 2004:12); however, the equivalent subjectivity is inherent within all forms of representation and the visual cannot be singled out in this manner (Knowles& Sweetman 2004, Rose 2007, Becker 2007).

In the past decade, some social scientists have embraced the ambiguity and complexity of the visual (Chaplin 1994, Banks 2001, Pink 2007, 2010, Knowles and Sweetman 2007). As Caroline Knowles and Paul Sweetman argue, this subjectivity of visual representation can become an advantage rather than a hindrance if “one is seeking to allow for multiple interpretations” (2004:13). The subjectivity and ambiguity of visual material allows for complexities within sociological research to emerge, in particular within urban studies.

Sarah Pink has advocated such an interdisciplinary approach to visual methods in *Doing Visual Ethnography* (2007) and more recently in a special volume of the journal *Visual Studies* (Vol. 25, no. 1, April 2010) exploring the theme of walking within ethnography and arts practice. This volume of *Visual Studies* is a unique contribution to this interdisciplinary model of working, with several articles dedicated to the fusion of arts practice and sociology (see Myers 2010, O’Neill and Hubbard 2010). The International Visual Methods Conference (2009 Leeds University, 2011 Open University, Milton Keynes) has also been a recent platform over the past few years for social science and humanities research based around the visual. Bringing together researchers from these disciplines, including those utilising arts-based methodologies, this conference is a testament to the increasing popularity of visual methods and the growing demand for interdisciplinary ways of working across the arts and social sciences.

Continuing in this vein, I believe it is important to push the discipline of visual sociology beyond the borders behind which it sometimes too comfortably lies. The ‘sociological imagination’, of which C. Wright Mills wrote, must continue to be expanded to encompass other ways of exploring the social – reaching beyond the comfort-zone into new territories to create a multi-faceted approach to sociological research. As Les Back explains, “creative thinking

and expression” are integral to Mills’ “notion of sociological craft” (Back 2007:163). Back goes on to advocate a sociology imbued with vitality, reassessing the craft of sociology through expanded methods which present “an opportunity to reinvent the nature of observation and measurement” (Back 2007:165). I believe the merging of arts practice with sociology is key to this expansion of methods.

Art as Method

My research lies on the boundaries of the humanities and social sciences, and it is through a merging of these two practices that my interest in exploring the perception of the urban landscape took hold. I am using art practice as my method of inquiry in examining the perception of urban temporality and spatiality. Art has been a method of interrogating social phenomena for centuries, often used as a tool for social critique and commentary. In the modern era, art movements such as Italian Futurism, Russian Constructivism, Dadaism, Surrealism, and Situationism all championed particular social and political views, often through written manifestos, aiming to effect change within the existing socio-political climate (Harrison & Wood 1992),

The urban realm has been a particular focus of such artistic movements. Nicholas Baurriaud has remarked that there is a “growing *urbanisation* of the artistic experiment”; the city enables a “hands-on experience” of art, whereby art is “relational” and is “formed by inter-subjectivity” with the “encounter” between beholder and picture, and the collective elaboration of meaning” forming the “substrate” of this art (Baurriaud 2002:15). The city provides a space for art to become a more fluid encounter between artist, artwork and viewer with some artists choosing the city street as the site of intervention, exchange, or commentary For example, Rachel Whiteread’s sculpture *House* (1993) which consisted of a cast of a Victorian terraced house in London’s East End. This imposing sculpture created an instant response from city dwellers, as Whiteread has described: “With this, everything was immediately very public and people had their say at once” (Higgins *The Guardian* 8 Sept. 2007). Many people wanted the sculpture to remain there permanently while

others called for its demolition, a public debate ensued and “People were even lobbying in Parliament” (Higgins *The Guardian* 8 Sept. 2007). The artist Francis Alys’s *When Faith Moves Mountains* (2002) is another example of art intervening in everyday city life. This artwork took place in Lima, Peru, a city surrounded by sand dunes where “shanty towns have sprung up, populated by economic immigrants and political refugees” (Alys 2009:39). Alys had 500 volunteers with shovels form a line at the foot of a sand dune and push this 1600 foot sand dune approximately 4 inches; the dune that Alys chose was populated by over 70,000 people who had no electricity or running water. Alys was responding to perceived tension in Lima while he was there in October 2000 in which he described the city as “in turmoil” due to clashes occurring on the streets. This artwork attempted to “translate social tensions into narratives that in turn intervene in the imaginal landscape of a place. The action is meant to infiltrate the local history and mythology of Peruvian society...to insert another rumour into its narratives” (Alys 2009:29). Alys intended that this “social allegory”, as he described the work, become interpreted by story-telling and oral tradition, so that the audience must “give the work its meaning and its social value” (2009:40).

Art provides a method for investigation that transcends a passive interpretation, facilitating a sensory engagement with phenomena and enabling an embodied experience. Nirmal Puwar discusses the engagement of body and mind in the physical encounter with the work of artist Anish Kapoor. Puwar describes his sculpture as “provoking feelings of disorientation or dislocation”; in Kapoor’s piece *Turning the World Inside Out*, “spectator and architecture merge in a distorted yet alluring reflected image” with the viewer and the surrounding space becoming seemingly engulfed by the reflective surfaces (Puwar 2004:18). Art has a particular capacity for sensory exploration of the world in which we live, allowing the viewer to have a sensory encounter with the work of art and go beyond the boundary of representation, according to Claire Colebrook (2002b). In discussing Gilles Deleuze’s belief in the ability of art to transcend representation, Colebrook explains that art does not necessarily interpret or present sensations, it *is* these sensations: “art presents singular differences: the very being of colour,

sound, tone, or sensibility” (2002b:xliv). Furthermore, art has the potential to disorientate and disrupt taken for granted ways of seeing and perceiving, thereby allowing those who encounter the work of art to re-evaluate their perception of time and space. Puwar explains this phenomenon with regard to Anish Kapoor, stating, “Disorientation and the consequent reorientation are... productive moments where change can occur”; she goes on to say that these moments “invite one to pause and to reconsider one’s place in space” (2004:18). Kapoor’s “sculptures manipulate the viewers into thinking about their presence in time and space” (Puwar 2004:180).

Following this argument, art is a dynamic method for examining the urban realm, which goes beyond reflection, rendering the city anew, creating difference as a means of exposing the constant becoming of everyday life. Georg Simmel has a similar view of the dynamic capability of art, which David Frisby sums up by stating: “It is modern art that captures ‘human beings in the stream of their life’ and which emphasises ‘the increased dynamic nature [*Bewegtheit*] of real life’ since ‘art not merely mirrors a world in motion, its very mirror has itself become more labile” (Simmel cited by Frisby 1986:47)³. Thus art is a powerful resource for interrogating the sensorium of the city, allowing sociological concerns to be examined from a dynamic standpoint, in which the vitality of the urban realm flows through the work of art and the viewing

³ Simmel is known for his systematic methodological approach focusing upon a sociology of forms (Frisby 1997, Capetillo-Ponce 2005) and Scott Lash deems Simmel a “positivist” for whom “forms are the social a priori” (2005:5). This positivist approach may seem at odds with the Deleuzian notions of ‘becoming’, ‘pure difference’ and ‘beyond representation’ that I am analysing in this thesis, however, Simmel also became concerned with *Lebensphilosophie*, or vitalism, in his later work, creating a change, whereby Simmel spoke “less of an a priori” since vitalism “does not think in terms of a priori” (Lash 2005:5). What Simmel saw as “more or less objective fact in his early work” became “seen increasingly as pernicious value in the later work” (Lash 2005:5). Richard Swedberg and Wendelin Reich also discuss the influence of *Lebensphilosophie* upon Simmel’s work and cite the following passage as an example of Simmel emphasising creativity over form: “Only in that which we call creative does life come to its self. Everything reproductive, combinatorial and that which works with an overload of historical objective content makes life less alive...” (Simmel cited by Swedberg and Reich 2010:31). Furthermore, art and the aesthetic realm are upheld within Simmel’s work as vehicles for transcending time. David Frisby asserts that for Simmel the “aesthetic realm” is “one in which reality is presented *sub specie aeternitatis*, transcending the individual moment” (2004: xxvi). Simmel describes Rodin’s sculpture as having captured “the artistic timelessness of pure movement” and states that “the movements of... [Rodin’s] forms illustrate not merely the expression of a fleeting moment, but rather at the same time also that of an ‘impression of the supramomentary’ or a *timeless impression*, that captures the totality of movement precisely in the individual moment of movement” (Simmel cited by Frisby 2004:xxvi).

audience, moving beyond representation to become something that resembles Deleuze's notion of pure difference (I will come back to this concept of 'beyond representation' later in this chapter).

In recent years, art has been adopted as a method within academic research and within social scientific research more specifically. Art practice allows new perspectives and understandings of the social world to be created.

Furthermore, art as research method provides a context in which the relationship between theory and practice can be explored and expanded (Sullivan 2010; Springgay, Irwin, Wilson Kind 2005; Smith and Dean 2009; Macleod and Holdridge 2006). In the following chapter, I will examine the notion of art as research method in greater detail and I will discuss my method of integrating the theoretical and practical aspects of this thesis.

Photography and the City

Photography has been described as a "technology of visual representation perfectly suited to its age" of modernity (Stout 1999:15) and has been an important medium for artistic expression, particularly in relation to visualising the city. Many of the earliest photographs were city street scenes by Daguerre, Nadar and Fox Talbot (Stout 1999:151); panoramic images of the city were also popular within early photography (Clarke 1997:75-76).



Daguerre, *Boulevard du Temple*, photograph, ca.1838

(<http://www.alscotts.com/wp-content/uploads/2010/04/Daguerreotype1839.jpg>)

The earliest photographic technology, however, was cumbersome and created difficulty in capturing the hustle and bustle of city life (Brougher 2001:25-26). The invention of the Leica and other portable 35mm cameras enabled the genre of street photography to develop in the early 20th century, allowing photographers to capture the fleeting and chance encounters of the city street – the “decisive moment” (Brougher 2001:25-26).

Prior to World War II, several “masters” of street photography had already emerged, including Brassäi, André Kertész, Walker Evans, Bill Brandt and Henri Cartier-Bresson (Ferguson 2001:9). Although difficult to define, street photography has been described as “candid pictures of everyday life in the street” whereby the photographer attempts to capture people “who are going about their business unaware of the photographer’s presence” (Westerbeck and Meyerowitz 1994:34). The street photographer wanders through the city with an inherent “readiness to respond to errant details, chance juxtapositions, odd non sequiturs, peculiarities of scale, the quirkiness of life in the street” (Westerbeck and Meyerowitz 1994: 34). There are obvious associations between the street photographer and the strolling *flâneur* (the *flâneur* will be discussed in more detail later in this chapter), which Susan Sontag has described:

The photographer is an armed version of the solitary walker reconnoitering, stalking, cruising the urban inferno, the voyeuristic stroller who discovers the city as a landscape of voluptuous extremes (Sontag 1973:55).

This method of “photographic walking” is a “means by which the city can be experienced and made sense of through the medium of the camera” (Halliday 2006:6). In the tradition of street photography, I am investigating the city using my camera, capturing the everyday activity occurring on the street in order to understand the perception of temporality within the urban sphere.



Henri Cartier-Bresson, *Behind the Gare St. Lazare*, photograph, 1932
(<http://redyellowbluemakeyou.blogspot.com/2011/01/artist-spotlight-10-henri-cartier.html>)

As a visual artist, I have been photographing the urban everyday since 2002 and this research emerged out of a practice of walking through the city streets, observing the movements occurring around me – attempting to understand how city dwellers make sense of their environment and the sensorium of the metropolis. I realised while walking along the city streets (sometimes photographing, sometimes without my camera), the mental activity within my mind (the multitude of pictures and thoughts) did not always mesh with what was happening in front of me. Sometimes I would disassociate from the fast-paced activity occurring around me and slow everything down in my mind and other times I would be somewhere else completely – daydreaming yet still walking hurriedly, running up and down escalators on the tube, getting to my destination as fast as I could, keeping up with the rhythm and pace surrounding me. My head was often buzzing and spinning just as quickly as my external environment and I was constantly trying to make sense of what was occurring around me, trying to process it, digest it, not only with my camera but simply in my everyday activity. It seemed that so much of what was happening in front of me went unnoticed, passing by too quickly or that I had tuned it out in order to focus on my journey or my immediate task at hand.

I was particularly fascinated by the movement of the city – the whirring of constant images surrounding me, continually shifting to create new patterns and rhythms through which I drifted, often seamlessly without thought or conscious recognition of the events occurring around me. It seemed this constant movement of the metropolis was perfectly choreographed – yet I had to ask, who was choreographing such complexity? How did this plethora of activity, an intricate labyrinth of intersecting routes and rhythms, unfold ceaselessly? It appeared to be magic – a miraculous concurrence of events occurring every minute of every day that came together to formulate this inexplicable, unfathomable realm of the city. It is these minutiae of everyday life, the details of movement, which make up the larger picture of the daily rhythm of the city that I am exploring in my research.

I have attempted to analyse occurrences taken for granted within the everyday by disrupting them to expose the processes constituting these routines. This approach draws upon the work of Harold Garfinkel, who asserted that the “seen but unnoticed backgrounds of everyday activities are made visible” through sociological enquiry when the sociologist is either a stranger or has become estranged from the subject of study (1967:37). Garfinkel attempted to do this by starting with “familiar scenes” and asking “what can be done to make trouble” (1967:37); he sought to “tell us something about how the structures of everyday activities are ordinarily and routinely produced and maintained” (1967:38). Similarly, this thesis attempts to disrupt the taken for granted ways of seeing the urban realm by breaking down the routine activity through photographic technology. Through photography I am attempting to untangle some of the fleeting moments that occur within the city – collecting and piecing together the fragments of the urban everyday. Taking these fragments of movement and time, separating them out from their usual dwelling places, provides a new perspective on these daily movements, allowing the viewer to mull them over in a way that is not possible while walking down the street in the midst of daily urban activity.

In this thesis I investigate the movements of the urban everyday using art practice to reveal the nuances of the perception of this movement, based on

my own experience of interacting with the city. My perspective as an observer and as a photographer form the basis for my enquiry, which I hope will provide insight into a larger framework from which to understand how we perceive the temporalities and spatialities of the city.

Metropolis and Mental Life

In this exploration of the perception of the urban realm, I consider the relationship between internal or mental images (that we hold in our minds) of the city and the external environment. This mental realm of the urban dweller is often at odds with the external surroundings, as I noticed within my own journeys through the city, and this led me to begin investigating where the boundaries between inner and outer realms lie. Georg Simmel addressed the psychological component of the city in his seminal text, 'The Metropolis and Mental Life,' in which he outlined the attitudes and behaviours that city dwellers adopt in order to cope with the pressures of urban life. Steve Pile asserts that these behaviours "include the blasé attitude, but also reserve, indifference, calculativity, rationality, individuality, personal skills, creativity, specialisation and the like" (Pile 2005:18).

The emerging modern metropolis throughout the nineteenth and early twentieth centuries was a site of rapid change, bringing with it new ways of being, new experiences and challenges of daily existence, the likes of which had not been previously encountered. The constant motion and fast pace within the city produced an overload of sensory information, described by Simmel as "the intensification of nervous stimulation" resulting from "the swift and uninterrupted change of outer and inner stimuli" (1997:175). This brutal onslaught of stimuli created a kaleidoscopic urban experience in which an endless array of possibilities could arise, with all manner of people and objects colliding, overlapping, and intertwining. The city became a site of both desire and opportunity as well as a place of alienation and corruption (Bridge and Watson 2000:15), its streets encompassing both "mystery and pleasure, threat and invitation" where the crowds are equally "unnerving" and "exhilarating" (Walker 2002:31). Walking through the city we are bombarded

with information, which overwhelms the senses and captivates us as we pass through it. In essence we get lost in the city the way that Walter Benjamin described by immersing ourselves in the density of the urban morass; we wander through in an almost dream-like state enchanted by the rhythm and pace of the metropolis.

This mesmerising, dream-like aspect of the city is often described as phantasmagoria (see Buck-Morss 1989:81-82; Castle 1988:27; Buci-Glucksmann 1994:164). Phantasmagoria “implies a peculiar mix of spaces and times: the ghost-like or dream-like procession of things in cities not only comes from all over the place (even from places that do not or never will exist), but it also evokes very different times (be they past, present or future; be they remembered or imagined)” (Pile 2005:3). The photographic images in this thesis are an attempt to conjure this phantasmagoric experience of walking through the density of stimuli presented to us within the urban realm.

The *Flâneur*, Difference and Situationism

The *flâneur*, first promulgated by Charles Baudelaire in the 19th century, emerged as a figure walking amidst the phantasmagoria of the city, observing the public sphere (Tester 1994:1-3). The city “became so large and complex that it was for the first time strange to its inhabitants” and this is when the figure of the incessantly strolling *flâneur* appeared (Solnit 2002:198). Keith Tester explains that for the *flâneur*, “The crowd is his domain, just as the air is the bird’s, and water that of the fish. His passion and his profession is to merge with the crowd” (Baudelaire quoted by Tester 1994:2). The *flâneur* goes in search of the ephemeral beauty of modernity upon the city streets and amongst the crowd; he becomes the figure able to observe this fleeting present of the city (Frisby 1986:18).

The *flâneur* figures prominently within my research, whereby I have observed the city in a similar fashion— taking my time to wander through the public spaces of the city, watching the crowds of people interacting with the urban

environment. This notion of looking, in particular, from the point of view of the *flâneur*, raises debates about power and knowledge in relation to the gendered 'gaze'. Elizabeth Wilson (1992) and others (Wolff 1985, Pollock 1988) have criticised the *flâneur* as representing "men's visual and voyeuristic mastery over women" with privileged, exclusive access to the urban public realm, which was not afforded to women – "a masculine freedom" to "wander at will through the city" (Wilson 1992:7). The gendered gaze of the *flâneur* also raises the issue of the sexualisation of looking with regard to psychoanalysis and the scopophilic notion of looking as a form of desire (Hall 1999, Rose 2005, Mulvey 2009). While these debates around the act of looking are important, they do not comprise the focus of this research and will not be analysed in detail within this thesis⁴. Moreover, it is important to point out that the concept of difference being studied within this thesis is not the notion of difference as it is predominantly understood within sociology. When referring to difference, social scientists generally consider forms of social and cultural difference, including gender, race, sexuality, and class (see Back and Solomos 2000, Soja and Hooper 1993, hooks 2000, Puwar 2004, Bhabha 2000, Hall 2000). An example of such an understanding of difference can be found in Avtar Brah's "Difference, Diversity, Differentiation: Processes of Racialisation and Gender" where she includes a discussion of ethnicity: "The modalities of difference inscribed within the particularities of our personal and collective historical, cultural and political experience – our ethnicities – can interrogate and challenge the strangulating imagination of racism, but the task is a complex one..." (Brah 2000:443-444).

This thesis, however, does not provide an analysis of such notions of cultural and social difference; rather, this thesis aims to look at a particular Deleuzian notion of difference, whereby difference is intensive and cannot be located within distinct points in the external realm. Keith Ansell Pearson explains that for Deleuze, "primary difference...resides in the differences that belong to intensity" (1999:74). Difference in this sense cannot be measured or fixed, it

⁴ However, in the following chapter, there is a brief discussion of the act of looking with regard to the concept of the frame within representation and perception, as well as to the relationship between subject and object and inside and outside.

is continuously evolving and becoming (Colebrook 2002b xxvi, xxx). This notion of difference is found in the virtual plane and while it may become actualised, it continues to become and differ from itself without cessation (Colebrook 2002b:xxx; Boundas 1996:91).

Claire Colebrook asserts that we can only ever grasp “a part or expression of difference” and we “need to constantly overturn, question and disrupt our terminologies and our differences” in analysing difference (Colebrook 2002b: xlii). I aim to explore this concept of difference as it relates to the urban realm, which is in a constant state of becoming, through a photographic interaction with the city. In order to engage with the dynamism of the city, I have used a multi-layered approach drawing upon psychogeography and Situationism, both of which relate to the figure of the *flâneur*.

The term psychogeography is linked closely with Guy Debord and the Situationist International. As its name implies, psychogeography is concerned with the psychological and emotional aspects of interacting with the city (Pile 2005:13). Situationism, in particular, sought to “to encounter the unknown as a facet of the known, astonishment on the terrain of boredom, innocence in the face of experience. So you can walk up the street without thinking, letting your mind drift, letting your legs, with their internal memory, carry you up and down and around turns, attending to a map of your own thoughts, the physical town replaced by an imaginary city” (Greil Marcus cited by Solnit 2002:212-213). Richard Sennett also discusses this notion of walking with one’s own thoughts with regard to the *flâneur*, whereby the *flâneur* ‘s solitary wanderings and subsequent observations allow the act of “turning things over in your mind” (1976:213).

Similar to the wanderings of the *flâneur* is the method of the *dérive* or drifting employed by the Situationists (Pile 2005:12). Drifting required spontaneity and “would have to accommodate a certain amount of ‘letting go” (Debord cited by Sadler 1998:78). The *dérive* comprised a “combination of chance and planning that reached various stages of equilibrium” and resulted in an “organized spontaneity”(Sadler 1998:78). I have incorporated a similar

method in my photographic work, focusing on a particular location or subject and then experimenting with different photographic techniques to see what results are produced. The technology that I have used, including low resolution digital cameras, long exposure times and coloured filters, contributes to the emergent quality of the images. I have initially set up the situations using these tools, yet the process taking place within the technology creates an element of spontaneity and surprise – an alchemy of sorts created by the convergence of photographic technology and the ephemerality of the city. For example, the third photographic project which focuses on light (as outlined in Chapter 5), incorporated an experiment using filters reflecting the light of the sun (see image below and DVD 1 – Chapters 29 & 30).



Soho, author's photograph (► see DVD 1 – chapters 29 & 30)

I did not originally intend for this to be a mechanism of the project but while I was photographing in Soho, I began observing the rhythm and pace of the people, cars and bicycles illuminated by strong sunlight, and it occurred to me *in situ* to manipulate the filters in this way. I could not anticipate what results this process would yield; the images emerged in an organic and spontaneous fashion. In the following chapter I will discuss this process of spontaneity with regard to responding to the dynamism of the city in the specific locales in which I was photographing.

This combination of chance and control in engaging with the city through walking or drifting was employed by the Situationists in an effort to set it apart from the Surrealist technique of automatism (Sadler 1998:78). The *dérive* differed from Surrealist automatism in that it did not seek to be led by the unconscious mind (Plant 1992:59) – the Situationists critiqued Surrealist automatism as “creatively and politically exhausted” (Sadler 1998:72). Despite the Situationist critique of Surrealism, Sadie Plant asserts that the *dérive* has its origins in “Surrealist strolls” in which “the hunter of marvels” drifts through the city “according to whim and desire”(1992:59). The influence of Surrealism (as well as other avant-garde movements) was felt within Situationism in a shared “will to gain immediate experience of the world and transform the everyday into a reality desired and created by those who live in it” (Plant 1992:59).

Surrealism

Surrealism emerged in the early 1920’s and chose the city as the subject of its enquiry, attempting to decipher the complexities inherent within the everyday urban domain. The Surrealists had ambitions to radicalise visual experience through an exploration of the unconscious by suppressing the “rational ego” (Jay 1993:238, 236-241). They were determined through their creative processes to connect with the unconscious state of being and to, therefore, uncover aspects of everyday life that were normally hidden: “For Surrealism, the possible is contained in the actual, what might be is always already present within what is” (Sheringham 2006:67). Thus the Surrealists chose the ‘reality’ of everyday existence as their subject of enquiry in order to achieve a deeper understanding of this ‘reality’. Although seemingly paradoxical, their intent was to heighten the ‘real’ by expanding the engagement of the senses through means beyond the purely physical realm (Sheringham 2006). The Surrealists believed that the unconscious dream state should receive the same attention as the waking state- both states were equally instrumental in perceiving the world (Balakian 1986:132). In the *Manifesto of Surrealism* (1929) Andre Breton writes: “I believe in the future

resolution of these two states, dreams and reality – which are seemingly so contradictory, into a kind of absolute reality, a *surreality*” (1972:14). In order to create this ‘surreality’ which bridged the dreaming and waking states, the Surrealists created works of art and literature that imitated the essence or feeling of dreaming. The Surrealists wanted “everyday life to be emphatically and consciously permeated by the dream... by its transgressive remodelling of normative constraints” (Hammond 2002:9).

The Surrealists believed that it was not reality that needed to be changed but the perception of reality that required alteration. They believed that “it is conventional seeing that alters or disfigures the world rather than surrealist techniques” (Sheringham 2006:82). They aimed to remove the obstacles that blocked perception. In other words, the Surrealists attempted through their artistic creations to “restore the powers perception has lost” by unifying perception and representation (Sheringham 2006:82). In this capacity it is the process of perception that is extraordinary rather than the object itself: “Surrealism does not aim to see new things, but to see things anew: to make the act of perception performative rather than merely constative” (Sheringham 2006:82).

By scouring the streets one by one and observing daily activity from the ground level, the Surrealists believed a picture of the overall metropolis could emerge. The juxtaposition of people and objects occurring within the time and space of the city creates a living montage; the chance nature of the encounter and the collision of people and objects creates the meaning of ‘reality’. Mimicking the fragmented quality of the urban environment, the technique of montage became a significant tool in surrealist writing and artwork, taking objects out of context and repositioning them to reveal new meaning. Placing objects together that would not normally appear side-by-side removes their familiarity and recognisability, allowing them to be viewed as novel rather than mundane. Ben Highmore discusses the use of collage and montage as a “persistent methodology for attending to everyday life in Surrealism” by “defamiliarizing” the everyday (2002:46). Rosalind Krauss argues that the framing of the photograph provides the surreal quality of its representation of

'reality' (1986:36). By cutting the subject of the photograph out of its surrounding context a rupture occurs and the 'real' is transformed through this cropping or framing (Krauss 1986:19,36). Removing the action from its context isolates it and allows the viewer to perceive it as separate and thus unique. Everyday surreal occurrences usually happen hidden from view, too quickly, or are too numerous for the viewer to perceive; however, photography and film capture these instances and allow the spectator to explore them in a different light. Montage plays a central role within the photographic work of this thesis and it will be discussed further in the following chapter.

This de-familiarising of the everyday often produced a disturbing effect likened to the 'uncanny' (Cohen 1993:63). Freud describes the uncanny as "that species of frightening that goes back to what was once well known and had long been familiar" (2003:124). The reconfiguration of the familiar as strange creates this sense of discomfort or unease. Photographic imagery is an effective tool in producing the uncanny, with the moving image "making reality uncanny" through its "power to suggest the spatial, temporal, and psychological dimension of the real" (Hammond 2000:9).

Photography became an important tool for the Surrealist pursuit of the uncanny within the everyday. Photography's indexical nature created a tension between the 'reality' it referenced and the 'reality' within the image (Jay 1993:249). Still photography and the moving image have been granted a special status since their inception which privileges them with a closer relationship to the 'real' than other forms of representation. Susan Sontag sums up this presumption of truth that photography evokes: "a photograph – any photograph – seems to have a more innocent, and therefore more accurate, relation to visible reality than do other mimetic objects" (1973:6). For this reason, photography became a central focus of surrealist expression by exploiting the "very special connection to reality" with which it is endowed (Krauss 1986:31). Ian Walker also comments on the surrealist use of photography as a "subversion of the standard realist frame" within which it had been situated previously (Walker 2002:5). Walker discusses

Surrealism's ability to expose the "subjectivity, ambiguity and reflexivity" of documentary photography. The Surrealists illustrated that documentary images can "acknowledge both their constructedness and their indexicality" (Walker 2002:5). This convergence of the imaginary and the 'real' within the photographic frame exposes the uncanny within the everyday.

Surrealism is an important influence upon my research in terms of its approach to creative practice (as opposed to the aesthetic look of Surrealist art) and this thesis has a similar aim in its focus on revealing hidden or unconscious aspects of the everyday. All three photographic projects capture fragments of everyday life within the city and take them out of context, changing their appearance using various techniques (these techniques will be discussed in more detail in the Methodology chapter) to expose the unnoticed movements within the everyday metropolis.

Vitalism

The fleeting nature of the city with its fast pace and constant movement renders it a prime subject for the application of vitalist philosophy. There has been a resurgence of interest in vitalism in recent years within the social sciences. Vitalism is based on the notion that life is in constant flux and Gilles Deleuze is one of the prominent figures of vitalist philosophy in the 20th century. His work, which is based largely on Bergson, Spinoza and Nietzsche, centres upon the notion of 'becoming' (Hardt 1993:112, Lash 2005:1). Scott Lash sums up vitalism as encompassing three key components: movement and flux; non-linearity or self-organization ("corresponding to our contemporary processes of informationalization"); monism ("Vitalism is based not on a notion of ontological difference. It is instead based in an ontology of difference. Here there is no fundamental dualism of being and beings. Instead all being is difference") (Lash 2005:2). Lash argues that vitalism figures prominently within today's "global information society" where media and communication take precedence over the material (2005:2). "These new media presuppose non-linearity. They suppose non-linear, open systems. Such open systems are the very stuff of vitalism." (Lash 2005:2).

I am investigating the city using this vitalist notion of becoming, non-linearity, and monism using the work of Bergson and Deleuze as a framework for the photographic exploration of temporality within the city. Looking at the city as an open system provides insight into its ever-changing form. In *Creative Evolution* Bergson states that “no system is absolutely isolated” (1997:14); everything is continually in flux and no object is ever defined absolutely from the next. The whole is constantly changing due to the ongoing shifting of its constituent elements. Bergson presents this idea of open systems in opposition to the traditional scientific mode of analysis in which organisms are viewed as ‘closed systems’ that operate in equilibrium without interaction or interference from other systems or organisms. Paul Virilio discusses this phenomenon of “a living system” being “far from equilibrium” in terms of an exchange between our rational minds (internal) and the external “sensa” of our environment: “our own movement in the time of the universe was to be singularly transformed by acknowledgement of this internal/external couple always far from equilibrium” (Virilio 1994:27). Our thoughts and perception are constantly affecting and being affected by the world around us. Nigel Clark also writes of the shift in thought from “systems tending toward stability” toward those that experience “ongoing changes of state” (2000:12). Nigel Thrift describes this constantly shifting state of being in terms of the human body, whereby “there is no stable ‘human’ experience because the human sensorium is constantly being re-invented as the body continually adds parts in to itself; therefore how and what is experienced as experience itself is variable” (2008:2).

This notion of the open system can be applied to the urban environment. Clark presents the notion of the city as a site of non-linear, seemingly chaotic activity which gives way to a greater system that is a self-organizing and rational open system (2000:23). The city is in constant motion; it is continually emerging and becoming in countless ways. Through my photographs, I am attempting to reveal this relentless movement in order to understand the relationship between the whole (the city) and its parts. In the following

section I will discuss the fragmentation of the urban realm with regard to the shifting sense of time and space created by industrialisation.

Shifting Time and Space

Temporality figures significantly within this analysis of the whole and its constituent parts. The way time is perceived in the urban realm affects how the city is represented and how the individual relates to it. Time and space have often been examined as separate entities as Nigel Thrift and Tim May (2001) have pointed out; however, time and space are, in fact, intricately intertwined and despite the wish of some (most notably Bergson) to separate them completely, there will always be extensity in duration and duration in matter as Deleuze explains in *Bergsonism* (Deleuze 1991:87). Although time and space are interlinked, it is important to recognise that they remain distinct entities, as Doreen Massey asserts, “thinking of time and space together does not mean that they are identical...rather it means that the imagination of one will have repercussions (not always followed through) for the imagination of the other and that space and time are implicated in each other” (2005:18). I am examining time within this proposed non-dualistic thinking of time and space. While I am focusing on urban temporality, I am considering temporality in relation to spatiality specifically in terms of movement. Movement within the city has been affected significantly by the shifting time and space within the previous two centuries (and continues to be affected within this century).

There has been a marked shift in the time and space of the city over the past one hundred fifty years, the beginnings of which were felt from the mid-19th century. As the modern metropolis took shape in the age of the Industrial Revolution, the time and space of the city changed alongside new technologies propelled by modern forms of capitalism, which increased the speed of travel, communication, and exchange of commodities within the urban sphere. The new modes of transport, most notably the railroad (see Schivelbusch 1987, Kern 2000, Boyer 1994, Latham and McCormack 2008), changed the relationship of the individual to the landscape with the speed of movement altering the sense of temporality – creating a shortening of

distances and times between places. Another shift of time and space has been argued to have occurred again at the end of the 20th century with David Harvey heralding the compression of time and space due to the continued acceleration of speed of telecommunication and other connections within a globally linked economy (Thrift and May 2001:9).

This speeding up of the world has created a perspective that temporality, especially within the city, is uniformly felt to be accelerated and compressed. Following the view proposed by Thrift and May, I want to argue that the perception of time and space within the city is more nuanced and complex than a straightforward time-space compression. Using a Deleuzian framework, I will consider time as both monism and pluralism; the time within the city is simultaneously both one and many. I will look at the notion of duration and the relationship of duration to the shifts in time and space created by the technological developments of the industrialised, global urban sphere. I want to argue that the intersection of duration (or mental picture and experience of time) and external time is crucial to understanding the temporality of the city within the context of time-space compression. The Baudrillardian notion of hyper-reality is important to understanding this intersection of duration and external time, or virtual and actual realms, in which simulacra dominate the perception of time and space. The speed at which we travel has the potential to reduce physical space to simulacra (Virilio 2008a:104-105,110), whereby 'non-places of supermodernity,' to use Marc Auge's terminology, emerge as nondescript sites (e.g. airports, supermarkets, petrol stations, shopping malls) that we travel through en route to the next non-descript location. Space becomes image with no referent with the speed of transport and teletopological devices (primarily digital telecommunications technology) changing the perception of time and space within the urban sphere (James 2007, Virilio 1991).

The relationship between the physical, actual space of the city and the virtual urban sphere has become an increasing focus (Latham and McCormack 2008:308-309). How the city is visualised has also been affected by technological developments. The increased pace of movement within the city

has led to a faster flow of images to be taken in by the spectator, and thus the fragmentation of the urban environment has increased along with speed. Paul Virilio terms this phenomenon 'dromoscopy' and I will examine this concept in greater detail in Chapter 4.

There are, however, varied tempos and rhythms occurring within the city creating both speed and slowness; as Thrift and May explain, the developments in technology have caused "time horizons to both foreshorten but also to extend, time itself to both speed up but also slow down and even to move in different directions" (Thrift and May 2001:10). Just as the overall speed of the city is increasing, there are elements of urban life that retain a slower pace. Alan Latham and Derek McCormack make the important point that speed is relative – once a certain innovation comes into being it then creates the perception that the previous technology was slow, whereas prior to the implementation of the new technology, the old technology may have been perceived as fast (2008:310-313). For example, until the arrival of the aeroplane, train travel seemed a rapid means of transport; with the invention of space travel, the aeroplane is made to seem slow by comparison. Furthermore, city dwellers are all too familiar with the excruciatingly slow pace of the city when gridlock occurs causing buses, cars, and trains to stand still or barely move. Walking is another example of variation in speed within the city.

Walking has a particular significance within the city and in navigating its environs. "Walking is the best way to explore and exploit the city," according to Iain Sinclair (Sinclair cited by Pile 2005:5). Michel de Certeau proposes that walking "actualizes the possibilities presented by a spatial order; the walker enables these possibilities to exist and to emerge" (1984: 98). Walking also creates other possibilities through "crossing, drifting away, or improvisation" in the choices made and the paths taken (or not taken) (de Certeau 1984:98-99). Walking is also an important way of making the often obscure connection between the parts and the whole of the city more apparent – allowing us to see what is happening on the ground as we move from place to place, street to street. Walking is a focus of Chapter 4, in which

I will discuss the photographic panoramas I have created, depicting people walking through the spaces of the city. In Chapter 4, I will analyse walking as a method of perceiving temporality through relating to the urban landscape, with past, present and future presented contemporaneously in ‘panoramas of time.’

The panorama has played a significant role within the way the modern metropolis has been perceived and represented. I will use the panorama in this thesis (see Chapter 4) as a tool for examining the relationship of the landscape to the perception of temporality within the city. The photographic and cinematic urban panoramas that are ubiquitous today evolved from the 360 degree landscape painting which originated in the late 18th century⁵ (Oettermann 1997:6).

Christine Boyer describes the early 20th century city as “an open and expansive panorama” (1994:40), which she attributes to new modes of transportation providing a novel view of the cityscape. The views from skyscrapers and aeroplanes exposed the spatial patterns and arrangements of the urban terrain from a new perspective “making it apparent that this wasteful treatment of space cried out for readjustment” (Boyer 1994:43). City planners and architects, such as Le Corbusier, gained insight from this vertical view and organised the physical structure of the city to reflect what they saw from above (Boyer 1994:43).

Moving Image and Montage

The panorama also has important links with the moving image, which figures prominently within my examination of urban temporality. The moving image is a useful tool in examining the fragments of everyday urban life. Film has both a recording function and a revealing function; the moving image both

⁵ The word ‘panorama’ is derived from the Greek roots ‘pan’ (all) and ‘horama’ (view) and was coined specifically to refer to the 360-degree landscape painting invented by Robert Barker in 1787 (Oettermann 1997:6). Eventually the term came to be “applied generally to mean ‘circular vista, overview (from an elevated point)’ of a real landscape or cityscape” (Oettermann 1997:7).

captures 'reality' and enhances it. Siegfried Kracauer discusses the camera's ability to reveal otherwise hidden moments that occur in everyday life; the 'flow of life' on 'the street' often passes unnoticed until captured on film and presented in a new light (Tredell 2002:81-88). The cinematic experience has the ability to disorient and disrupt our patterns of perception of everyday activity. Cinema "lies on the edge of realities: there is no certainty in its setting" (Richardson 2006:9). For the Surrealists, the cinematic experience of sitting in the dark watching projected images of light upon a screen was dream-like. The film itself was not of importance – it was the act of viewing the film in the cinema that created this surreal encounter (Richardson 2006). Kracauer describes the cinema-viewer in a state "between waking and sleeping" which allows him/her to be lulled by the images on screen into "subjective reveries" (Kracauer 1960:163, 165). The spectator becomes mesmerised by the projected images and begins to see "multiple meanings and psychological correspondences" which cause him/her to drift in and out of engagement with the film on screen "wavering between self-absorption and self-abandonment" (Kracauer 1960:166).

It is this duality of engagement and disengagement that I am attempting to achieve within the moving images in this thesis. My aim is to create a space for the viewer to perceive the rhythm of the city in a hypnotic capacity, to become mesmerised by the movement on screen. This experience of alternation between engagement and disengagement is intended to mimic the experience of being in the city, walking down the street, focusing on the activity taking place in the surroundings while simultaneously thinking about what to eat for dinner or what to do over the coming weekend – the multitude of thoughts and memories that pervade our minds (consciously and unconsciously) as we interact with the city daily. It is my intention to evoke this mental activity in the viewing of these images in order to draw attention to the role of this inner realm within the perception of the urban sphere.

Movement is one of the keys to the connection between the internal and external realms and the moving image is an instance where this intersection of mental and physical processes becomes apparent. The optical illusion of

the moving image reveals the disparity between external 'reality' and internal perception of this 'reality'. The mind cannot detect the difference between the quick succession of separate still images; it reads them as one continuous whole. What intrigues me most about the optical illusion of the moving image is what it might reveal about perception of movement in general.

Siegfried Kracauer highlights movement as the fundamental element in film's ability to present 'physical reality' and thereby captivate audiences (1960:28). Our eyes tend to be attracted to moving images; we are mesmerised by things that move. Citing scientific theory, Kracauer asserts that it is a primordial instinct to look for moving prey and predators in the wild which drives our inherent focus on movement. Martin Jay and Rob Shields also highlight the importance of this notion of scanning the environment. Shields discusses eye movement in terms of the 'gaze' and the 'glance'; he compares the two terms, stating that the gaze is "directed at a focus" or static whereas the glance is a "rapid scan" and thus involves movement (2003:7). Jay explains that the eye is in constant motion and although it is possible to "fix the gaze, we cannot really freeze the movement of the eye for very long without incurring intolerable strain" (1993:7).

Despite the "ocularcentrism" of modernity (Jay 1993:14,21-33; Jay 1988:3), which has given the visual a privileged position and created a "scopic regime that equates seeing with knowledge" (Rose 2007:3), human vision has limitations which prevent us from seeing phenomena that exist in the physical realm, e.g. certain light waves are undetectable to the human eye (Jay 1993:8). Chris Jenks (1995) has also asserted that Western society has confused seeing with knowing, which is problematic in relation to the many influences and interpretations affecting how we see and how we know the world. Vision is an active process and there are many cultural variables which influence the taking in and interpretation of visual information and thus "the universality of visual experience cannot be automatically assumed" (Jay 1993:9). An important distinction between vision and visibility has been made in analysing the relationship between historical and cultural influences upon the act of seeing (Foster 1988:ix, Woodiwiss 2001:viii). Anthony Woodiwiss

explains that vision is not spontaneous; rather, it is a “constructed power” (2001:140).

Martin Jay highlights the ability of optical illusions to fool the mind, which he attributes in part to the “habitual belief” in the “apparent reliability” of visual experience (1993:8). This unreliability of vision is an important aspect of my own research – I am attempting to uncover the limits of vision and reveal the gaps between the physical world and the internal world of ‘seeing’. Through my photographs I am exploring how visual information from the external world is interpreted by the mind, just as Surrealism used photography and the moving image to call into question the authenticity of vision (Jay 1993: 247-249).

How does the mind interpret everyday activity that is constantly unfolding within the urban environment? Does the mind read the external realm in a cinematic manner, by taking millions of virtual snapshots and piecing them together to see the world as seamless?

Henri Bergson proposes that the mind does, in fact, read the world in a ‘cinematographic’ fashion. According to Bergson the universe is made up of images which are continually shifting “as though by a turn of a kaleidoscope” (Bergson 2007:12). Images perceived by the mind cause the body to act or react; external images “transmit movement” to the body and in turn “it gives back movement to them” (Bergson 2007:4). Furthermore, Bergson states that movement gives rise to perception in the form of images. We perceive what we choose to focus on: perception is a choice and “is in fact reduced to the image of that which interests you” (Bergson 2007:34). Rather than perceiving the aggregate of images, we perceive specific ones that have a direct correlation with our concerns. We choose certain isolated images and string them together to create a uniform duration, which is not homogeneous although it is continuous.

The photographic images within my research seek to deconstruct movement, oscillating between still and moving images and exposing the optical illusion

of the moving image. I am questioning how time is perceived in the urban realm and what role the visual field plays in this perception. How do images combine to create a *mise-en-scene* that the viewer or perceiver interprets as a unified whole? How does this *mise-en-scene* create a sense of interconnectedness and order within which everyday life unfolds? In other words, my research aims to gain insight into how a unified sense of time is reconciled with the fractured nature of urban temporality. By recording intervals of time, which have been artificially separated into distinct moments (via photographic technology) and then sewing them back together (via computer technology), I am utilising a process that deconstructs movement. This deconstruction is an attempt to reveal the hidden links that give rise to the perception of this movement and movement itself.

Montage is an important element within this collecting of fragments and de-familiarising of the everyday. I have used montage within this photographic research to piece together fragments of movement, signalling an overlapping of temporalities. The moving image, which figures prominently within this research, is made up of 24 still frames per second, a continuous montage which gives rise to the illusion of movement. This phenomenon is similar to the Gestalt theory discussed by Maurice Merleau-Ponty in relation to perception: fragments combine in such a way to create a whole that is greater than the sum of the parts (1989:54-58). The Gestalt phenomenon is also akin to Bergson's notion of an open system.

Similarly, as we travel through the city we make connections between moments in time via the moving image in our minds. This mental moving image is a continuous flow of time linking disparate, often non-linear occurrences and images via duration. Virtuality is thus the key to understanding the often hidden connections between the fragments of the city and the whole, which is continuously evolving (in chapter three, the virtual will be analysed in relation to duration and becoming). The boundaries between self and whole, subject and object are indistinguishable within the virtual realm yet in actuality delineations between these entities are made – often via visual representation.

Representation and Beyond

Representing the city is a complex task: how can the city be depicted in an appropriate manner that will remain true to its infinitely intricate nature? Rob Shields proposes a re-examination of the role of representation within “all matters urban” (1996:227) and he highlights the limits of representation: “Representing the city is always a paradoxical project undertaken on shifting ground. In representations only some aspects are given to be seen, while others remain out of sight” (1996:246). This thesis attempts to grapple with this conundrum of representation and the city, using photographic media to engage with the urban in order to merge form and content and to produce images that go beyond representation. Through photographing the city I have interacted with it – I have created images which piece together fragments of the everyday city and which then become another layer within the urban fabric. In the vein of Walter Benjamin’s methodology, I have fused substance and form, allowing the images and the metropolis to coalesce, so that each informs the other producing a new entity. This is an entity which is neither the thing itself nor its representation; rather it is a dynamic interplay of city and image, whereby each illuminates the other.

Walter Benjamin delved into the city, writing it as text and representing it as literary montage, striving to forge a method that was nuanced and flexible enough to engage with the fluid modern metropolis. Benjamin, one of the most prominent scholars to observe and theorise the workings of the modern city, interacted with the urban sphere rather than simply reflecting or narrating it. This interaction with the city through his writing gave rise to a composite which fused city and text; not simply a mixture of the ingredients but an organic form vibrant and alive, a creation in which you can get lost, wandering through it, stopping and starting at random points, always coming across something different each time- a new idea, a nuanced interpretation, a fresh observation. Benjamin writes the city as text while also formulating “text-as-city” (Gilloch 1996:5). He merges content and form within his writing so that the text both reflects upon the city’s dynamics and becomes a reflection of the fragmentary, fleeting, layered metropolis: “The text is city-like. In its pages

one may linger in the structures and spaces of the urban complex, the arcades and world exhibition centres, the museums and railways stations, the boulevards and the Metro” (Gilloch 1996:102).

Although Benjamin’s writings on the city are all preoccupied with capturing the fragments of the city, it is his *Arcades Project* (or *Passagenarbeit*) which provides the richest material for his literary montage style to be exhibited (Gilloch 17-20, 93-102). The *Arcades Project* was left unfinished by Benjamin upon his death; it was left as a compilation of notes, a mass of quotations and other materials organised into folders or Konvoluts – a multitude of fragments left unassembled (Buck-Morss 1989: ix, 5). The unfinished state of Benjamin’s text was seen as a “vice (incomplete, impossible to interpret)” and then became lauded as a “virtue (open, a site of ‘endless interpretation’)” (Gilloch 1996:101). The disjointed, puzzling work that seemingly lacked a structure or at least a familiar, coherent linearity confounded its audience at first, yet soon this apparent flaw became its strength. Benjamin’s aim was to shock the reader in his unconventional use of montage in order to “bring about recognition. His intention in using the montage principle is to startle, to make manifest that which lies hidden and forgotten, to bring the repressed unconscious to consciousness, to awaken the dreaming collectivity so that it might come to realize the content of the dream” (Gilloch 1996:115).

Benjamin’s writings on cities are preoccupied with translating the visual into the written (Gilloch 1996:18) and, “His task is to illuminate the modern metropolis, to provide images of, and insights into, urban experience” (Gilloch 1996:112); Benjamin does this using the ‘dialectical image’. In the dialectical image past and present collide in a momentary flash of understanding (Pensky 2004:188,193), which Benjamin calls the “now of recognizability” (Benjamin 1999a:486, N18,4). Benjamin equates the dialectical image with a flash of lightning that illuminates suddenly and reveals what could not be seen previously – awakening that which was dormant or forgotten:

It’s not that what is past casts its light on what is present, or what is present its light on what is past; rather, image is that wherein what has

been comes together in a flash with the now to form a constellation. In other words, image is dialectics at a standstill. For while the relation of the present to the past is a purely temporal, continuous one, the relation of what-has-been to the now is dialectical: is not progression but image, suddenly emergent.” (Benjamin 1999a:462, N2a,3)

The images in this thesis are intended to awaken the viewer to a new experience of the city – an experience of viewing these collected fragments taken out of the context from where they came and placed in a different setting (that of the cinema, gallery space, or computer screen), allowing nuances of movement, rhythm, and pace to become apparent. These images are dialectical – they both record and reflect the urban everyday while simultaneously producing a new vision of the everyday. I will argue that these images create a new city – a virtual metropolis. The sites that I have photographed and the manner in which I have depicted them have been chosen based on this dialectical approach. Throughout the thesis there is a continual grappling with this merging of function and form, of city and representation, of image and referent, virtual and actual.

For Deleuze, modern thought arises from “the failure of representation” and he argues that we must go beyond representation in order to experience ‘difference in itself’ (2004:xii); representation prevents difference in itself from appearing (Williams 2003:120). Deleuze also proposes that there is a need to go beyond the human in this process of experiencing ‘difference-in-itself’, which can be accessed through duration. Duration is a critical aspect of the virtual realm allowing it to unfold seamlessly within our mind’s eye. Duration allows time to take place over a multiplicity of instants while also encompassing a univocal time fusing the many and the one (Deleuze 1991). In Chapter 3, I analyse Deleuze’s concept of difference-in-itself through a photographic exploration of difference and repetition, in which the everyday activity of a London bus stop is the subject of enquiry.

The Sublime

I want to argue that Deleuze's notion of 'difference-in-itself' can be equated with the sublime, which also seeks to go beyond representation and beyond the human realm. Philip Shaw asserts "the sublime marks the limits of reason and expression together with a sense of what might lie beyond these limits" and experience is sublime when "the power of an object or event is such that words fail and points of comparison disappear" (Shaw 2006:2). The sublime is the point at which the ability to understand and express a feeling or a thought is impossible and through this impossibility the mind is able to grasp what exists beyond language and thought (Shaw 2006:3). For this reason the sublime creates both pain and pleasure; it is pleasing to know that there is something beyond the self, yet it is painful not to be able to comprehend the magnitude of this beyond. The mind always puts a limit upon sensation in order to grasp it, thereby creating a boundary around this potentially unbounded state of being. Immanuel Kant discusses this tendency to contain the formlessness of the sublime stating we "add to this unboundedness the thought of its totality" (Kant 1987:98). Kant prioritises reason over imagination, with reason being unlimited and imagination having a finite capacity. Reason allows us to grasp the sublime, or at least to understand we are incapable of fully perceiving the infinite (Shaw 2006:118). In turn, this inability to comprehend the infinite then evokes a sublime feeling appearing to do violence to the imagination and "yet we judge it all the more sublime for that" (Kant 1987:99).

Longinus proposes that paradoxically the "sublime occurs within representation whilst nevertheless annulling the possibility of representation" (Shaw 2006:26). It is necessary, almost instinctual, to attempt to represent the sublime through visual (and other) means. There is a catharsis that takes place through both the act of representing and through the witnessing of the outcome of the representation; for instance, the sublime painting or photograph allows a release of tension felt from the incomprehensibility of the magnitude of the external world. These visual representations are coping mechanisms and although they fall short of representing the sublime, they are

important for our well-being and for bringing us closer to understanding what we are incapable of comprehending. Jean-Francois Lyotard argues that art must present the unrepresentable in order to “enable us to see only by making it impossible to see; it will please only by causing pain” (Lyotard cited by Shaw 1997:116). Visual representation of the sublime allows us to experience pleasure through cathartic relief while also causing discomfort in exposing the inability of the image to capture the magnitude of what it is attempting to depict. There is a duality both within the sublime itself and within representation of the sublime; a constant cycle of trying to get hold of what we will never be able to grasp. It is not a futile effort, however, in that visual representation plays a significant part in understanding our relationship to the external realm.

The sublime factors significantly in the aesthetic approach to my photographic work within this thesis. I have intended the photographic images to evoke a sublime effect using scale, colour and movement, producing a mesmerising quality that both pleases and creates a certain level of discomfort. I have attempted to render the sublimity of the metropolis within these images. I will discuss the city as a sublime entity in Chapter 4 where will argue that there is an important connection between the panorama and the sublime. The expansiveness and omniscient view provided by the panorama is reminiscent of the sublime. During the same time period that the panorama was invented, the sublime became prominent within philosophical discourse and within the arts⁶, which stems from a desire to explore the unknown and the limits of human experience while simultaneously attempting to control and tame nature and the beyond. I will argue that Deleuze’s concepts of ‘difference in itself’ and the time-image as well as Benjamin’s ‘Now of recognisability’ contain elements of the sublime. Furthermore, in Chapter 5 I will analyse Virilio’s concept of the ‘overexposed city’ in relation to the sublime, in the Derridean sense of the ‘cise’ (the ‘cise’ will be discussed in chapter four).

⁶ Although the sublime had existed since the first century CE with the text *On Sublimity* by Longinus, it did not reach a wider audience until the English writer William Smith published an edition of Longinus’ text in 1739 (Shaw 2006:27).

Throughout this thesis the sublime plays an essential role in confronting the challenge of representing the city. At the heart of this research there is a tension between representation, the virtual, and the process of becoming. In essence, I am attempting to record the unrecordable, to represent the unrepresentable, yet it is within this dialectical process that the temporality of the city is revealed. The continual becoming of photographic imagery and the city and the merging of these two elements, produces a dynamic entity that is neither one nor the other; within this dynamism the complexity of the perception of temporality begins to emerge.

Conclusion

The city is an elusive entity – it can never be represented or seen in totality. This research is neither interested in capturing a totalising view of the city nor providing an all-encompassing image of urban temporality – this would be an impossible task. As Michael Keith asserts:

The proper function of a social theory of cities never was and never could be a chimeric search for the essence of the urban. It always needed to occupy a more complex and more ambivalent relationship between the production of time and space and the realization of city form, both as represented and as a crucible of representation.
(2000:411)

Instead, this research seeks to examine how various temporalities are perceived within the urban everyday using photographic technology – transforming and displacing time from the urban sphere to the photographic realm. Through this photographic imagery, a picture of the city emerges which is by no means a totalising view; snippets of everyday life have been recorded, rearranged and re-imagined in an exploration of the temporality of the urban.

Each of the three photographic projects (comprising Chapters 3, 4, and 5) interrogates a different aspect of the perception of temporality within the

urban everyday. The first project (Chapter 3) examines the daily activity at a London bus stop, looking at the movement and rhythm occurring at this site, slowing down its pace and altering the colour of the images to reveal a 'surreal' space – de-familiarising the everyday. Temporality is analysed in terms of Deleuzian difference and repetition, through a photographic case study of this bus stop. Through photographs and moving images, I aim to reveal the hidden, miniscule mundane movements of this locale in an attempt to portray the relationship between the visual, the temporal and movement. The images for Chapter 3 of the thesis can be located on DVD 1 – Chapters 2- 10 (please see Chapter List for DVD 1 on p.219) and on DVD 2. The second project (Chapter 4) explores the panorama as a visual trope within the city and reconfigures the panorama as a temporal device, allowing past, present, and future activity to sit side by side in one expansive view. Deleuze's notion of the coexistence of past, present and future is presented through both still and moving panoramas which depict figures walking through the city. Different stages of this movement are placed adjacent to each other revealing the links between moments in time, using montage. The panorama images can be found on DVD 1 – Chapters 11- 20 and on DVD 2. The third project (Chapter 5) investigates the role of light within the perception of urban temporality, manipulating the exposure within the camera to reveal a de-familiarisation of urban 'reality', referencing the influence of light-based technology upon the daily rhythms and time-keeping mechanisms in the 21st century city. The speed of light has become increasingly dominant within our perception of time, with teletopology and dromoscopy (see Virilio) creating alternate temporalities and cycles within the daily existence of the urban realm. The photographs in this chapter explore overexposure and underexposure, revealing the role of light in the temporal process of the photograph as a metaphor for exploring the relationship between light, time and movement within the greater urban realm. The images from Chapter 5 can be viewed on DVD 1 – Chapters 21- 32 and on DVD 2.

In the proceeding chapters, I will discuss these three photographic projects, presenting a different space in which to experience the urban everyday, thereby providing an alternate lens through which to view the city and interact

with it. The aim is that these new perspectives of the city will linger (consciously or unconsciously) within the minds of the viewer, subsequently influencing his/her engagement with the city. The chapter directly following this one presents a methodological discussion of the photographic and theoretical components of this thesis – the interaction between these elements forms the basis for the novel view of the metropolis which this research attempts to reveal.

Please note: There are two DVD's which depict the visual element of this research. DVD 1 consists of approximately 42 minutes of material and DVD 2 consists of approximately 15 minutes of material. DVD 1 displays the images as they evolved throughout the research in a 'sketchbook' fashion while DVD 2 is a more formal presentation of the final material. DVD 2 will be shown on a large screen in a cinema screening room at the viva voce examination.

Chapter 2: *Art, Knowledge, Research: Discussion of Methods*

In this chapter I will discuss my methodological approach to researching the perception of urban temporality by outlining the three photographic projects that comprise the visual components of this thesis. I will examine the role of artistic practice as a method of research (often described as practice-led research) and the interactive relationship between practice and theory within this study. In mapping my research methods, I will provide the rationale behind the technology used within the three photographic projects, the locations chosen, as well as the artistic and aesthetic approaches employed. I will also include a reflection upon visual representation and its role within the investigation of urban temporality.

As a visual artist I have been photographing the city of London for several years; I have continually attempted to make sense of the fluidity and rhythm of movement enveloping me as I walk through the sensorium of the city. Photographing the city has become a way for me to see the urban realm through a different 'lens' in several respects: firstly, the lens of the camera alters the appearance of the urban landscape within the camera's viewfinder as I am photographing; secondly, the photographic images produced by the camera further alter the appearance of the depicted urban environment; lastly, photographic images provide the time and space for reflection upon the urban everyday (reflection which is not usually afforded by the hustle and bustle of daily life), thereby allowing the city to appear anew. I want to argue that this reflection is crucial to making sense of the time and space of the city, with visual depiction (photography and video in this case) providing an important method for this reflection.

I will argue that the practical and theoretical aspects of this research inform each other in equal measure, thereby creating an emergent form that extends beyond text and image. I will revisit the discussion of this emergence beyond text and image, which was begun in the previous chapter. The interaction of the visual and written elements gives rise to a dynamic composition, which allows for an innovative interrogation of urban temporality. This fluid

relationship between artistic and theoretical practice is crucial in investigating the urban realm, which itself is emergent – in essence, the methodological structure of this thesis mimics the nature of the metropolis and allows for flexibility inherent within such a dynamic entity.

Interaction of Theory and Practice

In adopting arts practice as a method of inquiry, the relationship between theoretical research and practical research must be considered. This is a complex relationship and continues to confound scholars and researchers due to the overlapping of the two within the research process. Hazel Smith and Roger Dean have argued for “iteration” being “fundamental to both creative and research processes”; they explain that this iterative process requires repetition whereby a cycle is set up (2009: 19). Arts-based inquiry is a fluid process in which research is conducted in the spaces between fixed frameworks, creating “new relationships among theories, ideas, forms, and contexts as assumptions about concepts, and categories that tend to fix meanings are brought into question” (Sullivan 2010:58-59). Katy MacLeod and Lin Holdridge assert that “art is always in translation” (2006:8) and is “always open to interpretation” (2006:7), whereby:

it could be argued that art’s methods make transparent those obdurate binaries between word and deed; contemplation and action; theory and practice; feeling and cognition; intuition and reason; imagination and logic. What might be taken to be the unalterable dialectics at play in being conscious in the world, are apparently put into high relief as materially realised thought in writing and artwork collides” (MacLeod and Holdridge 2006:8).

MacLeod and Holdridge propose that “new theory” is created by art within the context of a doctoral thesis whereby “the artwork becomes theorised itself” (2006:2).

Using arts-based research, I have attempted to combine art and theory in an innovative capacity whereby theory and practice inform each other in an iterative manner. Theory and art have been developed and reflected upon simultaneously to develop the practical and written work. It has been crucial for me to develop the visual work alongside the written work: the theoretical work has evolved adjacent to the photographic work, with the two elements being inseparable. Throughout the duration of this thesis, I have constantly alternated between theoretical research and practical research – continually writing alongside performing photographic enquiry. This simultaneous approach has been essential to the progression of the research and has given rise to a body of theoretical and practical work, which are intertwined. The visual work and the theoretical work have been woven together over the past several years, being twisted and turned and wrapped around each other many times over, ultimately producing a hybrid of ‘theory-practice’. I want to argue that theory-practice is a form of knowledge production critical in making sense of the urban sphere. The dynamism and transience of the metropolis make it an inherently difficult entity to research – the city often resists the attempt of researchers to locate valid and reliable data, with this data shifting as soon as it has been recorded. My method of theory-practice focuses on this transitory and elusive nature of the city and works with it in order to produce research which evolves alongside the dynamic urban realm. My artistic practice, which has arisen from my interaction with the city and my contemplation of the time and space of the city, has informed my theoretical work and then in turn the theoretical work has influenced the visual work, which has again shaped the theory in an ongoing cycle that continues to repeat in this manner. This thesis did not adhere to the traditional formula of doctoral research in which fieldwork is conducted for approximately one year, sandwiched in between the theoretical and written work; rather, my fieldwork (composed of photographic images) took place over the entire course of the thesis, emerging and changing alongside the theory, each one being shaped by the other continuously.

My intention was to create an innovative methodology in which the images did not illustrate the theory; rather, the visual element interacted with the

theoretical aspect of the research giving rise to the theorisation of urban temporality. An example of where this interaction between visual and theoretical elements became apparent is in the use of the concept of the sublime. In Chapters 4 and 5 the sublime is used in relation to the difficulty in pinpointing boundaries between moments in time, between subject and object, and between the individual and the whole of the city. In Chapter 4 the sublime is discussed with regard to the visual trope of the panorama and in Chapter 5 the sublime is theorised in conjunction with the role of light in determining the legibility of images. The theorisation of the sublime arose out of the images that I produced in Chapter 3 – images of a bus stop in North London, which will be discussed in more detail later in this chapter. In Chapter 3 I discuss Deleuze's concept of the 'out-of-field' with regard to the framing of the photographic images of the bus stop; I consider the symbiotic relationship between what is outside the frame and what is included within the frame, whereby each gives rise to the other. In taking photographs and videos of the bus stop and in the process of editing these images, I reflected further on the notion of the 'out-of-field' and the relationship of temporality to the frame, specifically in the camera's ability to cut out an artificial slice of time creating a temporary inside and outside of the photograph. This then led me to relate the theory of the sublime to the photographic event and the camera's capacity for cutting time into sections – the unboundedness of time experienced through duration becomes temporarily bounded by the recording of photographic technology.

I turned to Jacques Derrida's writing on the sublime and his notion of the 'cise' which is discussed in *The Truth in Painting*. I began considering this text as I was developing the techniques used within the panorama images. Thus, Deleuze's notion of the 'out-of-field' in conjunction with the development of the bus stop images led me to Derrida's text on the sublime, which then fed into the panoramic images as well as the theorisation of the panorama outlined in Chapter 4. I started to think about what it meant to have several frames pieced together and how this challenged the traditional 'frame' by disrupting the relationship of figure to ground and eliminating the vanishing point. I had been experimenting with different techniques and in considering the 'cise,' I

was able to reaffirm my initial idea to portray movement travelling horizontally across a series of frames in order to emphasise the relationship between frames. This consideration of the sublime also helped me in developing the moving panoramas as I then experimented with panoramic videos, where a moving figure walks across the screen, using both single screen videos and split-screen images (see DVD 1 – Chapters 18, 19 and 20). I felt that the moving image would further evoke this sensation of the 'cise' by depicting the figures' interaction with the environment in the process of walking across the screen and eventually disappearing off of the screen, thus highlighting the ephemerality of the frame.

The moving image can be seen as a series of 'cises' – a continual succession of frames passing from one to the next where each frame relates to the previous and successive frames. Each frame rests upon the adjacent frame, thereby exemplifying this notion of inside and outside delimiting each other. In considering the relationship of the moving image to the cise and the sublime, I then began to explore the Deleuzian time-image, which is a direct image of time that goes beyond a linear and narrative aspect. Looking at the time-image while working on the panoramic images led me to make comparisons between the time-image and the panorama. It became apparent that both the time-image and the panorama disrupt the conventional notion of the frame by considering what exists beyond the frame, which I argue relates to the infinitude of the sublime. Through the panoramic images I was able to bring together these various aspects of theory from Deleuze and Derrida, and this allowed me to consider the sublime element of time in terms of the infinitude of duration and the coexistence of time.

Art practice has been a vital element within this research as has been outlined above. My art practice influenced the theorisation of this research as much as the theory influenced the image-making process. In the following section I will address the changing status of arts practice within academic research.

Art as Method of Enquiry and Practice-Led Research

It has been argued that arts practice traditionally has been given less priority than theory and other forms of research within the academy (Sullivan 2010:xix, Smith and Dean 2009:2). In recent years this “undervalued” status of art within scholarly research (Sullivan 2010:xix) has been addressed by several books and articles concerned with outlining the importance of artistic practice within academic research (Sullivan 2010, Springgay, Irwin, Wilson Kind 2005, Smith and Dean 2009, Macleod and Holdridge 2006). Historically, art institutions have been kept separate from universities, however recent decades have seen many art schools becoming “part of broader systems of higher education” within Western countries (Sullivan 2010:xx). Furthermore, doctorates in fine art are becoming more prevalent, causing an increase in debates surrounding the validity of art as academic scholarship. Katy MacLeod and Lin Holdridge discuss this “relatively new culture” of fine art research and they highlight “the tensions which undoubtedly occur within a subject which has little academic history or precedent in this context” (2006:1) in their book *Thinking Through Art*, which is based on nearly 10 years of research into “student and supervisor experience and PhD submission in fine art in the United Kingdom” (2006:1).

I want to argue that art is a powerful research method – it allows us to see in new ways and has the “potential to transform our understanding by expanding the various descriptive, explanatory, and immersive systems of knowledge that frame individual and community awareness” (Sullivan 2010: 97). The ability of art to alter our ways of seeing and shift perspective by generating new knowledge is unmatched by other methods. With this thesis I am attempting to create a newfound perspective of the everyday urban realm and render the time and space of the city anew through artistic practice. John Baldacchino states that art is itself a means of producing knowledge; thus “the arts do not *search* for stuff or facts, but they *generate* it” (Baldacchino cited by Sullivan 2010:57). Stephanie Springgay, Rita L. Irwin, and Sylvia Wilson Kind argue that arts-based research practices need to be understood

as “methodologies in their own right” rather than viewed as “extensions of qualitative research” (2005:898). Graeme Sullivan proposes that art can help us make sense of the environment in which we live and that artists provide a unique perspective of research “for they create new understandings from what we don’t know, which profoundly changes what we do know” (2010:xii). The “power of the work of art” lies in its capacity to create the world in “some unforeseen way” through “a monstrous performativity” (Bolt 2004:187). There is an interactive process occurring between the work of art and the subject that it references, whereby “the outside world enters the work and the work casts its effects back into the world. We are quite literally moved” (Bolt 2004:190).

The relationship of the artist to his/her own work is particularly important in practice-based research; the artist’s practice begins with himself/herself and it is this point of view which situates the work in a different manner to other research. The artists’ “own sense of themselves, their subjecthood, comes into play when realising research artwork” along with “a specific intimacy with research findings which are often seen as part of a developing and self-determining practice rather than as research inquiry” (MacLeod and Holdridge 2006:9). MacLeod and Holdridge argue that this intimacy between the artist and the research can cause “alienation from the normative academic” whereby art has the capacity to create a “disturbance of theory” through this peculiar relationship between theory and practice; they also note there is a lack of literature outlining this potential disturbance or the “alienating intimacy” of the process of reading art which they claim can “only be reread not read, since some of its structures can be perceived only retrospectively” (2006:9). Artists tend to work from a place of personal inquiry, basing their practice on their own experience and interaction with the world, making meanings “*created* in response to their experiences” (Sullivan 2010:xii). Arts-based research has been described as “enacted living inquiry” (Springgay, Iriwin, Wilson Kind 2005:899) and I want to argue that this is important to my own methodology for this thesis. I have made investigations using my own experience of navigating the city and have relied on my own responses to the urban environment as the basis for my photographic enquiry.

I began by considering my everyday movements through the city and what I witnessed as an urban dweller in London. Starting from my daily experiences of London, I began recording the urban environment, trying to make sense of the relationship between what I perceived internally within my mind (which may not have always been conscious) with what was unfolding externally on the city streets around me. The first location where this relationship between the internal and external realm of images became apparent within my daily life was a bus stop in Highgate, North London.

First Photographic Project: Difference and Repetition

I lived directly opposite the bus stop and thus could witness the activity at this site 24 hours a day. I lived at that location for nearly two years and it was my residence at the time that I began this thesis. I decided to start photographing the bus stop in autumn 2007 and I continued to take photographs and videos over the next year and a half. I did not have a systematic approach to recording the activity at the bus stop; rather, I attempted to let the activity of the site dictate what I captured. As discussed in the previous chapter, I am using an approach similar to that employed by Surrealism and Situationism which based much of their practice on the chance nature of the urban everyday (I will return to the notion of chance later in this chapter). The randomness of multitudinous events taking place across the time and space of the urban sphere provides rich fodder from which to examine fragments of daily occurrences. The kaleidoscopic quality of the metropolis gives way to chance encounters and collisions of people, objects, and buildings. My approach to unravelling some of the layers of this arbitrariness is similar to the city symphony films of the early 20th century.



Highgate 271 bus stop, author's photograph

The 1920's saw a proliferation of moving images depicting the city; this fascination with the urban spectacle resulted in numerous films "aimed at constructing composite cinematic poems that encapsulated the dynamics of the modern metropolis" (Penz and Lu 2011:10). These cinematic poems are known as "city symphonies" and they rely heavily on montage in splicing together dynamic sequences depicting the urban environment; in city symphonies the metropolis is the subject rather than portraying a human protagonist. Francois Penz and Andong Lu claim the city symphony genre is difficult to define, however they assert that "city symphonies not only represent the city" but "also invent the city, enable its imagination and creation, and bring out the hidden, silent and invisible features of the city to public consciousness" (2011:10). In addition to the city symphony genre, I have incorporated the artistic approach of video art from the Fluxus movement which flourished in the 1960's, of which Nam June Paik was the main proponent. Fluxus was influenced by Dadaism⁷ as well as the work of John Cage and his "chance operations" (Meigh-Andrews 2006:9). Themes of

⁷ Dadaism was an avant-garde movement that emerged during the First World War and sought to challenge existing political, social and artistic values. It was an international movement that combined "art, politics and daily life, and expressed itself in a variety of media, including poetry, performance, painting, cinema, typography, montage, and idiosyncratic combinations of each" (Plant 1992:41). While Dadaism remained distinct from Surrealism, Dadaism was an important influence upon the Surrealist movement, which shared many of Dada's subversive and revolutionary aims (Plant 1992:40).

arbitrariness and randomness were fundamental to the work of John Cage as well as to the Fluxus group.

In attempting to create images devoid of narrative structure, in which the everyday movements of the city are the subject, I experimented with different ways of photographing. I started by taking hundreds of consecutive digital stills as a way of capturing sequential movement in a process of experimenting with building a moving image from these stills. I took photographs at various times of the day, and took most of the images in the late afternoon when the bus stop appeared to be at its busiest, primarily inundated with school children and commuters. When taking the still photographs, I shot several hundred of them in quick succession over a period of many months (▶ see DVD 1 – Chapter 2). By taking this multitude of successive shots, the incremental movements occurring between actions at the bus stop were revealed (although in a much slower capacity than a moving image, due to the slow speed at which the camera is able to take successive shots), for instance the changes in the sign at the front of the bus indicating which direction it was travelling (see images below).

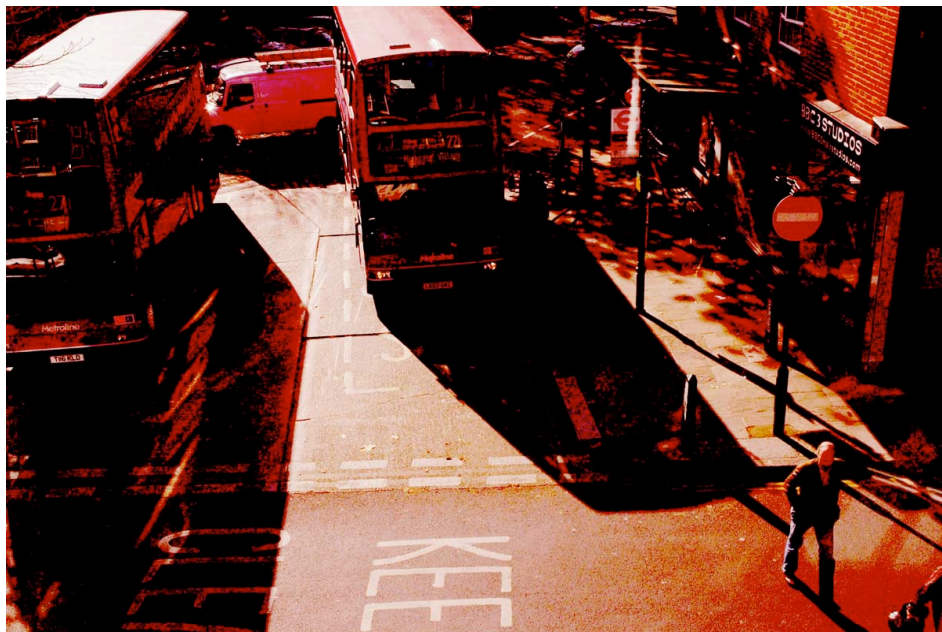


Highgate, author's photograph (▶ see DVD 1 – Chapter 4)



Highgate, author's photograph (▶ see DVD 1 – Chapter 4)

I then took the raw still image files, uploaded them to my computer and began manipulating them in Photoshop, altering the colour and exposure. I experimented with various combinations, using the Curves function in Photoshop. Some of these stills are shown on DVD 1 – Chapter 3. An example is also shown below:



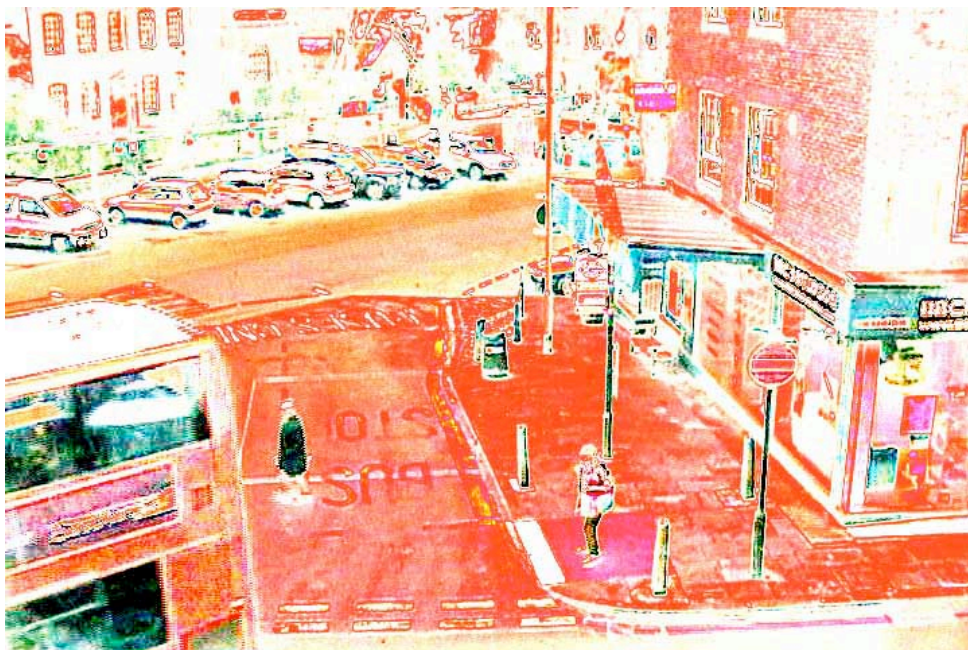
Highgate, author's photograph (▶ see DVD 1 – Chapter 3)

I then continued this process by piecing the still images together to make short stop-motion moving images. This technique of sewing still images together is lengthy; it requires many hours of meticulous work in order to alter each image in Photoshop (again using the Curves function to alter the colour, contrast and brightness) and then piece the altered images together in Final Cut Pro. In Final Cut I edited the length of the still frames and then also inserted a transition between each still image, using a cross-dissolve to smooth the transition between each photo. The final outcome of this stop-motion moving image process can be viewed on DVD 1 – Chapter 4 (depicting the moving sequence of the sign changing which was referenced above). This moving image is made up of over 100 still images and is the result of numerous hours in the editing process.

This mechanism of photographing was cumbersome and did not capture movement in as nuanced a capacity as I wanted. Therefore, I began using video to photograph the site. In both instances of still and moving images, I set up the camera on a tripod and it was placed in the same location for each session of photographing (it remained in the same location continuously for months at a time so that I could switch the camera on and off whenever I wanted, it was there at the ready at all times). I often left the video camera (Sony Mini DV DCR-HC52) rolling on its own while I was doing other things in the flat or sometimes while I was not at home. In this sense, the camera is performing the function of observer, making the recorded activity visible to me (and other viewers) which would not have been visible otherwise. Andy Warhol used a similar approach in his moving images where he “‘simply turned the camera on and walked away’” (Meigh-Andrews citing P. Adams Sitney 2006:72).

In reviewing the video footage, I subsequently observed occurrences at the bus stop that I might not have noticed otherwise due to their seeming insignificance when viewed in the context of everyday encounters. (For example, the boy who fails to catch the bus and is left standing on the corner while the bus drives away – this is depicted in the images below and on DVD 1 – Chapter 10. This example will be discussed in more detail in Chapter 3).

The technology of recording allows for these instances to be reviewed and re-played many times over and to be slowed down or speeded up.



(► see DVD 1 – Chapter 10)

In the process of reviewing the footage and watching the multitude of everyday movements occurring at the bus stop, I became focused on the mesmerising quality of these mundane movements and wanted to highlight this quality within the images. Furthermore, in my examination of the moving

image as a metaphor for perception and an investigation into the way that urban temporality is visually perceived, I chose to focus on the intersection of the moving and still image. In editing the video footage, I utilised a methodology of breaking down the moving images into still images using the animation tool in Photoshop which allows short clips of video to be processed by the programme, breaking the footage down into a maximum of 500 still frames at a time. I used Photoshop again to experiment with altering the aesthetics of the images, experimenting with the colour and contrast as I did with the still images. Once the still frames have been created, it is then possible to alter each frame individually using the Curves feature, in a similar manner to the process performed with the still images as described earlier. I created what is called a new 'action' in Photoshop, which acts like a Macro, for each different colour scheme so that identical colour and light manipulation could be applied to each frame using a designated function key (e.g. F6 key). Despite the convenience of this function key, it takes hours to produce a moving image which is several minutes in length. After uploading the footage to the computer (a lengthy process in its own right), I then reviewed the hours of footage and decided which sections to use. I then spent many more hours experimenting with the colour schemes, trying different colours on the various frames and sections of the videos. I spent a considerable amount of time altering hundreds of frames, only to decide the colour scheme I had chosen was not successful and that I preferred a different colour. Once the hundreds of frames had been colour treated, I then converted the still images into QuickTime movie files, imported the QuickTime movie files into Final Cut Pro and then edited them further in this programme, ultimately creating the final version of each moving image. These hours (adding up to days, months, and years) of experimentation are crucial to the creative process and essential to this type of research.

Speed and Slow-Motion

As mentioned in the previous section, photographic technology has the ability to slow down recorded activity. Variations in the speed of the movement depicted by the moving image contribute to an altered sense of time and

space. Walter Benjamin discusses the ability of slow-motion in film to reveal nuances of everyday actions: “slow motion not only presents familiar qualities of movement but reveals in them entirely unknown ones ‘which, far from looking like retarded rapid movements, give the effect of singularly gliding, floating, supernatural motions’ (Rudolf Arnheim, *loc. Cit*, p. 138)” (Benjamin 1968:236). By slowing down the pace of the city through my stop-motion videos, I have attempted to portray this sense of gliding or floating that Benjamin describes. The hypnotic quality of the images allows the viewer to be enraptured by the movement while also providing the time and space for the intricacies of everyday motion to be revealed.

As discussed in the previous chapter, the speed of the metropolis is of paramount importance in considering the temporality of the urban realm. The development of faster transportation and communication technologies have created a frenetic pace within the city that permeates all daily activity whether or not we are moving at this pace (I will revisit this relationship between speed and perception in Chapter 4 and I will argue that slowness does not necessarily negate a perceived haste). In order to contemplate the speed of the metropolis it is often necessary to create an artificial and imposed boundary through visual representation – between moments in time and fractions of space – in order to see these infinitely moving parts that make up the whole of the city. I have used both still and moving images to record banal everyday movements within public spaces of the city in order to examine the relationship of these movements to the greater kaleidoscopic whole of the metropolis.

Benjamin asserts that “a different nature opens up to the camera than opens to the naked eye – if only because an unconsciously penetrated space is substituted for a space consciously explored by man” (Benjamin 1968:236-237). Sergei Eisenstein also discusses the speed of the moving image in altering our perception of the event depicted on screen: “it is not the event itself that is distorted but the treatment of that event by the speed of the apparatus, as a result of which our mind interprets it as another image of the event” (2010: 122). Events which are sped up or slowed-down imply that

there is a norm of tempo that we expect to see on screen and when this is disrupted we read the images differently; however, the context of the slow-motion or fast-motion image also shapes how it is read. For instance, Eisenstein gives the example of fast-motion images being funny in a newsreel yet no longer being humorous when they occur in “some episode of *heightened activity* in a crowd scene, i.e. where the visual distortion of plain reality is *imaginatively* more in keeping with the theme than straightforward, literal depiction would be” (2010:122).

The photographs and moving images of the Highgate bus stop render visible actions that are not typically seen at this locale. The monotony of this site creates a drone-like or hypnotic effect when watching the buses continuously departing and returning to this stop, sometimes resting and other times leaving again as soon as they arrive. The cycle continues throughout the day and evening – it is impossible to witness every single action that occurs at this site, even from my vantage point when looking through the window of my flat. The camera, on the other hand, can reveal movements that I did not see, it can highlight actions which are potentially significant – these actions take on a heightened significance when photographed and isolated from the quotidian context in which they originally occurred.

Inside/Outside and Ethical Considerations

I decided to record the bus stop from the window of my flat in order to capture the activity in a manner that did not interfere or intrude upon the movement of the bus stop. From my window I was hidden from view (for the most part) and this also provided me with a bird’s-eye perspective on the bus stop. While this method of covert photographing raises some ethical concerns, it was important to me to remain distanced from the activity at the bus stop and to be able to witness it from afar. If I had photographed from the street level it is likely that my presence would have altered the movements of passers-by and it would not have provided as accurate a picture of the bus stop activity. In my experience of photographing the city, many people either step out of the way of the camera on purpose (presumably because they think they are in the

way of the shot or because they do not want to be photographed) or they look directly into the camera lens – neither of these activities being what I wanted to portray, as these are all movements that do not typically occur at the bus stop on a daily basis. Although the people captured in the stills and videos are not aware that they are being recorded, it is impossible to identify any of these people in the images. The faces of the people portrayed have been distorted due to the way that I have photographed them and as a result of the digital manipulation of the images. This unidentifiability of all subjects portrayed is consistent within all of the images produced by the three photographic projects. Furthermore, this anonymity is important to the aesthetic and artistic approach of the work – it contributes to the sense of overwhelm evoked by the urban sphere, which threatens to erase the individual at times (this point will be addressed again with regard to the panorama, the second photographic project of the thesis).

Rosalyn Deutsche warns, however, that there is a danger in this type of looking, whereby the observer watches from a distance and objectifies the subject of the gaze. Deutsche claims that this viewing from afar implies an element of voyeurism and scopophilia or pleasure in looking, whereby the “voyeuristic look exercises control through a visualization which merges with a victimization of its object” (1991:11). She discusses such distancing and objectifying with regard to the notion of a totalizing view of the city, which she critiques (specifically in relation to David Harvey’s *The Condition of Postmodernity*) as “hallucinatory” and as fantasy (Deutsche 1991:11, 7). Deutsche asserts that “foundational totalizations are systems that seek to immunize themselves against uncertainty and difference” (1991:7). While I have used a method of observation that created distance between me and the people I photographed (both from my flat window in the first project and from street level in the second and third photographic projects), the intention of this research is not to provide an all-encompassing view; rather, this thesis attempts to highlight difference through this method of observation. I would argue that the act of looking in this manner provides a nuanced understanding of the relationship between self and other, subject and object, and individual and whole. This research seeks to draw attention to the

imagined boundaries between subject and object and to disrupt these perceived boundaries through photographic examination of difference by investigating the continual becoming of the city.

Within perception and within visual representation, framing plays a crucial role. The decision, made by the observer or the artist, as to what to include within the frame alters the way the image is perceived and has important consequences upon the portrayal of subject matter. Gillian Rose discusses this relationship between the artist and the subject of the gaze depicted in works of art; she gives the example of a Thomas Gainsborough painting of Mr. and Mrs. Andrews from the mid-eighteenth century, which portrays the couple posing within an expansive landscape scene. Rose asserts that the representation of Mrs. Andrews as sitting “impassively, rooted to her seat” gives the impression that she is “planted to the spot” and does not have the freedom to roam the land in the way that Mr. Andrews appears to possess (1993:91). Mr. Andrews has been painted with his gun on his arm “ready to leave his pose and go shooting again; his hunting dog is at his feet, already urging him away” (Rose 1993:91). There is a tree looming above them, with Mrs. Andrews directly under the tree and her torso appearing to become almost part of this tree; as Rose describes, “Mrs Andrews is painted almost as a part of that still and exquisite landscape” (1993:93). This framing of Mr. and Mrs. Andrews in relation to the land, signals both class relations as well as a gendered difference in their individual relationships to the land. Furthermore, Rose argues that the passivity of Mrs. Andrews within the frame allows her to be the subject of a “gaze that renders her as immobile, as natural, as productive and as decorative as the land” (1993:93). The power relationship between the observer and the subject of the gaze is important to recognise when framing visual representation as well as within framing everyday perception. This thesis attempts to look at the frame in terms of its potential to disrupt a binary opposition between object and subject, between observer and observed, between inside and outside of the frame. Through each of the photographic projects, the relationship of what is inside the frame to what lies outside of this frame is challenged through a defamiliarising of the

everyday, using visual tools to disorientate and thereby disrupt visual perception.

This thesis interrogates the boundaries that we place upon moments in time and between self and whole within perception – the unclear borders between virtual and actual that we delineate in order to attempt to grasp our everyday existence, to navigate through the influx of visual information bombarding us at every turn within the city. Framing is crucial to the process of perception, whereby the frame acts as a separation between what we choose to focus on and what we choose to discard. This notion of framing corresponds to Bergson's notion of perception as a choice which was discussed in the previous chapter. In the first photographic project, the window and the walls of my flat provided a physical separation between me (the photographer) and the subjects being photographed. The window also created a frame, which added another layer to this relationship of inside and outside (the role of the window and the frame in highlighting the interactive relationship between subject and object, inside and outside will be discussed in greater detail in Chapter 3). The relationship between inside and outside is far from simple; I will argue in this thesis that each is contained within the other, with one giving way to the other while simultaneously maintaining a perceived separation. This separation is necessary for human perception and it is this (artificial) separation with which photography and the moving image are concerned.

Photographic imagery is an important tool in exploring the boundaries between virtual and actual that are created through human visual perception. Photographic technology allows for artificial separation between moments in time to be generated; images are created through the lens of the camera and re-presented to the eye after the event takes place. Thus there is a layering of images occurring through photographic representation: the image seen *in situ* by the person other than the photographer, the image seen through the camera lens by the photographer, the image captured by the camera (with or without additional manipulation through processing and printing). All of these images are then occurring simultaneously and influencing each other through duration within our mind's eye; in this sense the actual image and the virtual

image become intertwined. Yet the actual image of the physical photograph (whether a projection on the computer screen or a printed piece of photographic paper) functions as a tool for providing some 'evidence' or 'memento' for what occurred (regardless of whether the photograph is indexical or legible) (Sontag 1973, Tagg 1988, Barthes 1981). The photograph is a record (to some degree) of an event that occurred (regardless of whether this was a staged event, as all events captured are manipulated via the camera and the photographer to some extent). The photograph creates a delineation between past and present moments in time which are made tangible via this photograph, thereby illustrating in a physical capacity a delineation between inside and outside. The photograph has a unique ability to produce this distinction (as distinct from other visual modes of representation, such as painting) in its reproducibility, its mechanical formulation, and its technology. This unique status of the photograph, as it relates to the notion of 'truth' and indexicality attributed to the photographic genre, was discussed in the previous chapter. Furthermore, the hand of the artist is not felt within the photographic image – the craft of the photograph is produced by the reflection of light upon materials rather than the painted or drawn image.⁸ The technology of the photograph and the moving image creates the possibility of making visible actions that are not seen or perceived (consciously) by the naked human eye – the camera captures split-second movements and separates them into individual instants, making them discernible (Benjamin 1968, Doane 2002).

Second Photographic Project: Panorama

The second photographic project within this thesis continues with the method of deconstructing the moving image to reveal the processes behind the mechanism by combining montage with the panorama. This second project uses the panorama as a visual device with which to explore urban temporality. The panorama has played an important role within the

⁸ While the artist's hand has an impact and an input on the manipulation of the technology within the camera and the printing and processing of the images, it is not a hand-drawn image, this distinction is important in the perception of the photograph as 'evidence'.

development of the urban metropolis and the perception of the city (this will be discussed in Chapter 4 in more detail). With this project I have transformed the panorama, using it as a tool to present movement and time. In my everyday experience of moving through the city, in particular walking through the urban realm, I felt at times as though I was on a conveyer belt or a people-mover. This sensation was one of being carried through the city by the force of the speed and dynamism flowing through the metropolis. The pace and rhythm of the city are powerful entities – they can swallow up the individual and move him/her forward at an accelerated rate, whether physically or psychologically, and this acceleration has a significant impact upon the individual's movement through the city. The expanse of the panorama is reminiscent of urban space, enveloping and consuming the individual.

There appeared to me to be an endless stream of people walking through the public spaces of central London – a continuous flow of individuals navigating the time and space of the city through their incessant movement. The artist Adam Chodzko writes that he views the process of making art as a particular form of looking at the public sphere. He sees public space as a network which is “very flexible and constantly changing and contingent” which means “it can be played with and transformed to propose new possibilities of space” (Chodzko 2009:65). Chodzko explains that this act of looking at the public sphere “proposes an expansion of vision to accommodate that which we did not previously know or perhaps that we previously did not want to know” (2009:65). My images have attempted a similar task of looking at the public sphere and searching for that which we do not know or cannot see – perhaps what we did not want to know for fear that it might reveal banality, boredom, or alienation; however, my aim in uncovering the hidden aspects of time and space within the urban realm is to counteract such losses of individuality and regain a sense of self in relation to the whole of the city.

The relentless swarm of people flowing through many of the spaces which I observed and photographed created a sense of anonymity and detachment from the faces and individuals passing. As discussed previously, the images

that I have created reflect this detachment by portraying the individuals as unidentifiable, indistinguishable forms and shapes. A sense of the incessant movement and relentless pace of the city is reflected in the repeated action of the people walking – the same individuals are portrayed several times within the expanse of the panorama, allowing a sequence of their past, present and future actions to sit alongside one another. The still panoramas have been created using montage – several images taken in sequential order that have been sewn together in a horizontal ‘filmstrip’ in Photoshop. Deleuze’s notion of the coexistence of time (where past, present, and future coexist) is the fundamental principle underlying the sense of temporality within the panorama images.

The panoramic still images for this project were created using several cameras: the Nikon DSLR, the Nikon Coolpix camera and the Sony video camera. I started this project taking still images with the Nikon DSLR of people walking through public spaces of the city and I experimented with piecing those still images together in Photoshop to create the panoramas, depicting the sequence of movement horizontally. It took me several months of experimenting with this technique in order to discover how to produce a panorama that looked relatively seamless and which portrayed a seemingly continuous sequence of past, present and future movement. Many of the images were rough around the edges to begin with as I struggled with developing a technique that fused both foreground and background in a smooth capacity. It took many hours of trial and error of photographing in various locations to discover which angle to photograph from and where I could stand in relation to the people walking past me without disrupting their movement and without drawing too much attention to myself, as I wanted to capture their everyday movement as it would typically occur. As I discussed in the previous chapter, I attempted to interfere as little as possible with the activity I was photographing.

I often photographed or filmed in the same location continuously for hours (locations for this project included: Holloway Road, Regent Street, Oxford Street, Goadge Street, the British Museum, and Covent Garden), recording

people walking the same short distance (from point A to point B) over and over again in order to get a sequence of still shots or video footage that would produce a workable panorama. In order to create a panorama that encompasses a unified sequence of movement, the figures must be a certain distance from the camera without cars or other people obstructing the view (which often occurred), the background must be relatively plain so that it can be sewn together seamlessly, and there must be an unobstructed expanse of space in which to record a horizontal sequence. I tried several different locations and different angles before piecing together successful panoramas. For instance, I photographed on Holloway Road, Islington (see image below which is also depicted on DVD 1 – Chapter 16), yet at this time I was still experimenting with the angle of the camera, therefore this image does not portray a horizontal sequence.



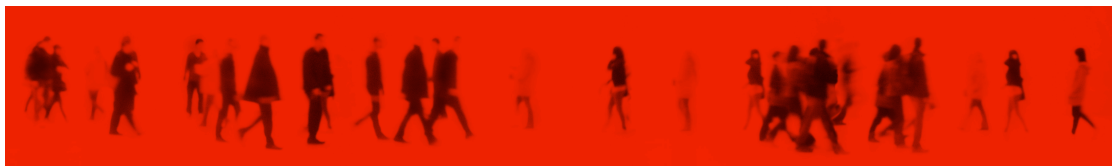
Holloway Road, author's photograph (► see DVD 1 – Chapter 16)

This image was taken with the Nikon DSLR using a series of stills and then the still frames were uploaded to Photoshop, where I pieced them together – the image below depicts this process of montage. It took many hours of photographing and editing to find sequences of movement that were suitable for such a montage. It was a lengthy process to match up still images so that the foreground and backgrounds were in alignment in order to create a uniform image.



Regent Street, 'rough' edit of stills montage for panorama, author's photograph
(▶ see DVD 1 – Chapter 15)

Once the montage was made in this rough format, the seams between the images needed to be smoothed over and made as invisible as possible. This smoothing over process was also extensive, requiring hours of work in Photoshop using various processes (including the Clone and Blur functions) to produce a uniform image. The result of this smoothing over of the edges of the joining frames can be seen below:



British Museum, final edit of panorama, author's photograph
(▶ see DVD 1 – Chapter 17)

As discussed in Chapter 2, I also used video footage to create still panoramas, using the Photoshop animation tool (the same tool used in the bus project) to produce still frames from the moving images. While it takes longer to generate these still images with this method, it is easier to produce a horizontal sequence of movement required for this project; the moving image captures more frames in a faster amount of time, therefore more increments of movement are recorded. The digital stills camera is much slower at capturing the increments of movement and thus it is more difficult to produce a panoramic sequence. However, the video footage has a lower

resolution and this creates a more pixellated image – there is less digital ‘information’ recorded within the image and therefore less information (in terms of colour and light) to manipulate. As was also discussed in Chapter 2, I used coloured filters on the camera to create the monochromatic, saturated colour within the panoramas. I manipulated the colour and light further in Photoshop, using the Curves tool once again.

I then experimented with producing panoramic videos in which a similar technique of piecing together sequences of movement in a horizontal manner has been used. This process was the most complex technical method that I employed within the thesis. It took me many months to devise the procedure for creating the moving panoramas and then it took several more months to hone the technique. The moving panoramas were created primarily using a split screen (► see DVD 1 – Chapters 19 and 20 – blue image of man walking and red image of girl running through crowd of walking figures).⁹ In the blue moving panorama, the figure walking across the screen is depicted performing the same movement in both screens, yet it gives the effect that he is moving across the screen – as with the still images, his past, present and future movement is contained in one simultaneous view. The complexity of this technique was due to the alignment of the screens so that they created a seamless panorama with the foreground and background remaining relatively uniform across the horizontal plane. Furthermore, hiding the seams of the screens in Final Cut Pro is more difficult than in Photoshop as there are fewer tools for this function. As discussed in chapter two, I have continuously attempted to push the boundaries of the technology that I am using and in this case I have attempted to perform a function in Final Cut Pro that it may not have been originally designed to execute. By using the locations, sequences, lighting, and colour chosen, I facilitated the matching up of the images as seamlessly as possible and then using the ‘edge feather’ tool as well as the crop tool in Final Cut Pro I was able to align the images and erase most of the seams between screens.

⁹ I also produced some single screen images (► please see DVD 1 – Chapter 18 and DVD 2 which feature single screen moving panoramas).

As with the first photographic project, this second project attempts to capture the nuances of movement and daily activity within the urban public realm which are often unnoticed or taken for granted. Focusing on the movement of people walking along the streets of London, this project examines urban temporality in the context of the urban dweller's movement through the landscape on foot. Walking is a fundamental means of interacting with the city and a crucial tool for making sense of the individual's surroundings. In Chapter 1, the figure of the *flâneur* was examined in relation to psychogeographical wanderings and the observation of the phantasmagoria of the metropolis. This panorama project explores the act of walking in the context of the phantasmagoria of the city, using both content and form to reflect this dreamlike quality of the urban realm. In Chapter 4 I will discuss the development of the panorama (and other optical devices) as a precursor to the moving image, with both formats evoking the phantasmagoria of the city as well as signalling the sublime element of the metropolis. The previous chapter introduced the sublime as an important mechanism for the examination of the relationship of the individual to the whole and this panoramic project continues with this strand of inquiry, looking at the sublime in relation to the temporality of the city. Chapter 4 will discuss the sublime in greater detail (the sublime also figures prominently within the third photographic project of the thesis as outlined briefly later in this chapter and in more detail in Chapter 5).

One of the ways that this panoramic project explores the sublime is in the aesthetic presentation of the images. Both the still and moving panoramas draw heavily upon the relationship between photography and painting in the colour and form of the images. In the next section I will look at the relationship of painting to photography and discuss the influence of painting within the visual aspect of this thesis.

The Relationship Between Painting and Photography

As Walter Benjamin discusses, technology diminishes the 'aura' of the artwork (1968). Photographic technology is an intermediary between the hand

of the artist and the artwork. There is a distancing of the artist from the artwork within photography, as opposed to painting where the artist manipulates the paint directly on the surface of the artwork. Painting is more tactile, there is a direct contact between the painter and the canvas, whereas photography happens without this contact – the ‘magic’ that occurs within the camera is physically untouched by the photographer until after the recording occurs.

The dominating role of technology within photography is vital, and for me it provides photography’s allure. There is a loss of control within the photographic process, which is created by this distancing of the artist’s hand. An element of chance is prominent within photography and many photographers attempt to fight against it, continuously trying to manipulate the technology to produce pictures that fit certain accepted norms for photographic images. Often, unpredictability is seen as something to overcome: the goal is to master the technology so that the photographer is in control and achieves the desired result, rather than being at the mercy of the camera. However, I relish this chance element within photographic technology – in my work I have explored this unpredictability through setting up a tension between photography and painting. I spent several years painting and originally thought I would become a painter before discovering my fascination with photography. My background in painting continues to inform my photography, and I aim to disrupt photographic technology by pushing the technology beyond its expected behaviour. For instance, using a low-resolution digital camera, it is easier to achieve overexposure and saturation of colour when using coloured filters on the lens; the way that the lower-grade technology operates in this camera provides less control for the photographer. I prefer this effect because it results in a broader spectrum from which to experiment with colour and light. I could not have produced many of the images in the light project (third photographic project of the thesis), for example, with a higher resolution camera.

My work does not revolve solely around the subject I am ‘capturing’ but the deconstruction and examination of this subject filtered through the lens, the

camera, the coloured filters, the enlargement, the montage, and the exposure. In all three photographic projects, I have manipulated colour and light, which for me are the most important aspects of photography; I am breaking the medium down into these basic components, taking it apart, pushing it to see what its capabilities are. I do not know what these limits are or what is possible. Much of the photographic work is an experiment — it incorporates the unpredictable nature of the technology. By allowing this chance element to pervade the images, I have attempted to mimic the randomness and layering of events occurring within the urban sphere. This inclusion of randomness and unpredictability references the approach of Surrealism, which was discussed in the previous chapter. The Surrealists revered the unpredictability of the city streets where random objects and people often collided within everyday encounters to produce ‘surreal’ moments (Durozoi 2002:173-176). Gerard Durazoi states that the Surrealists captured “the incongruous at the heart of the ordinary” through the everyday collage” (2002:176). Examples of this random juxtaposition captured by Surrealist photography can be found in Eugene Atget’s photographs of mannequins in shop windows. The mannequins appear life-like due to the angle and reflection of light, creating a layered effect and confounding a straightforward perception of the image (Durozoi 2002:174). The National Gallery of Art, Washington, DC describes the mannequins as “absurd” and remarks that the reflections in the window “add to the confusion about what is real and what is fantasy” (www.nga.gov/feature/atget/works_urban.shtm, accessed 26 June 2012).



Eugene Atget, *Magasin, Avenue des Gobelins*, 1925
(http://www.nga.gov/feature/atget/works_urban.shtml)

This surrealist approach to incorporating chance in capturing the everyday urban sphere is what I am drawing upon in this research. I am referencing the kaleidoscopic quality of the continually shifting city in my approach to photographing the urban realm. The use of chance within my photographic investigation of the city has been combined with a method of digital manipulation and re-working of the images through the editing process. Through a layered process combining both chance and control – a process which incorporates a dynamic interaction between these seemingly disparate elements – I have woven together the instantaneity of photography with a lengthier, more systematic editing technique. I will discuss this multi-layered approach in the proceeding paragraphs.

Photography is often seen as instantaneous (especially in digital photography) and I have attempted to infuse it with more layers (through the processing of the images) in order to reaffirm the 'human' connection of the artist's hand, to infuse it with the 'aura' that is attributed to painting. I have aimed to deal with the subject in a similar way that painting deals with the subject it is rendering. I am rendering the subject rather than solely recording it (a role that has often been attributed to photography); and yet at the same

time I am relinquishing some control over the images and allowing the camera to decide how the subject will appear.

Painting is, of course, influential within photography and film. The relationship between painting and photography is often overlooked and the two genres are treated differently and independently by practitioners and theorists alike. Peter Galassi argues that photography was invented as a result of a changing climate within 19th century painting, landscape painting in particular. Galassi asserts that the tradition of landscape sketching in oil (performed by artists including Constable, Turner, and Corot), which flourished in the late 18th century and early 19th century, provided a means of more fluid, immediate renderings of the landscape (1981: 22-26). He describes the “unresolved but bold realism of the sketch” which was “a symptom of transformation within artistic tradition” (Galassi 1981:24). Galassi explains that the “landscape sketches...present a new fundamentally modern pictorial syntax of immediate, synoptic perceptions and discontinuous, unexpected forms. It is the syntax of an art devoted to the singular and contingent rather than the universal and stable. It is also the syntax of photography” (Galassi 1981:25). These sketches often depicted close-up or cropped views focusing in on one particular aspect of the land and were frequently painted from varying angles, for example Constable’s study of trees in *The Close, Salisbury, 11:00am-Noon, July 15, 1829i* (Galassi 1981:26). Galassi argues that photography struggled at first to capture the views that it sought; it was at a disadvantage to painting in its earliest format: “many photographers sought to emulate the look and meaning of traditional compositions, but the medium often defeated them. The photograph obstinately described with equal precision (or imprecision) the major and minor features of a scene, or showed it from the wrong point of view, or included too little or too much” (Galassi 1981:28-29). Despite this seeming ineptitude of the photographic medium, Galassi does concede that photography has had a significant impact on modern art and that from its inception it “was a powerful force of change” (1981:29). The limits of photography as a representational device were apparent from the beginnings of the medium due to the lack of control and element of chance present in the technology. These limits within photography continue to be

prominent although they are often overlooked due to the perceived indexical nature of the photographic image. I am fascinated by these limits of photographic representation and seek to experiment with these limits to produce images which go beyond representation (the concept of 'beyond representation' will be discussed again in a later section of this chapter).

The interaction of painting with photography can be seen in the work of Francis Bacon and Gerhard Richter, in which both painters incorporate photographic images into their process of art-making. While he did not use photographic images directly within his paintings, Bacon indirectly worked with photography, using it as inspiration for the painted work. For example, Bacon was influenced by Muybridge's photography, in particular this influence is exhibited through his depiction of movement of figures within the images (Harrison 2005:97-98). Richter uses photography more explicitly within his paintings, often portraying photo-realist depictions of people and objects directly referencing specific photographs. Hal Foster explains that Richter renders "the photograph mnemonic in painting, as painting" (2012:190) through his intention "not [to] use [photography] as a means to painting but [to] use painting as a means to photography" (Richter cited by Foster 2012:190). Through a process of several layers of deconstruction and reconstruction I have put together photographic works in a way that some would consider to be a mockery of photography. Yet for me this is where the interesting work lives: a space where the boundaries between painting, photography and the moving image are broken down – a realm of fluidity, a virtual realm made actual through these images.

An important factor in making fluidity possible within all three photographic projects is digitisation. All of the images within this thesis have been produced using digital photographic technology. Digital technology has enabled an immediacy and a plasticity of the photographic material that would not have been possible with analogue technology. In using such a high degree of unpredictability within the photographic process, I have employed a method of experimentation throughout the fieldwork. A method has evolved within the visual research that incorporates 'failure' of the technology and of the images

produced through a process of layering. Each project has begun with a certain framework and subject matter which has evolved through photographing this subject over months and years; this evolution over time has allowed the city, the technology and the theoretical research to interact with one another (filtered through my own perception) and for shifts within the images to occur. Paradoxically, this method comprises continual shifting and readjusting as well as consistency in this continual modification. For instance, in the early stages of the panorama project, I created images that were not horizontally laid out (see example on p. 65) and I also made montages from video stills (see example below) that ‘failed’ to look and present the subject matter in a successful manner (as discussed previously).



Goode Street, panorama made from video stills, author’s photograph

I continued photographing using different angles and different cameras, ultimately honing the technique to produce the final results (see example below).



Covent Garden, author’s photograph

Using experimentation within the photographic process – for example, letting the video camera record on its own in the bus project, using coloured filters in the panorama project, overexposing the images in the light project – gave me the opportunity to relate the images to theoretical texts and to develop a method which consisted of moving between text and image continually over a

long period of time, creating research shaped equally by both elements. Earlier in this chapter I discussed how the use of the sublime within this thesis arose from the visual research combined with my contemplation of the 'out-of-field' concept. Another example of how the constant movement between the visual and theoretical work shaped my research can be found in the panorama project, in which I had difficulty depicting the relationship between the foreground and the background within the images. At the start of this project, I found it challenging to weave the foreground and background together in order to create a seamless panorama. It seemed that the moving figures in the foreground, which were repeating across the horizontal montage, dominated the images. Furthermore, the background, which primarily depicted the built environment of the urban landscape, was often at odds with the movement of the figures (for example, see blue image on p.78); this caused me to reflect on how I could seamlessly weave together the movement of the foreground with the apparent stillness of the background. I then spent time thinking through Virilio's concept of dromoscopy, which included notions of a perforated landscape and a landscape of simulacra, while working on these images. As I was reading Virilio's text *Negative Horizon* I began looking more closely at the relationship of the body to the landscape and I then related this to the process of walking (which I will discuss in Chapter 4). Through the act of photographing and then editing the images, Virilio's scenario of a nullified landscape eroded by the dromosphere began to shape the images. I then experimented with the background by photographing in locations that produced more detail within the landscape and other locations which produced less distinct backgrounds. This experimentation in photographing various backgrounds in a number of locations prompted me to consider how perception of the landscape is affected by the speed of the city and in what ways this perception might be further shaped through the act of walking (as opposed to riding a bus or driving a car). I then made the decision to create a blurred background in order to reference the distortion that the pace of the urban sphere creates within our perception of the landscape (for example, see red image on p. 78).

The evolution of the photographs in this manner has been crucial to the methodological process that I have employed; it is a dynamic process that also reflects the transience and the dynamism of the urban sphere. The continual adjustment of the photographic approach based on my encounter with the city has created a method that responds to the flux of the metropolis. The city is constantly evolving and we must, in turn, keep shifting our perception in order to make sense of our surroundings. Bergson's notion of an open system (as discussed in the previous chapter) applies to this process, whereby when one part of the whole moves, the entire whole is affected. This process of continual evolution, reassessment and realignment within my photographic approach also incorporates a temporal element. In researching urban temporality, my method reflects the temporal process of duration in which the mind takes in various layers of images and processes them over time, not necessarily in a linear capacity – a dynamic practice of integration and manipulation constantly unfolding over time.

One of the ways that this processing of information over time occurs is through montage: both montage in a photographic sense and montage in a metaphoric sense of piecing together elements and information from the outside world and layering them within the mind to formulate the whole. I will discuss montage in the following section with regard to the writings of Sergei Eisenstein and Gilles Deleuze.

Montage

Sergei Eisenstein regards montage and the shot (of which montage is composed) as the basic cinematic elements (1949:3). Montage produces the illusion of movement within the moving image, with a succession of still images put together in a filmstrip or in video format. Eisenstein explains that “two photographed immobile images result in the appearance of movement” and “each sequential element is perceived not *next* to each other but on *top* of the other” and this gives rise to the “idea (or sensation) of movement” (2010:4). The relationship between the parts to the whole is crucial within the moving image, whereby the juxtaposition of elements coming together

through montage define “the sense to be given to the whole” (Nowell-Smith 1991:xv). Eisenstein is concerned with perception in regard to montage and the sense of movement created within film; he asserts that in the “first stage of cinema” images placed in juxtaposition are not “registered by our consciousness” but are taken in by the mind and the mind subsequently combines them internally to create a “visual *sensation*”: “Gallop ing hooves, the rushing head of a horse, a horse’s rump disappearing into the distance. Those are three pictures. Only when they are combined in the mind does there arise a visual *sensation* of a galloping horse” (Eisenstein 2010:123).

Deleuze defines the ‘shot’ as ‘movement-image’ – it is a mobile section of duration and “relates movement to a whole which changes” (1986:22). The shot has a dual function of acting as the “intermediary between the framing of the set and the montage of the whole” – it exhibits the changes between shots and also changes within the whole (Deleuze 1984:19). Following on from this, montage “is the determination of the whole” and it “is the operation which bears on the movement-images to release the whole from them, that is, the image of time” (Deleuze 1984:29). Deleuze considers montage to be an indirect image of time since it “is deduced from movement-images and their relationship”; furthermore, montage and the whole are primary and “should be presupposed” rather than arising after the fact (1984: 29). Eisenstein discusses the primacy of the whole within montage in terms of the viewer imagining and creating the whole, whereby “in the mind this fragment [within montage] has already become an image of a complete picture, thence of a series of imagined pictures” (2010:128-129).

In a similar capacity to montage, the Cubist art movement used a technique of depicting objects and figures as fragmented pieces, often presenting different angles of the same subject within a single frame. Cubism was interested in depicting modernisation and the changing temporality and spatiality created by industrialisation. Many of the Cubists were influenced by Henri Bergson and his notion of duration in their “concern to represent (in both positive and negative ways) the dynamic character of modern life” (Cottingham 1998:34). Cubism as well as Futurism was influenced by the work

of Etienne-Jules Marey (Eimert 2010:41, Doane 2002), who conducted photographic studies of movement with several shots of various stages of movement depicted in one frame in their attempts to portray movement and dynamism within their artwork. In describing paintings by Fernand Léger and Albert Gleizes, who were both part of the Cubist movement, David Cottington writes: “Like Léger it is as if, straining both to maximise the play of volumes and to lay bare the illusionistic devices from which they are constructed, Gleizes loses control of parts of the painting” (1998:35). This notion of exposing the illusion of devices is important to my photographic work – it is crucial for examining the movement and temporality of the urban sphere. I will return to this element of exposing the illusion in relation to the moving image and Marey’s photographs in Chapter 4.

Colour

Along with montage, colour is an essential element in my depiction of the time and space of the city. In all three photographic projects, I have manipulated the colour of the images using coloured filters that I constructed from acetate and placed on the lens of the camera; I have also altered the colour digitally using computer technology. As discussed previously, the colour in the bus images was manipulated in Photoshop (rather than coloured filters) – each frame for the videos was coloured individually before being put together in Final Cut Pro. The saturation of colour and high contrast of shadow and light creates a painterly and an almost print-like feel to the images, evoking the use of colour in Andy Warhol’s prints (Foster 2012). I have altered the colour in all of the images in order to provide a sense of displacement and to disrupt the sense of the familiarity of the everyday; by transforming the appearance of the city street into an unfamiliar realm, I want to draw attention to nuances of movement, of space and time, that are not seen in daily life.

This use of colour within the second and third photographic projects is largely influenced by Abstract expressionism and Minimalism, in which monochromatic painting was prevalent (Colpitt 1990:30-31). Monochromatic painting disrupts the traditional figure-ground relationship by taking away

reference to depth. “In painting, a two-dimensional unity of the picture plane results from the use of a single color, at the expense of figure-ground relationships” (Colpitt 1990:34). Frances Colpitt discusses the artist Ad Reinhardt’s painting (Reinhardt was considered to be part of the Abstract Expressionist movement) in terms of this disruption of figure and ground: “Reinhardt persistently sought unity or ‘oneness’ through monochrome, a process eventually so refined that, in the black paintings, the picture plane seems spatially indivisible” (1990:34). In his *Theory of Colours*, Goethe discusses the significance of using monochromatic tone, explaining that, “In order to experience these influences [of colour] completely the eye should be entirely surrounded with one colour; we should be in a room of one colour, or look through a coloured glass. We are then identified with the hue, it attunes the eye and mind in mere unison with itself” (2006:168). The expanse of colour within the panoramas creates a sense of the figures floating through the dynamic realm of the metropolis. The elimination of a distinctive figure and ground (which also occurs in the third photographic project) references the relationship between the individual and the whole of the city – drawing attention to the blurry boundaries between the individual and the whole. These images attempt to reconcile this relationship by providing a space of reflection in which the viewer can contemplate his /her connection to the greater whole of the urban sphere.

In *Concerning the Spiritual in Art*, Wassily Kandinsky asserts that colour has a powerful impact upon the psyche as well as a physical effect when perceived by the eye; colours “produce a corresponding spiritual vibration, and it is only as a step towards this spiritual vibration that the elementary physical impression is of importance” (1977:24). Kandinsky discusses scientific studies of coloured lights and the various sensations that they purportedly generate within the body, he gives the example of red light stimulating the heart while blue light may cause temporary paralysis (1977:25). Various colours have numerous associations which we attach to them based on history, literature, art, personal memory, and other factors; each colour can engender a different response within individuals based on all of these elements. Kandinsky explains that red has a connotation of fire or sunset, while blue has a

heavenly connotation; he proposes that colour has the potential to “make a picture a living thing, and so achieve an artistic expansion of space” (Kandinsky 1977:45). Goethe declares that “particular colours excite particular states of feeling” (Goethe 2006:168); he claims that colour creates delight within people and that the eye requires colour “as much as it requires light” (2006:167).

Third Photographic Project: Light

The relationship between colour and light is the starting point for the third project of this thesis, which explores how light affects the perception of urban temporality. Colour is made up of different frequencies of light and as Donald Judd proclaims (in writing about Dan Flavin’s light sculptures): “ There isn’t any difference between the light and the colour; it’s one phenomenon” (2004:57). These frequencies of light evoke different sensations and associations, including indications of the time of day and year. For example, orange leaves are generally associated with autumn, while colourful flowers are a sign of spring. A yellow-reddish hue in the sky indicates sunset, while dark blue tells us that night has fallen. These associations may seem obvious, but I believe it is important to look at how these banal, everyday indicators of temporality affect how we make sense of the urban realm and how we navigate the relationship of the individual to the whole of the city. By looking at these simple elements within visual perception, a greater understanding of the relationship between the fragments of daily life begins to unfold, thereby creating more awareness of how basic factors such as the interplay of light and colour impact on our sense of self in relation to the urban sphere.



Finsbury Park, study of light, author's photograph
(► see DVD 1 – Chapter 22)

Starting from this point, I began photographing sunlight in Finsbury Park, a park near to where I lived (from Feb. 2010- Dec. 2011) and through which I walked daily. Using coloured filters on my Nikon Coolpix digital camera I started capturing yellow, red and orange hues, allowing the sunlight to overexpose and saturate the images, which created planes of mostly monochromatic colour. The red tones created more opaque images while the yellow tones allowed more transparency and evoked a more ethereal, ephemeral quality to the images (► see DVD 1 – Chapter 22). Goethe claims that yellow is the closest colour to light and it “carries with it the nature of brightness” and has a “softly exciting character” (2006:168). From there I began photographing in other sites in central London, including Soho and Euston, using a blue filter on the camera (► see DVD 1 – Chapters 28, 29, 30 and 31). I wanted to use a contrasting colour to the yellowish hues – blue also has a transparent quality, however it is denser than the yellow yet not as dense as red. I continued to overexpose the images using the light of the sun to overwhelm the sensor on the digital camera in order to create a disorientating effect. (In chapter 5, I will examine the role of light in terms of its dual nature – its potential for facilitating sight and hindering it). This photographic project explores the role of light within the perception of urban temporality, specifically examining the change in the relationship between

light and time due to industrialisation and urbanisation. There has been a marked shift in the reliance upon natural light in controlling the rhythms of daily life. Electric light has drastically altered the boundary between night and day within the urban sphere, creating the possibility of a 24-hour city. As Paul Virilio has theorised, the traditional diurnal rhythm of human activity has been disrupted by electric light, most notably with digital technology allowing images to be transferred at the speed of light. The sense of time and space has shifted due to this speed of light technology, with past, present and future appearing to occur simultaneously. The human mind perceives the speed of light to be instantaneous, thereby erasing past, present, and future (Virilio 1991, 2008a).

This disruption of temporality by light creates a sublime effect, whereby it is difficult to orientate oneself within the time and space of the city – this photographic project highlights this disorienting aspect of light. The images within this project experiment with overexposure and underexposure of light in order to reveal the often taken for granted role of light within the perception of the urban realm. The perceived immateriality of light is an important factor in the way in which the role of luminosity is taken for granted – light is intangible, yet this does not diminish its power to affect the material world.

There is a fine line between complete abstraction creating dissolution of form and the preservation of form and figuration. These images relied upon experimenting with this boundary between legibility and non-legibility within the frame. In order to achieve the disorientation that occurs within the images, I overexposed the shots by pointing the camera towards the light source, which created an interaction between the coloured filter and the beams of light hitting the filter. The different coloured filters produced varying effects and each circumstance and situation in which I photographed, the light conditions fluctuated, thus creating more room for chance and experimentation. It was impossible to predict the results of the interaction between the filters and the light in each instance of photographing and filming. I relied on the chance nature of this combination of light and colour to produce different results each time. By repeatedly photographing in the same

or similar locations I began to develop a consistent technique for this project, however, it required many hours of experimentation (as with the other photographic projects) in order to produce a substantial body of work examining light and perception. Many of the still images for this project were manipulated primarily within the camera, with less editing in Photoshop required. The interaction that took place within the camera created sufficient disorientation, thus less editing outside the camera was required.

Again using the technique of repetition and experimentation within this project, I became accustomed to the response of the Nikon Coolpix camera when exposed to large amounts of light. The more I photographed, the more adept I became at manipulating the technology and the unpredictability of this process, so that I was better able to use the chance aspect in a favourable manner to produce the desired results. This project required hours of work *in situ* in a variety of locations, including Finsbury Park, Euston Road, East London Overground line, Soho, and New Cross. Some editing was performed in Photoshop for the still images in terms of manipulating the colour and light further, although as mentioned less of this type of editing was required. For this project, the editing that was done consisted primarily of zooming in on details of images to create further abstraction and disorientation. A similar technique was mentioned with regard to the bus project in which I enlarged particular details of activity occurring at the bus stop in order to examine them more closely. In this project, this technique of blowing-up or zooming in was pushed to a more extreme level, producing complete abstraction in certain photos. In addition to this technique, many of the still frames from this project consist of still frames (fragments) taken from moving images (the whole) (►see DVD 1 – Chapter 23). Using the same process as described in the previous chapter, I broke the moving image down into still frames and then sifted through the multitude of images, subtracting single frames and thus highlighting these fragments (see example below):



East London Line, still frame from moving image, author's photograph

The moving images within this project were taken primarily from the East London Overground line (between Highbury and Islington and New Cross) (► see DVD 1 – Chapter 24) with some images being taken in the Finsbury Park neighbourhood, on Euston Road, and in Soho (near Lexington Street) (► see DVD 1 – Chapters 26, 27, 30, and 32). These moving images were created using the same lengthy process described in the previous two chapters, whereby still frames were generated by Photoshop and then these frames were manipulated and pieced back together using Photoshop and Final Cut Pro. I experimented over many hours with the subtleties in the movement of light and the change from one frame to the next, In examining duration and the ability of the mind to synthesise past, present and future in a non-linear capacity, I experimented with re-arranging the frames so that they appeared in a different order than originally recorded, by placing 'future' frames behind 'past' frames and vice versa. This mixing up of the temporality of the moving image has allowed for the nuances of movement to emerge. The often subtle shifts within the movement of light become increasingly apparent when non-linear frames are juxtaposed (► see DVD 1 – Chapter 25). By recording the light and movement in this way, I could examine the sequences of colour and light that inhabit our everyday routes through the

city. The intention of the slowed down, stop-motion moving images is to mesmerise and lull the viewer – to highlight traces of movement, light, and colour that often go unnoticed in the urban realm yet simultaneously mimic the incessant, hypnotic rhythm of the city streets.

Conclusion

Combining art practice with theoretical investigation, this thesis is an attempt to produce a dynamic entity which transcends representation. Using this dynamic research method, I will examine the perception of urban temporality through practice and theory in an iterative capacity. In the following chapters, I will weave together the photographic images and the theoretical discussion by interrogating the relationship between the still and moving image. The relationship between the parts and the whole within the moving image (with regard to montage and the method of deconstruction outlined in this chapter) will be used as a metaphor for examining the link between the individual and the whole of the city. The subtle shifts in movement recorded by the camera and then slowed down through the method of deconstruction will be presented in relation to each photographic project (depicting difference and repetition, the panorama, and light, respectively) in an attempt to highlight the multitude of unnoticed fragments of movement occurring in the everyday urban realm. In the next chapter I will interrogate the perception of urban temporality through an examination of Deleuze's theory of difference and repetition; I will explore the concepts of duration, the virtual, and difference in itself through photographic depiction of the everyday activity of a bus stop in Highgate, North London.

Chapter 3: *The Virtual Urban Realm: A Visual Reading of Difference and Repetition*

The inner workings of the city, the everyday moments and encounters that make up the dynamics of the city's rhythm and movement, are countless. These everyday occurrences are happening simultaneously across the expanse of the metropolis, making it impossible to witness all of these actions. Yet all of these moments in time are affecting each other and affecting the whole of the city in ways that are not always visible, and which can be known only "indirectly" (Shields 2006:284). All of these hidden everyday fragments occurring within the city make up the virtual urban realm. The virtual is no less real than the actual and in this chapter I will argue that the virtual is essential in understanding the perception of time within the city.

Using a Bergsonian and Deleuzian framework, I will interrogate the interplay of temporalities within the city, fusing the synchronic with the diachronic through a visual reading of the city. Using photographic technology I will explore the gap that exists between distinct moments in time and the process of synthesising past, present and future through duration. In other words, I will examine the relationship between the virtual and the actual in the perception of time within the fragmented nature of the urban realm. Bergson's metaphor of the kaleidoscope in his discussion of perception is useful in looking at the overlapping of temporalities within the city (2007:12, 260). The parts within the whole are continually shifting and expanding to create a constantly changing form, yet despite these shifts we see a uniform organism. The same is true for the city – we read the city as a consistent entity rather than various parts that are unattached and isolated. While we may experience heterogeneity within the urban realm and feel at times that there is disjunction between elements, it ultimately functions as a whole and we read it accordingly.

In order to attempt to make the virtual urban realm visible, I have focused on a specific locale within London as the site of a close-up examination of the multitude of daily events occurring within the city. This close-up view will provide the basis for a broader investigation of the hidden virtual realm. For a

period of over a year, I photographed the everyday activity of a bus stop in North London. This bus stop is the end of the line of route 271 which runs from Highgate to Liverpool Street. It is a hub of activity for the neighbourhood as it is situated on the High Street in the centre of shops, pubs, and restaurants (of which there are only a handful in this area). During this period of photographing the bus stop I lived directly across the road and had a unique vantage point from my window on the second floor. This perspective allowed me to view the activity without being noticed (apparently) thus giving me the ability to watch the scenes unfold without interference. Throughout this chapter I will discuss this photographic project in terms of its relationship to the theories of Deleuze and Bergson with regard to the virtual. I will incorporate the images with a discussion of the theory in an attempt to reveal the virtual realm of the city and to push the limits of our understanding of this realm and of perception further.

The virtual potential that lies within all things is continually becoming and we (usually) see the actualisation of this virtual potential rather than the process of becoming. Through this photographic project I am attempting to reveal this process of becoming and to make explicit the differentiation that takes place within actualisation. Through photographic imagery I will examine the relationship between the virtual and the actual using Deleuze's philosophy of difference and repetition and the concept of eternal return. I will consider Deleuze's notion that we must go beyond the self and beyond the human in order to understand the nature of existence. This leads to an investigation of representation and the role of representation in differentiation, perception, and actualisation.



Highgate 271 bus stop, author's photograph

The Virtual, Becoming, and Difference

My aim in photographing the bus stop in Highgate was to gain insight into the virtual urban realm by revealing the elusive process of becoming. I wanted to capture some of the multitude of fragments that make up the whole of the city but which are often hidden. I chose to photograph this specific place because of its banality; it is the centre of daily routine for many people in the surrounding neighbourhood, as it provides transport links to the nearest tube (Archway) and into the centre of London. The routine of the buses coming and going at constant intervals throughout the day and night can be read as a microcosm of the greater city, which is in constant motion. For me, the flux of people and buses was like an ocean with its waves continuously rising and falling, with the tide going in and out throughout the day. Just as the motion of the sea mesmerises and becomes both a focus and a backdrop, the ebb and flow of activity at the bus stop became both the centre and periphery of my daily life. I became fixated on the motion outside my window, sometimes without realising I had been watching for hours at a time, and often while undertaking everyday tasks within the flat. The windows looking onto the street dominated the activity within the flat much of the time with nearly every

visitor experiencing a similar fascination and reflex-like reaction to watch the bus stop and the street. I decided to begin photographing the bus stop activity in an attempt to engage with its rhythm further. I had a privileged perspective in that I could photograph this site almost any time of the day over an extended period. I thus witnessed many moments of the daily life of the city (in this particular location) that would not typically be seen. In this regard, the normally unseen activity of the bus stop is virtual; most people never encounter it and only know of its potential.

Rob Shields defines the virtual as “objects and states that exist but are not tangible, not ‘concrete’. The Virtual is known only indirectly by its effects” (2006:284). Claire Colebrook describes the virtual as “the univocal plane of past, present, and future; the totality of all that is, was and will be” (2002b:1). Although the virtual is intangible and we know it indirectly, it is ever-present and continually affecting everyday existence. The virtual is critical in making sense of the urban realm and how we perceive time within this realm. While the virtual city is bound up with the actual one, its scope extends further and contains much greater potential of becoming. This potential of becoming exists in all things yet it is not always seen; it is hidden and unpredictable but this does not diminish its capacity. Typically we cannot see the process of becoming; rather, we see only the actualisation of the virtual (Colebrook 2002a:126-127). The city is a place of concentrated levels of stimuli and produces an overload of sensory information, which in turn gives it an overwhelming amount of creative potential. The density of the city in a physical sense is mirrored and magnified in the virtual plane. If the virtual always outweighs the actual realisation (Colebrook 2002a:96), then the virtual city is a megalopolis beyond anything that could exist in the physical world.

How can we make sense of the virtual realm if it is hidden? The answer to this lies within the process of actualisation. According to Deleuze the virtual becomes actualised through differentiation¹⁰.

Photography is a tool that can be used as a means of delving into the virtual potential of the city. A photograph differentiates an instant of time from the whole of duration; it isolates a moment of virtual potential and actualises it into a physical object. Photographic images have the ability to capture moments of everyday city life that are unseen due to the speed and complexity of the urban realm. Photography 'stops' movement and transforms it into an isolated, condensed part of the whole, enabling us to view these moments and analyse them as separate. The process of becoming is at work within photography as with all things; however, photographs can help us to contract moments of becoming and to view them as condensed, which is useful in investigating perception. As discussed in the preceding chapter, I have used photography to examine this process of becoming by deconstructing the movement at the bus stop into still images and then reconstructing those images into moving images. The images of the constant activity of the bus stop break up the continuous motion into separate instants. The photographs divide one instant from the next, allowing the viewer to see these moments as different from each other rather than blending together into one indistinguishable whole or going entirely unnoticed. Thus the images actualise the virtual potential of the city in two ways: 1) by 'stopping' the

¹⁰ Deleuze also uses the term 'differentiation'; he makes a distinction between differentiation and differentiation in *Difference and Repetition* stating that the "actualisation of the virtual...always takes place by difference, divergence or differentiation...For a potential or virtual object, to be actualised is to create divergent lines which correspond to- without resembling- a virtual multiplicity." (2004:264). Prior to *Difference and Repetition* Deleuze did not use this distinction (Boundas 1996:91), as he discusses in *Bergsonism* : "It is difference that is primary to the process of actualization... In short, the characteristic of virtuality is to exist in such a way that it is actualized by being differentiated and is forced to differentiate itself, to create its lines of differentiation in order to be actualized" (Deleuze 1991:43). Constantin Boundas explains that differentiation and differentiation are two halves of the notion of difference. Differentiation "is the half which cannot account for itself without prior appeal to the process of differentiation" (Boundas 1996:91); differentiation needs differentiation in order to not "be left subordinate to the concept of identity" (Boundas 1996:91). James Williams explains that differentiation is the process of going from the virtual to the actual and differentiation is the reverse (moving from the actual to the virtual) (2003:21). In this thesis I will employ the word 'differentiation' as I will move between *Bergsonism* and *Difference and Repetition* in my analysis and this will provide uniformity in terminology.

motion and isolating instants artificially; 2) by recording the movement and manifesting this 'unseen' activity into a physical object that can be seen.

Photographic imagery is a tool for analysis that can be useful in understanding how the constituent parts of the continually becoming whole of the city fit together. For example, on DVD 1 – Chapter 10, a boy is shown running for the bus and then banging his fist on the doors in a last minute attempt to board the bus as it is departing, ultimately failing to gain entry to the bus (► see DVD 1 – Chapter 10 and images below). A seemingly unimportant occurrence such as this takes on heightened significance when depicted in this manner. There is a moment of anticipation that leaves the viewer suspended, waiting to see if the boy will get on the bus; the slowed-down pace of the action intensifies this anticipation and creates a dramatic effect where there may otherwise not have been. The drama unfolds as in a film; we are able to identify with the boy and feel a cathartic disappointment as he is left standing there while the bus drives away. These minor events that we witness everyday but often fail to 'see' become emphasised when recorded photographically and then viewed after the fact. Nuances in the activity are revealed (enabled by the technology) through recording and representing everyday movements in this capacity. In another instance, a bus is attempting to depart and it stops mid-way through the manoeuvre, leaving the viewer to wonder what has caused the delay. The motion has been slowed down by the video and this creates a longer pause than would have occurred in the original scenario, thereby evoking an intensified sense of delay and possibly frustration at the stillness of the activity on screen (► see DVD 1 – Chapter 5). Within about thirty seconds, the large black car that was in front of the bus begins to move forward and it is revealed that this has caused the inaction. While it may seem obvious to the viewer that the black car was blocking the route of the bus, it might not have been seen by passers-by from a different vantage point or even by some of the people on the bus. Thus the photographic recording and subsequent digital manipulation of the image provides a nuanced perspective on such everyday actions.



(► see DVD 1 – Chapter 10) Still frames of boy knocking on the door of the bus and subsequently being left behind at the bus stop, author's photographs

Mark Wallinger is an artist who has used the moving image in a similar manner, drawing attention to banal repetition and rhythm of a transitory place. His video "Threshold to the Kingdom" (2000) depicts an airport arrivals area

with passengers streaming through a set of double doors as they enter the terminal. The video is in slow motion and the slow pace allows subtleties of movement to appear which normally would pass unnoticed. At one point in the video it looks as though several people are going to collide as they move closer and closer together (one person moving horizontally across the screen from another area of the airport heading towards the passengers walking through the doors) and this moment has a similar feeling of heightened anticipation to the boy missing the bus in my video, whereby the viewer waits with almost bated breath to find out how the potential catastrophe will unfold. As the people in Wallinger's video draw closer and closer it is revealed that they are, in fact, far enough apart that they do not ever touch – it is an optical illusion created by the slow motion. This instance is important in illustrating how photographic technology can reveal the interconnectedness of fragments of movement and how they fit together to create the kaleidoscopic whole that is continually in motion.

Bergson puts forth a notion of the universe as an open and continuous whole that is constantly shifting, changing and 'becoming' (Ansell Pearson 1999:34-35). The whole is virtual and through actualisation it becomes divided up and differentiated (Deleuze 1991:104). Everything is interconnected; Bergson formulates a theory of perception in which we must cut out pieces of this whole in order to grasp them. There is no absolute boundary between beings and between beings and their environment. In order to perceive we must stop the motion of the ever-changing whole in our minds (Ansell Pearson 1999:34). Through our perception we contract "flows of becoming" so that the continual motion of these flows are reduced to a unified object or quality (Colebrook 2002a:126-127). Colebrook gives an example of a plant which "is not a static thing, although we perceive it as such"; rather it is "the reception of light, heat, moisture, insect pollination and so on..." (Colebrook 2002a:128). Photography can be thought of as a means of this contraction of becoming.

Duration and Univocal Being

Temporality is a key element within differentiation, where “time is duration” (Boundas 1996:92). According to Deleuze, duration has no beginning or end and “it only ever becomes what it ‘is’ – pure becoming” (Ansell Pearson 1999:137). Duration is thus part of this process of continual change and it allows us to perceive change through a continuum of time. Bergson states in *Matter and Memory* that “the universe *endures*”; it is continually moving and creating, thereby duration means “invention, the creation of forms, the continual elaboration of the absolutely new” (2007:11). In this sense duration is a multiplicity – it divides constantly and in this process it changes in kind (Deleuze 1991:42). Thus duration is both heterogeneous (through its differentiation and changes in kind) and continuous:

Duration is a kind of succession which implicates, in a latent form, past, present, and future. Segments of duration implicate each other, each one of them is present in all others and all of them in each one. Duration is succession, but a succession which is *sui generis*. Succession and coexistence must both be asserted of it. (Boundas 1996:93)

Univocal being is another concept that contributes to this continuous aspect of perception. Deleuze states that the key to univocity is that Being is “said, in a single and same sense, *of* all its individuating differences or intrinsic modalities” and that “Being is the same for all these modalities,” yet these modalities are not the same (2004:45). Thus being encompasses all differences in one sense yet these differences “do not have the same essence and do not change the essence of being” (Deleuze 2004:45). Deleuze gives the example of the colour white containing various intensities while still remaining white. There is no contradiction between dualism and monism here because the duality only exists in the actual; in the virtual all levels and degrees exist at once: “All the levels of expansion (*détente*) and contraction coexist in a single Time and form a totality; but this Whole, this One, are pure virtuality. This Whole has parts, this One has a number – but only potentially” (Deleuze 1991:93). Deleuze shows that the seeming

contradiction of Bergson's notion of time as both monism and as multiplicity can be resolved: "There is only one time (monism), although there is an infinity of actual fluxes (generalized pluralism) that necessarily participate in the same virtual whole (limited pluralism)" (Deleuze 1991:82). Both differences in kind between actual fluxes and the differences of relaxation and contraction remain fundamental to Bergson's notion of time. Deleuze concludes that these components give rise to a single time as do virtual multiplicities, and thus "duration as virtual multiplicity is this single and same Time" (Deleuze 1991:83). Furthermore, Deleuze discusses a monism of time, in which the divergent lines of experience meet up again and converge in the 'turn in experience' (Ansell Pearson 1999:27). Dualism results in a return to monism ultimately and it is the virtual which enables this divergence and convergence.

Photographic imagery (still and moving images) can be read as a metaphor for duration and univocal being – they are both one and many simultaneously. On one hand, photographic imagery actualises the virtual potential of its subject matter (the bus stop in this case) by recording movement and capturing it in a visible, finite, material object; yet these photographs and videos are like the Deleuzian divergent line of flight because they then create new virtual potential. In another capacity, the moving image embodies duration and univocal being in a more literal sense. The moving image uses multiple still frames to create a sense of elongated time consisting of many instants. Photographic imagery is part of the process of becoming, and it continues to become once it has been differentiated from the whole; yet through duration these divergent lines ultimately converge once again to create a unified perception. All things are both actual and virtual at the same time (this 'mixture' will be discussed in more detail in the next section), thus photographic technology both isolates parts from the Whole while continually being affected by the Whole and contributing to the becoming of the Whole in turn.

Repetition and the Synthesis of Time

Along with difference comes repetition. Deleuze asserts that difference and repetition are intertwined and one gives way to the other: “difference allows us to pass from one order of repetition to another” (Deleuze 2004:97). Repetition would not be recognised without difference and this difference occurs within the mind through imagination. Repetition is essentially “imaginary” since it is the mind which draws “something new from repetition” (Deleuze 2004:97). Repetition is not the re-occurrence of the same thing continuously since each instant can never be exactly the same. However, the mind both recognises the difference in activity through a synthesis of time and simultaneously sees the action as repeated. Paradoxically, repetition is difference and difference is repetition. In becoming, the whole is always repeating, yet this is the repetition of difference and of constant change. This concept of repetition and difference links with Bergson’s notion of time as both monism and pluralism; time is seen as continuous within our minds yet this is due to a synthesis of the multiplicity of time (past, present, future) and multiplicity of instants that we read as seamless. The time of the city is also read in this way even though it is overlapping and multiple; through duration we view the difference and repetition of the urban sphere as continuous and as part of a greater whole despite the fact that we cannot see this whole in its entirety.

This continuous aspect of duration is achieved through memory. Claire Colebrook explains, “Memory can interrupt the actual present only because memory is real and exists virtually alongside the present” (Colebrook 2002a:33). The present is pure becoming and is active while the past has ceased to act but not to be (Deleuze 1991: 52-55). Deleuze explains that the whole of the past exists in each instant which is ‘virtual coexistence.’ Repetition ensues from this virtual coexistence through the past repeating itself continually:

Duration is indeed real succession, but it is so only because, more profoundly, it is *virtual coexistence*: the coexistence with itself of all

the levels, all the tensions, all the degrees of contraction and relaxation (*détente*). Thus, with coexistence, repetition must be reintroduced into duration – a ‘psychic’ repetition of a completely different type than the ‘physical’ repetition of matter; a repetition of ‘planes’ rather than of elements on a single plane; virtual instead of actual repetition. The whole of our past is played, restarts, repeats itself, *at the same time*, on all the levels that it sketches out. (Deleuze 1991: 60-61)

In other words the present is becoming and continually changing. Recollection becomes actualised in an image that coexists with the present but to which it is also past. We are always living in the present yet the present is a composite of the past and the future. The present is continually passing, yet it is also always present while simultaneously signalling the future (Deleuze 1991:54-72).

Using the bus videos (► see DVD 1 – Chapters 4-10) as an example of this constant passage of the present moment, we can view the continual repetition of the buses coming and going from this point. The moment that one bus arrives, another one leaves and so on. If we are not looking carefully, each bus looks the same and each repeated action appears the same at each moment of the day throughout the days, months, and years. Our minds read the activity as continuous and as a repetition. Paradoxically, we must distinguish between each moment in order to understand that a repetition is occurring in the first place. We know, for instance, that the bus drivers go home at a certain point and then come back at another point even though we do not see this activity. We know this to be true; thus we recognise that difference is occurring and that each moment does not blend together to become the same moment, although it is a continuous temporality.

In referring to Hume, Deleuze explains that the mind is able to anticipate activity based on patterns of repetition that occur. If AB, AB, AB, etc. occurs, when the mind sees A it will assume that B will follow and this is the synthesis of time within the mind (Ansell Pearson 1999: 99-100). Thus we are able to

anticipate what will happen at the bus stop based on what we know from previous experience. We expect that the buses will continue to arrive and depart because this has happened in the past for as long as we can remember. We assume that these actions are the same each day and at each bus stop throughout London. However, nothing is ever repeated; the only thing repeated is difference and this is the concept of eternal return (Colebrook 2002a:121).

Eternal return cannot mean the return of the Identical because it presupposes a world...in which all previous identities have been abolished and dissolved. Returning is being, but only the being of becoming. The eternal return does not bring back 'the same', but returning constitutes the only Same of that which becomes. Returning is the becoming-identical of becoming itself. Returning is thus the only identity, but identity as a secondary power; the identity of difference, the identical which belongs to the different, or turns around the different. Such an identity, produced by difference, is determined as repetition." (Deleuze 2004:50-51)

Thus, each of these actions will always be different from the previous even if conducted by the same person in the same place at the same time everyday. The bus photographs are an attempt to examine this repetition of difference and to scrutinise the seemingly banal and similar events that occur at this bus stop, which is part of the dynamic whole of the city.

'(C)onsciousness cannot go through the same state twice. The circumstances may still be the same, but they will no longer act on the same person, since they find him at a new moment of his history.' No identical repetition of an event is, therefore, possible, because the total survival of the past guarantees the production of difference. (Bergson cited by Boundas 1996:94)

Through the many hours (adding up to days, months, and years) that I spent experimenting with the bus photographs and videos, using the methods

described in the previous chapter, I was able to interact with the nuances of everyday activity at the bus stop repeatedly. This act of looking at the images again and again, then manipulating their speed, colour, and exposure within thousands of frames, frame by frame, has been vital in engaging with the difference and repetition of the bus stop and with the urban realm. For me, this process of repetition through photographing and editing mimicked the repetition of the bus stop; by continually repeating this method of deconstructing the images and then piecing them back together, I was able to perceive difference in a more nuanced capacity. Through repetition of this creative photographic process, I found that difference emerged; for example, in watching the footage repeatedly and by manipulating the images constantly, I noticed details, such as the reflection of cars in the bus windscreen emerging that I had not seen previously (► see DVD 1 – Chapter 8). Through the repetition of manipulating the images, differences such as this surfaced more prominently. In some instances I studied these differences in greater detail by focusing solely on certain movements, e.g. the reflection of cars in the windscreen, the reflection of headlights on the pavement (► see DVD 1 – Chapter 7) or the movement of people as they waited for the buses, often pacing back and forth, moving around erratically (► see DVD 1 – Chapter 9).



Highgate, author's photograph

The depiction of repeated instants from the bus stop in various colours references the repetitive quality of the everyday urban realm. I am drawing attention to the monotony of seemingly repeated activity that occurs daily throughout the city – the constant stream of buses, trains, cars, and commuters that make similar journeys or perform similar actions each day. As mentioned in Chapter 2, Andy Warhol’s use of photographic imagery, in which he depicted the same image repeated in several colours (Foster 2012: 113, 120), has influenced my photographic work. In the vein of Warhol, I have applied multiple colours to the same image, causing it to appear nuanced and allowing difference to surface. Using Deleuze’s notion of repetition and difference, each repetition is different from the next, however, we do not always recognise this phenomenon; the use of colour in my photographs and videos is an attempt to highlight this difference occurring within repetition. I have used the same frame repeated in different colours; I have also used varying shots and varying sequences of footage in multiple colours, in which the activity performed is repeated across the different videos (e.g. waiting for the bus, the bus pulling into the stop, passengers boarding the bus, running to catch the bus, etc). By becoming aware of the difference and repetition of the multitude of these actions, we can begin to make sense of the city as a place of constant becoming. We can gain an understanding of the urban realm as a site of infinite difference, which comes together through both a multiplicity and a unity of time that allows us to see it as a continuous whole.

The Event

The repetition of difference is produced by a series of events. Events “introduce change and difference” yet they are not new occurrences (Williams 2008:1). Events introduce novelty yet they exist within an ongoing series – they are dual by nature: “*No event is one-sided and no event is limited since they take place in infinite and multiple series that only exist as continuing mutual variations*” (Williams 2008:2). The event has a dual existence: it is the time which happens to us and which lives beyond us. The event continues to exist beyond the present and beyond the individual and specific state of

affairs in which it occurs, thereby allowing it to be incorporeal and virtual (Ansell Pearson 1999:124).

Photographs are a type of event. They are, in fact, singularities. Singularities are ideal events which are “turning points and points of inflection” such as “points of fusion, condensation, and boiling” (Deleuze 1990:52). Singularities evoke difference yet they avoid falling into the trap of identity: “*Singularities are a non-identical determinant of individuation, because they determine the process, but are themselves always variations or turning points across changing series rather than things with a fixed identity and location*” (Williams 2008:93). The act of taking a photograph is a point of significance which crystallises the captured action. If we put a series of photographs together, such as with the bus photographs, they become a series of singularities through which our duration allows the flow of time to be continuous. Colebrook states that: “Singularities are not images *within time* – not perceptions organised into a coherent and ordered world – they are the events from which the difference of time flows. Time, or the flow of life, is just this pulsation of the sensible events or singularities, which we then experience and perceive as an actual world” (Colebrook 2002a:127).

Singularities transcend the self as they “preside over the genesis of individuals and persons” and are “distinguished in a ‘potential’ which admits neither Self nor I, but which produces them by actualizing or realizing itself” (Deleuze cited by Colebrook 2002:34). Photographs live beyond the physical world they record; they have a life of their own and they become more than the physical objects they inhabit. The potential of photographic imagery reaches beyond what each image represents. Photographic images allow us to see the coexistence of the past with the present (normally this occurs through memory) and yet this does not mean that there is one true past. The past that is captured in the photograph will mean something different to each person who sees the image. Furthermore, photographs may help us anticipate the future based on the action presented in the images. Photography as event allows us to go beyond the limits of the actual realm and tread the line between virtual and actual existence.

The moving image is also a type of event. Colebrook discusses cinema as singularity in terms of presenting images that take us out of our everyday ordered reality and “allow us to think the singular and specific differences from which life is lived” (2002a:34). Maurizio Lazzarato argues that video technology crystallises time and enables images to exist beyond the ‘physiology of our bodies’ so that they can “dilate and contract ‘beyond the turn in our experience’” (2007:110). Deleuze’s writings on cinema are useful in examining the role of images within perception. His analysis of movement is of particular importance. Movement is both “that which happens between objects or parts” and “that which expresses the duration or the whole” (Deleuze 1986:11). There are both immobile and mobile sections making up this movement and the whole. The mobile sections are ‘movement-images’ and these are “pure movement extracted from bodies or movement things” (Deleuze 1986: 23). The movement-image is essentially a “movement of movements” (Bergson cited by Deleuze 1986:23) in that it extracts the essence of the movement of objects.

Deleuze premises his analysis of the moving image on Bergson’s theory of perception in which there are two simultaneous systems of intertwining images. Bergson states that the aggregate of images that make up the universe are in constant motion without a central point. Their movement is decentralised and all images are influencing each other equally. The body, however, is a privileged image – it is the primary image from which we perceive all other images. When this image moves or changes, it causes the other images to change and in this sense there is a central image around which all others revolve (Bergson 2007:12-13). Deleuze expands on this dual system in his analysis of cinema. He asserts that film comprises many “any-instant-whatevers” that are equidistant and which “create an impression of continuity” while at the same time cinema also relies on “privileged instants” (Deleuze 1986:5). These any-instant-whatevers make up the bulk of what we see in the urban realm. For example, the activity at the bus stop is a constant string of any-instant-whatevers and the photographs I have taken are an actualisation of these instants. The photographs are both mobile and

immobile sections in that they stop the continuous whole in a specific instant, yet they also reveal the movement and the change occurring within the whole. One of the main objectives of this photographic research is to reveal this movement that may not be perceived consciously in the everyday urban realm. By slowing down the pace of the activity into still photographs and then creating a moving image from these photographs, I am attempting to expose the connection between the any-instant-whatevers and the greater whole.

Montage

As discussed in Chapters 1 and 2, montage plays an important role within the perception of the moving image. Deleuze defines montage as “composition, the assemblage [*agencement*] of movement-images as constituting an indirect image of time” (1986:30). The succession of shots creates a whole that is unique and that would change if any of its constituent parts (shots) were changed. By placing adjacent images in rapid succession the mind interprets cinema as moving. Thus the positioning of images affects the way they are read. It is not simply the content within images that becomes significant but equally the order in which they occur and the relationship between the images. By placing certain images next to each other this affects the greater whole in which these images are contained. Sergei Eisenstein explained that montage required the viewer to engage in a two-stage process by “first recognizing the separate elements, the discrete scenic spaces, and then experiencing the dynamic process by which they were assembled into an image” (Eisenstein cited by Boyer 1994:48).

The videos I have made of the Highgate bus stop incorporate montage as a central component. In the first instance, I have taken still images and placed them together to build ‘moving’ images in order to find out how the juxtaposition of these images changes the nature and perception of them as a whole (► see DVD 1 – Chapter 4). I have also taken video footage and broken it down into individual frames; then I have taken some of these still frames and pieced them back together using montage (► see DVD 1 – Chapter 6). Through this process I am inviting the viewer to perceive the

temporality of the bus stop in a different capacity. By isolating and slowing down motion, I am drawing attention to the difference and repetition of the everyday rhythm and activity of the bus stop, which in turn may provide insight into how these instances or fragments affect the whole of our perception of this site and of the greater whole of the city. By examining how the juxtaposition of images changes the whole, we can begin to understand how the fragments (instances of time, memory, imagination) within the urban realm come together to form perception.



Highgate, author's photograph

Framing

These instants become distinguished from the whole through framing. The framing of an image is crucial in determining what separates it from its surroundings. The frame is finite; it contains only the information that fits within its boundaries. The frame limits what is visible or what is capable of being represented within that bounded rectangle. Privileged instants are a significant factor within the framing of images. As Bergson posited, we choose to focus on images that are of importance or interest to us. Our bodies are privileged images and what we perceive in the external realm

revolves around ourselves and our own duration. Martin Jay describes Bergson's reading of the body as a "vehicle of human choice" which through its movement in the world "provides us with perceptions that are necessarily informed by recollection and anticipation, rather than mere instantaneous receptions of external stimuli" (Jay 1993:193) We choose to frame the images we perceive by deciding (consciously or unconsciously) what to include in the frame and what to exclude.

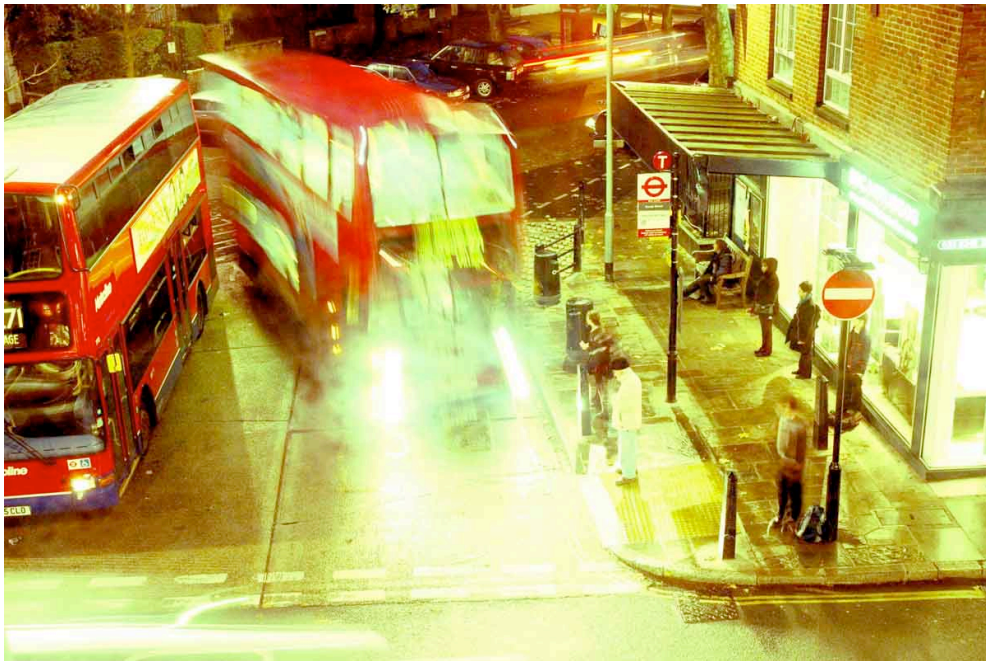
The construction of framing applies to the act of perceiving as well as to the act of photographing. In the case of the Highgate bus project the framing I chose was based on the window frame in my flat. Thus there are two layers of framing occurring within these images: the frame of the camera shutter and the frame of the window. This dual frame emphasises the boundary between privileged instant (or the duration of the photographer, myself) and the any-instant-whatevers occurring around me. The relationship between inside and outside is heightened in this scenario; the actual barrier of the window defining the inside and outside, and the camera providing the virtual boundary between the self (and the images of one's own duration) and the whole. Deleuze states that while we choose to focus on a certain image, or as in cinema where images are presented to us in the frame, we remain aware of the aggregate of images or the whole that exists "out-of-field" (Deleuze 1986:16). The compilation of sets or frames does not comprise the whole but has an "indirect relationship with the whole" (Deleuze 1986:16). Whatever is not included in the frame either exists "elsewhere" or exists "outside homogeneous space and time" (Deleuze 1986:17). That which is left out of the frame is as important as that which is inside the frame. The allusion to the "elsewhere" provides the spatial and temporal link between the frame and what is outside the frame.

In the bus photographs, the 'out-of-field' is the rest of London, yet this is equally as important to the images as the activity at the bus stop which is inside the frame. What is happening within the images references what is outside in terms of the movement of buses in and out of the frame, en route to their destination; buses, cars, and people are continually passing in front of

the camera leaving the viewer to wonder where they are going and whence they came. The relationship of this bus stop to the whole of the city is key to these images. I intentionally kept the frame at a fixed point and did not follow the journey of the buses beyond this point in order to maintain a particular correlation between the bus stop and the rest of the metropolis. I would argue that by keeping the frame fixed on this specific area, its relationship to the rest of the city becomes heightened. That which is absent from the frame speaks louder than if it had been included in the frame; what we cannot see intrigues us as much (or more) than what we can see. The curiosity of the viewer leads him/her to imagine what is outside the frame. This phenomenon references the notion that repetition is imaginary: we do not have to see what is outside the frame to know that it exists and is affecting the activity at the bus stop.

By keeping the frame fixed in this case, I wanted to emphasise the importance of the frame and the relationship between the inside and outside. By forcing the viewer to see the documented activity from this one fixed vantage point, the significance of the frame comes to the fore. Perhaps the viewer may become frustrated with this limited perspective, with not being able to see what happens to the buses and passers-by on their onward journeys. If the viewer were watching the activity first-hand rather than mediated through these photographs, he/she would most likely be able to turn his/her head (or even walk closer to the object of the gaze if on ground level) in order to see beyond this limited frame. By fixing the frame, the movement that normally allows us to control what we focus our gaze upon is paralysed and we no longer have as much input into the information we perceive. This is not to say, however, that our framing is not fixed within everyday life. Just as the camera can obstruct our view through framing, so do buildings and windows and vantage points (street-level versus bird's-eye view, for example). This is where the dual framing in this project becomes significant. The window frame is a common boundary which limits our visual field within the urban environment. It seems that we are often looking through windows from the inside out, whether that be from buses or trains on our journeys through the city. Just as frequently we are looking from the outside into shop

windows or bus windows or even into other flats, observing either consciously or unconsciously. The density of the physical environment within the city creates a layering of objects through which and around which we must adapt our visual perception via windows. While framing our perception and limiting our view, windows also extend the visual field beyond the opaqueness of brick and steel, allowing us to see through these materials in our everyday routines.



Highgate, author's photograph

The Window

This layering effect of windows performs a further function of providing a retreat from scrutiny. The window offers a space from which to observe the rhythm of the city from a distance; being slightly removed from the street yet still immersed in the goings on allows the observer to be “at the same time both inside and out” (Lefebvre 1996:219). Lefebvre remarks that “from the window noises are distinguishable, fluxes separate themselves, rhythms answer each other” rather than being fully immersed in the hustle and bustle when on the street (1996:220). Watching the ebbs and flows of people and

vehicles along the streets of Paris (in Lefebvre's case) or the streets of London (in the case of this project) from an inside window provides both a spatial distance and temporal distance from which to engage (or disengage) with the city. As Lefebvre discusses, the observation from the window can happen over an extended time, spanning the course of the day and night or longer, and this length of time reveals the rhythms of the city as they fluctuate (1996:220-223). Remaining at this fixed point enables the viewer to witness activity that would not be seen if one were passing by the same location on the ground. Thus temporality plays a crucial aspect in observation: "To extricate and to listen to the rhythms requires attentiveness and a certain amount of time. Otherwise it only serves as a *glance* to enter into the *murmurs*, noises and cries" (Lefebvre 1996:223). With the bus stop project I was able to observe the activity at this site over an extended period (approximately 19 months), which created an intimacy and familiarity with the place and its rhythms.

The act of photographing heightened my awareness of the daily rhythm of activity; for instance, I noticed what time of day that certain groups of people gathered at the bus stop and at what time the streetlights were lit. I became attuned to the nuances of the activity in a more conscious way than when observing without the camera. Lefebvre notes that in order to "capture a rhythm one needs to have been *captured* by it" and he goes on to say that "one really understands meanings and sequences by *producing* them" (1996:219). Through photography I connected with the bus stop activity in a capacity that was different to the observation I performed without the camera. The act of taking photographs created another level of engagement with the rhythm and pace of the action on the street; I became more aware of the *mise-en-scene* in terms of the effect of each movement upon the whole picture. In particular, with the still photographs, which I shot rhythmically taking several hundred in quick succession, it felt as though I was mimicking the pulse of the street.

At the same time, however, observing from the window provided a point of disengagement as well. As Lefebvre points out, the window creates both an

inside and an outside perspective from which to view the street. The window allows for a certain critical distance from which to observe the urban rhythms that would typically pass by unnoticed. From the window we are able to perceive how these rhythms fit together (to a certain extent). The window also creates protection from the gaze of the street. On the city streets we are subjected to the gaze of those around us, including observers from their windows. Those watching from their windows, however, are able to escape being the object of this public gaze and this enables them to have a certain amount of distance from which to observe. This gaze and the scrutiny of observation that is inflicted upon all of us within the urban environment (via the human eye and via technology such as CCTV, bank machines, Oyster card readers, etc.) is an important element of everyday life. However, the role of surveillance is not the focus of this project. I am aware that the act of photographing surreptitiously from a window has associations with Closed Circuit Television and may be perceived as an act of panopticon-like surveillance. As I explained in the previous chapter, the reason for the hidden nature of the filming behind the privacy of the window was to interfere as little as possible with the street level activity. I wanted to observe and record the movement as it would take place without the interference of a visible photographer. In addition, the reasons mentioned earlier with regard to the space and distance that the window provides were crucial to this project. If I had photographed in full view from the street level, I would have potentially disrupted some of the activity. For instance, as invariably happens when a photographer is present, people react to the camera by stopping and waiting for the photograph to be taken so as not to walk in front of the camera (this would have defeated the purpose of the project) or they might have altered their behaviour in other ways to appear differently on camera or to avoid the camera. If I had photographed from the street, my presence ultimately would not have interrupted the daily flow of the bus stop with the flux of buses and people carrying on; the images would have become more about my interaction with the people and the buses rather than providing a more distanced view (which I was aiming to achieve). Furthermore, I chose not to perform a systematic 'rhythmanalysis' despite drawing upon Lefebvre's text in my approach to this research. My aim within this project and within this thesis

was to produce research that evolved from a method of theory-practice (as outlined in Chapter 2), whereby photographic practice and theoretical analysis combine to create a method that responds to the dynamism of the urban realm, to the constant becoming and fluidity of the metropolis. This method of theory-practice required flexibility and a non-systematic approach. It was not the aim of this project to produce a systematic analysis of the site or to provide an overview of the rhythms that dictate this place; rather, I intended to disrupt the rhythm of the site by slowing down the pace through the photographs and videos, in order to highlight nuances of activity that may have gone unnoticed. The window frame was a crucial device in allowing me to perform this particular type of photographic interaction with the bus stop and to produce such disruptions of rhythm and pace.

Composites, Intuition and Differences in Kind

Although windows and framing create seemingly distinct boundaries between inside and outside and virtual and actual, the lines of distinction are not rigid and, in fact, all matter is a mixture of virtual and actual: “For Deleuze, the relation of events to states of affairs is not that of the possible to the real, but of the virtual to the actual. The world is actual-virtual, and as such maintains the power of virtuality; the capacity of a thing to become differently” (Fraser 2006:130). Bergson, as Deleuze explains, is obsessed with ‘the *pure*’, however, he is aware that “things are mixed together in reality” (Deleuze 1991: 22). Discussing time and space Deleuze explains how this mixing of differences in kind occurs:

...we make time into a representation imbued with space. The awkward thing is that we no longer know how to distinguish in that *representation* the two component elements which differ in kind, the two pure *presences* of duration and extensity. (Deleuze 1991:22)

Bergson aims to untangle this mixture of ‘reality’ through his method of intuition. There are, however, composites that are acceptable to Bergson and

are, necessary. Expansion and contraction coexist and are relative to one another. Matter is at the limit of expansion; it is not space but it is extensity. Space is not matter or extension but the “‘schema’ of matter” and there are numerous extensities which combine within “our own schema of space” (Deleuze 1991:87). In perception we contract many vibrations in order to sense and what we contract in this process is matter or extension. Thus there is always extensity in duration and duration in matter, and all of our sensations are extensive (each with varying degrees of extension in space) (Deleuze 1991:87). However, matter cannot be expanded to become “pure space” and it will always continue to have “this minimum of contraction through which it participates in duration, through which it is part of duration” (Deleuze 1991:88). Neither can duration become contracted enough to be separate from matter or extension. According to Bergson, matter is a tendency involving relaxation while duration is a tendency involving contraction. Deleuze explains that the present is the most contracted level of the past and “at each instant, our present infinitely contracts our past” (1991:74). Following on from this, matter is the most relaxed state of the present. There are only differences in degree between relaxation and contraction: “Duration is only the most contracted degree of matter, matter the most expanded (*defend*) degree of duration” (Deleuze 1991:93).

Photography is a composite of both temporality and matter – intervals of time captured within the image are imbued with the space of physical matter or extensity of the photographic object. Thus photography is a tool that enables us to explore the relationship between time and space and to begin to untangle differences in kind from differences in degree. Through photographic images we can explore the complexities of duration and its relationship to the physical realm, as photographs themselves are both virtual and actual. Photographs, however, can also be representations and Deleuze proposes that in order to achieve his ultimate goal of difference in itself we must go beyond representation. The *élan vital* is instrumental in achieving this state of beyond representation. Deleuze conceives the *élan vital* as “an internal explosive force that can account for the ‘time’ of evolution as a virtual and self-differentiated movement of invention” (Ansell Pearson 1999:21). The *élan*

vital is the essence of existence; it is neither virtual nor actual; “The élan vital is always a case of virtuality in the process of being actualized, a simplicity in the process of differentiating...” (Deleuze 1991:94). The élan vital is the force that allows the actualisation of the virtual: “Élan vital is difference passing into action” (Boundas 1996:91).

Representation gets in the way of the élan vital and of difference in itself. For Deleuze, modern thought arises from “the failure of representation” and the “loss of identities” (2004:xvii). His aim is to remove identity in terms of thinking about difference because he sees identity as defining the “world of representation” (Deleuze 2004:xvii). In a world of simulacra, identity is merely simulation and is “produced as an optical ‘effect’ by the more profound game of difference and repetition” (Deleuze 2004:xvii). James Williams argues that Deleuze’s *Difference and Repetition* has ambitious aims to show that “all our representations, senses and concepts of identities are illusions (nothing fixed is real)” and seeks to take away those illusions and to connect to difference in itself (Williams 2003:13). Representation prevents difference in itself and repetition in itself from appearing in reality: “True difference and true repetition are excluded by representation” (Williams 2003:120).

For Deleuze difference is distinct from identity and he seeks to “determine difference without defining it in terms of identity or representation” (Williams 2003:55). Deleuze explains that, “We propose to think difference in itself independently of the forms of representation which reduce it to the same...” (2004:xvii-xviii). For Deleuze, difference must distinguish itself and yet “that from which it distinguishes itself does not distinguish itself from it” so that difference ‘makes itself’ (2004:36). Therefore difference must differ from itself and this is achieved through the virtual (Boundas 1996:91).

Duration consists of differences in kind while space contains only differences in degree. Deleuze states that the underlying theme running through Bergson’s work is that, “People have seen only differences in degree where there are differences in kind” (Deleuze 1991: 23). This tendency of failing to identify differences in kind leads to the stating of false problems, which further

confounds perception. Furthermore, we do not always perceive differences in kind due to our inability to distinguish between the multiple components that make up experience and representation. Bergson's method of intuition enables us to detect differences in kind by seeing beyond the divergence of the strands of difference to where these strands intersect once again at a virtual point (Deleuze 1991:28). Intuition presupposes duration and allows duration to extend beyond the purely psychological realm by providing us with the tools to perceive our own duration as well as other durations (Deleuze 1991: 31-35). The human imagination can both perceive its own time as well as the time of the whole beyond its actual perception (past and future), and Deleuze argues that we should use this ability to become "inhuman" (Colebrook 2002a:8).

Deleuze aims to think beyond the human realm. It is the ability to go beyond the human which for him is the ultimate reason for doing philosophy (Ansell Pearson 1999). By freeing thought from the restrictions of the human realm we open up to the "event of becoming" and are able to allow this becoming to unfold: "Freedom requires moving beyond the human to affirm life" (Colebrook 2002a:129). The human becomes "more than itself" not by "affirming its humanity" but by using imagination to go beyond and "overcome the human" (Colebrook 2002a:129). There is a risk in going beyond the human and beyond the self: that of losing oneself and descending into chaos. The self does not actually exist; rather, it exists only virtually as part of the continuous whole. We need to differentiate our individuality in order to function in the world, however. Deleuze challenges us not to become trapped by the actual realm and to think and become beyond this realm through an interaction with difference in itself. We must attempt to access difference in itself beyond identity and beyond representation in order to understand existence and to free ourselves from the confines of humanity and actuality. This going beyond the self is important in my photographic investigation of the virtual urban realm. We must go beyond the self (through the photographs and videos of the Highgate bus stop, for instance) in order to gain insight into other durations, and to understand how our own perception is reconciled with that of other individuals and the whole of the urban realm. These photographs

are an attempt to reveal the interaction of the virtual and the actual by highlighting the subtle intricacies of (often unnoticed) daily movements in order to allow the viewer (and the photographer) to experience his/her relationship to the city in a novel capacity.

Through these images I am seeking to enable the viewer to see the city in a way that is often taken for granted or is simply unnoticed. My aim is to make apparent these unnoticed or unconscious everyday activities in order to examine the relationship between the individual and the whole of the city. My visual reading of the city is an attempt to awaken the viewer to his/her capacity to influence the whole; in a sense, to counteract anomie by making the interconnectedness of fragments (of daily activity, individual actions which seem isolated but collectively make up the whole) more explicit or conscious.



Highgate, author's photograph

Conclusion

Is it possible to move beyond representation? If everything is simulacra and the world is made up of images, where do we draw the line between the virtual and actual? There is no absolute distinction between the end of the

virtual and the start of the actual. As Bergson asserts, existence contains composites in which time and space, duration and matter, overlap and combine. The boundary between the self and the whole is similarly difficult to determine. The whole of the city is constantly changing and becoming in myriad ways. It is impossible to predict what will arise and take shape. The virtual potential of the whole is infinite although not all of it is actualised. This does not prevent the entirety of the virtual realm from being real, however. All of the virtual realm is, in fact, as real as the actual realm. The world is made up of composites in which the virtual and actual realms are intermingled and in which our durations are mixed with matter and space (and vice versa). Paradoxically there is both a multiplicity and a monism of time and of being, which allows for cities (and individuals) to function without disintegrating into formlessness and chaos. The boundaries between form and formlessness are critical – it is important to traverse these borders in order to gain insight into existence and to push the limits of our knowledge further. We will never grasp the entirety of London or any city; it is an impossible task because cities will never be static. Once they are static they will cease to exist. The challenge, however, is to cross the border between form and formlessness without becoming completely ungrounded. It is important to venture into the realm of the virtual and to attempt to go beyond representation to discover difference in itself; yet we must find a way to do so that does not overwhelm us completely.

Deleuze championed the belief that we must extend our thinking outside the human realm and to dissolve the self so that we go beyond the individual and beyond identity. This is a dangerous challenge in that one could lose oneself in this process, yet if one succeeds it will be the ultimate gain in understanding existence. How do we do this without losing all ground and sense of orientation? Photography provides one way in which to explore this boundary between the virtual and actual and between form and formlessness. It is a tool that allows us to go beyond the self and beyond the human realm while still anchoring us in a tangible reality. Through my photographs of the Highgate bus stop, I have attempted to explore the virtual potential of the urban realm and the process of becoming. The photographs are inevitably

subject to the continual becoming of the city and the continual becoming of the self (in terms of myself as the photographer and in terms of the viewer of the images); moreover, the photographs contribute to the becoming of the whole and the self. Once movement and the process of becoming are recorded within the photographs, they have already changed and are continually engendering change upon all subsequent events. There is a cyclical relationship between the photographic images and the viewer, just as there is a cyclical relationship between the virtual and the actual. It is this symbiosis which forms the basis of this research; I am attempting to record a process that seemingly would refuse to be recorded. However, through this so-called impossible task, my aim is to elucidate the role of unpredictability within everyday life and to highlight the importance of becoming; the uncontrollable nature of these images is precisely what gives them their meaning. Within everyday life, we do not know what will emerge although we make predictions based on previous repetitions; without being aware we make sense of an infinitude of actions, possibilities and temporalities through our perception. The existence of photographs extends past the physical realm and creates a new line of divergence into the virtual realm. Photographs are events and their meaning and influence surpass their physical manifestation. Thus, through photography we can actualise the virtual and then in turn this actualisation becomes virtual once again. The virtual potential of photographic imagery exceeds the self; we are freed from the ground of the physical human realm by creating an actualisation that then takes on a renewed virtual potential outside of the self and which actualises again beyond the self.

Through these images I have attempted to create an actualisation of the virtual potential of the urban realm which will then become an individual in its own right (separate from myself). My duration and perception will always be linked to these images; however, they will take on an identity of their own beyond me. I cannot control or predict how, when or where they may be viewed or interpreted in the future and this again is a crucial element in this research. The virtual potential of these images is continually emerging; it is never-ending. In this development of becoming, the images both investigate

the process of perception of urban temporalities and they continue contributing to this process. While it is seemingly impossible to move beyond representation and beyond individuality absolutely (in terms of human perception), these images may provide a means of stepping over the line between self and whole, order and chaos, into a world where boundaries between individuals are dissolved (if only temporarily) and we are free to explore this unknown yet critical terrain.

Chapter 4: *Panoramas of Time: The Urban Sublime*

For centuries the panorama has been a visual tool for representing space, with traditional panoramic representations depicting expansive landscape views. In this chapter, I am reconsidering the panorama as a method for representing time. In the previous chapter, urban temporality was interrogated from a fixed-frame, close-up view of a single location: a micro view of the everyday movements of a London bus stop. This close-up view enabled a dissection of the relationship between the hidden, miniscule and multitudinous events that make up the larger picture of temporality or duration. Continuing with this strand of inquiry, in this chapter I will examine urban temporality from a broader, macro-level view using the panorama as both a methodological tool in the practical aspect of my research and as a theoretical leaping off point from which to investigate the link between ways of seeing the city and the perception of time within the city.

Using Deleuze's notion of the coexistence of time, in which all previous moments are contained in each current and future moment, I will argue that this overlapping of temporalities creates a panorama of time. This panorama of time does not exist in isolation but relates to the landscape through movement. The relationship of movement and time is crucial to the investigation of the perception of the urban realm. Movement of the body plays a primary role within perception as Henri Bergson proposes. The body is the principal means of sensing information and through its movement we are able to explore terrain and make our mark upon the landscape. I will look at movement of the body, in particular the act of walking, within the urban landscape through photographic images. I have created photographic panoramas using both still and moving images to explore the coexistence of past, present and future and to attempt to untangle this sublime multiplicity of time.

Tracing the history of the panorama, I will consider how this device has developed as a response to a shift in visual perspective as well as a shift in the perception of time and space in accordance with industrialisation and

urbanisation. The way in which time and space within the city are constructed and perceived have both influenced the development of the panorama and been shaped by it. The panorama and other optical devices from the 19th century became popularised forms of entertainment amongst the urban masses and were precursors to the rise of the cinema. The panorama's connection to the cinema is important in looking at how it shaped the city and has been shaped by it. The moving image, like the panorama, has a dual nature in its relationship with the urban sphere, coming into being as a result of the changing time and space of the city and simultaneously contributing to the way we perceive time and space. Using Deleuze's writings on cinema, in particular his concept of the 'time-image', I will argue that the sublime figures prominently within the perception of temporality. I will also examine the connection between the virtual and the sublime, discussing visual representation in relation to both. I will compare the emergence of the panorama with the rise of the sublime in the 18th century and argue that there are important links between these two phenomena. I will consider how the sublime operates within the perception of time using Derrida's analysis of the *parergon* and Lyotard's notion of the sublime as event. My panoramic photographs will provide the basis for this exploration of the urban sublime by investigating the boundaries between the individual and the whole (of the city), between figure and ground, and between moments of time.



British Museum, Panorama, author's photograph (► see DVD 1 – Chapter17)

Origins of the Panorama

The panorama painting emerged in the 18th century when nature was an object of particular fascination, with the relationship between humanity and nature being explored in the arts and other disciplines. As discussed in Chapter 1, the panorama originated as a 360 degree landscape painting and it arose as a response to a growing demand within the 18th century to see an

overview of the landscape, to take in nature in one unifying view. Denis Cosgrove asserts that depicting landscape as visual representation is a means of exerting control over it; representation is an attempt to create distance between the observer and the land (Cosgrove 1998:18). In the Romantic period, nature, especially wild nature, became the focus of cultural interest along with landscape (Cosgrove 1998:230-234). Romanticism equated nature with the divine and sought to reveal God within the natural landscape (Cosgrove 1998:230-231). It became a form of entertainment to climb church spires in order to see the horizon, with people becoming 'godlike,' and instead of looking 'heavenward' they increasingly looked down from above (Oettermann 1997:11).

Mountaintops also became sites from which to view the world on high whereas prior to this time mountains had been viewed as undesirable and hostile territory (Oettermann 1997:11). Mountain climbing bore religious import in that it was performed as a means of atonement in order to reach a heavenly state, as mountains were also seen to be the "cloud-wreathed borderland between the physical and the spiritual universe" (Schama 1995:417). By the late 1500's Alpine exploration was becoming more prevalent for brave explorers due to maps and guides of the terrain becoming more readily available, yet it was not until the 1800's when Alpine tourism became popularised (Schama 1995:430-431, 494). The danger that accompanied mountain climbing became desirable as the thrill of the unknown was sought. Pushing the body to its physical limits became part of this thrill; people sought out the sensations that occurred under extreme conditions but they wanted them in milder forms: "What they sought was the edge, a tingle of excitement in situations that were easy to control" (Oettermann 1997:12). The panorama came to the forefront to fulfil this desire of experiencing these extreme sensations without having to be pushed to one's physical limit. The panorama seems to "guarantee a heightened verisimilitude" (Crary 2002:20); the overwhelming feeling of being within the Alps or some other natural wonder could be simulated, with the viewer being able to consume the landscape in a way that was not possible in nature (Oettermann 1997:13).

Angela Miller argues that the panorama coincided with an “international hunger for physically, geographically, and historically extended vision” in an attempt to satisfy a “craving for visual—and by extension physical and political—control over a rapidly expanding world” (1996:35-36). This hunger for vision and control developed alongside the “imperial dreams of the new nation-states of Europe and the United States” with the panorama providing “spatial extension” as well as “the passage of time and the grand sweep of history” (Miller 1996:36). Scott Wilcox asserts that the growth of a literate middle class within the 19th century created an increased awareness, through newspapers and printed media, of the further reaches of the world. Furthermore, a “revolution in travel had made the world seem smaller” and this contributed to an increased desire to see images from other parts of the globe (Wilcox 1988:37).

This desire to explore the unknown and the limits of human experience while simultaneously attempting to tame nature and control the extended landscape is reminiscent of the sublime. As discussed in Chapter 1, the sublime evokes both pain and pleasure within the individual by coming into contact with the whole: the individual cannot grasp the magnitude of the whole and this creates discomfort and fear, yet in sensing what is beyond, the individual is filled with an overwhelming feeling of awe and esteem. I want to argue that the panorama and the sublime operate in a similar capacity, with the panorama providing a visual tool for encountering the urban sublime (I will discuss the urban sublime in greater detail later in this chapter).



Regent Street, Panorama, author's photograph

The Panorama and the City

Although the traditional panorama painting typically depicted scenes of the natural landscape, its influence was felt primarily within the urban realm. The panorama was both a tool for grappling with a newfound perspective of landscape and also became a device in itself for training the eye to incorporate this visual approach to surveying the land and surroundings (Oettermann 1997). The urban landscape that was developing alongside the panorama began to reflect this way of seeing within its spatial and temporal arrangements. The panorama impacted the layout of the city just as the city was influencing its inhabitants to read it as a panorama; there was a cyclical relationship between the panoramic format, the cityscape and the perception of the urban realm (Boyer 1994:41). Thus the panorama affected how the city was visually perceived, teaching city dwellers to view the urban realm in this all-encompassing manner and to take in vast amounts of visual information in one sweeping view.

The development of the panorama was directly linked to the Industrial Revolution and the separation of work and leisure that occurred during this time. The panorama appealed to the masses and it was these masses within the cities that financed the panorama exhibitions; in turn, the panorama was made to appeal to these urban audiences “in both the themes that it portrayed and the manner in which it presented them” (Oettermann 1997:45). Jonathan Crary discusses the relationship between vision and industrialisation in terms of a “structuring of experience” produced by pre-cinematic and cinematic devices in the late 19th century, whereby “the fragmentation of perception inherent to the apparatus is at the same time presented in terms of a mechanically produced continuum that ‘naturalizes’ the disjunctions” so that an “*automation* of perception occurs” and a “synthesis is mandatory” (1999:138). The observer must synthesise the often disjointed images in order to create a unified vision. An example of this synthesis is the Kaiserpanorama which presented a “mechanized series of photographic images” of various scenes spanning the globe, from Rome to the Great Wall of China to the Italian Alps, in 120-second intervals, forcing the

viewer to make the connections between these diverse images (Crary 1999:136-138). This synthesis taking place within the mind, a piecing together of fragments, reflects the speed and the kaleidoscopic quality of the urban sphere. This process resembles how fragments of the city are perceived by the urban dweller passing through the morass of objects and people in constant motion, shifting and turning in incoherent and jumbled (yet not necessarily disorderly) ways. The panorama along with other visual devices, including the Kaiserpanorama, and then ultimately the cinema were bound up with this way of piecing the world together through images, a process similar to duration and the notion of perception promulgated by Bergson and later by Deleuze.

Along with the fragmented nature of being in the city, the panorama also conjured the phantasmagoria of the urban realm. Viewing the 19th century panorama was a phantasmagoric experience in its own right (Crary 2002:18-19). The original panoramas were often shown in carefully constructed exhibition spaces (usually large rotundas) with specially designed viewing platforms and lighting effects that maximised the experience of verisimilitude in viewing the landscape scenes (Wilcox 1988:17,20; Sternberger 1977:8-10). Walter Benjamin likens the panorama to the arcades of the modern metropolis, stating "The high point in the diffusion of panoramas coincides with the introduction of arcades" (Benjamin 1999b: 5). Both the arcade and the panorama were simulated environments in which one's senses were stimulated by the lavish visual display. The panorama and the arcade have similar purposes of entertainment and consumption. While the arcade was ostensibly a shopping arena, many people would visit simply to look at the items on display as a form of entertainment (Benjamin 1999a). The arcade functioned as a type of panorama with the expansive displays of merchandise mesmerising the consumer, creating a panorama of commodities that the eye had to scan in order to take in the plethora of visual information. Moreover, Susan Buck-Morss explains that panoramas were often contained within arcades:

providing sweeping views that unrolled before the spectators, giving them the illusion of moving through the world at an accelerated rate. The experience corresponded to that of moving along a street of commodity display windows. (Buck-Morss 1989:82)

Buck-Morss recalls that Karl Marx used the term phantasmagoria to “refer to the deceptive appearance of commodities as ‘fetishes’ in the marketplace” but for Benjamin “the key to the new urban phantasmagoria was not so much the commodity-in-the-marketplace as the commodity-on-display” where these desirable commodities-on-display “held the crowd enthralled even when personal possession was far beyond their reach” (1989:81-82). In this sense the panorama was a commodity on display that mesmerised viewers and took them temporarily beyond their reach into another realm. The panorama could also be described as phantasmagoric in another sense. Terry Castle discusses the original *Oxford English Dictionary* definition of phantasmagoria as “A name invented for an exhibition of optical illusions produced chiefly by means of the magic lantern” (1988:27). Later definitions refer to “a shifting series of phantasms or imaginary figures...as called up by the imagination, or as created by literary description” (Castle 1988:27). He examines both uses of the word throughout the technological developments of the magic lantern and other optical illusory devices. Castle states “phantasmagoria gave way to new kinds of mechanical representation” and he cites such devices as the panorama, bioscope, and stereoscopic projection as providing “the inspiration for early cinematography” (1988:41-42).

The panoramic images that I have created examine both this phantasmagoric and fragmented nature of the city; through these photographs I am considering how the perception of time and space has shifted with the rise of industrialisation and urbanisation. As previously discussed, the 18th and 19th century panorama took hold within this shifting perspective of the temporality and spatiality of the city while also shaping urban vision. In my panoramic photographs and videos I attempt to reconsider the panorama and its relationship to the city as well its role within the perception of urban temporality. The still photographs piece together fragments of movement in

one long panoramic image: using montage I have digitally sewn together several still frames of figures walking through public spaces of the city to create the illusion of continuous movement. This montage technique mimics the device of the moving image yet the stillness of the image creates a layering of past, present and future in a horizontal capacity, thereby revealing the coexistence of time in a tangible, material, and less ephemeral manner than the moving image. Within the moving image, the still frames that make up the illusion of movement are hidden, with each frame passing in quick succession – we only see the present action, the rest is stored in our memory similar to the way we perceive movement in the material world. In contrast, the images I have created purposely lay past and present side by side to create a material presentation of the coexistence of time. The videos attempt to achieve a similar goal while presenting a moving panorama – this moving panorama is also an overlapping of multiples frames with past and present coexisting on the screen, disrupting the seamless illusion of typical moving images. For example, the red moving panorama shown on DVD 1 – Chapter 19 and DVD 2 presents a split screen (see chapter 2 for a detailed explanation of the method used to create this video) depicting the same figures walking from left to right. The two screens, which show identical sequences of the same figures walking, are staggered so that there is a temporal lag between the images – thereby portraying the past, present, and future of the sequence simultaneously. The girl running through the video disrupts the uniformity since she is moving at a faster pace – her action reveals the temporal lag of the fused screens which constitute the moving panorama. If the two screens displayed a twin sequence with the same start and end point, the girl would not run across the screen – her action would be shown as a double image. This video was the most technically difficult image that I produced, as it required many hours to align the screens and adjust the sequences in order to portray the coexistence of time in this continuous manner.

The Urban Sublime

Both the phantasmagoria and fragmentation of the metropolis have created and continue to create simultaneously a pleasurable and disturbing experience – a duality of delight and disgust, evoking the sensation of the sublime. The sublime regained popularity in the 18th century coinciding with the emergence of the panorama, and it was associated typically with nature, often being depicted through paintings of dramatic landscape scenes (for example, the work of Caspar David Friedrich). However, just as natural landscapes can evoke the sublime, the city also conjures sublimity within those who encounter it. The city is overwhelming in its pace and magnitude; it is impossible to grasp the entirety of the city, to see the whole of the metropolis. The city refuses to be contained and continues to grow, sprawling outwards, upwards and downwards. The vastness of the urban sphere creates both feelings of pain and pleasure; it allows for freedom through anonymity and opportunity (for some) while simultaneously evoking fear, frustration and alienation for others. The city is a site of endless possibility and this can be both exhilarating and terrifying. We can never understand the city fully, nor can we control it; therefore it is a sublime entity that eludes our perception. The temporality and spatiality of the city are sublime in that they are both incomprehensible and enlightening; by coming into contact with the time and space of the city we are able to realise what is beyond the self and begin to understand how the self and the whole are connected (even though ultimately this connection is unfathomable). There is a tension between wanting to control the city through seeing overtop of it and wanting to be swallowed up by its labyrinthine streets. The disjointedness of the city gives us the time and the space in which to explore possibilities that are not present elsewhere, yet the expanse of the city's time and space also overwhelms us.

As the modern industrialised city emerged at the beginning of the 20th century, the panorama evolved to keep up with the technological developments occurring at this time. Panoramic views of the city became popular as the modern industrialised city emerged – these views were attained both within the landscape of the urban sphere and within

photographic and cinematic representations of the metropolis. Photographers began taking panoramic images of cities, such as Eadweard Muybridge's photographs of San Francisco in 1878 (Keller 2010:224).



San Francisco, Eadweard Muybridge, 1878 (please note: this image depicts only one section of the 13 plate panorama)

(http://gawainweaver.com/images/uploads/Muybridge%20Panorama_900px%20high.jpg)

Panoramic views of the city also became prominent within early film in which “a variety of picturesque vistas across the city space” are depicted from the tops of buildings and diverse perspectives throughout the city (Bruno 2008:21). Thus this desire to consume the landscape from above and to continually reach new heights in order to see overtop of the world transformed itself alongside the development of the industrial metropolis, from a pre-industrial pursuit to an industrial one.

Christine Boyer describes the layout of the early 20th century city as “an open and expansive panorama” which was enabled through new and faster modes of transport (for example, the railroad) as well as higher vantage points from which to view the city (e.g. skyscrapers and airplanes) (Boyer 1994:40). The “City of Panorama” was a “city of soaring skyscrapers and metropolitan extension; a spatial order when seen from a bird’s-eye perspective that requested deciphering and reordering” (Boyer 1994:41). Dolf Sternberger also describes the experience of the railroad as transforming the landscape into a panorama by connecting “previously remote places” and by turning “the

eyes of travellers outward, offering them a rich diet of changing tableaux” (1977:39).

The panoramic view of the city was a means of coping with the sublimity of the urban sphere. It has been suggested by André Jansson and Amanda Lagerkvist that panoramic views of the city create a “cosmeticised” vision of the metropolis, noting that by the end of the 1920’s “corporate aspiration and the symbolisation of power had in popular perception been mythologised by an invocation of the city as a silhouette, the city as theatrical façade, the city viewed from across the river” (2009:25). This panoramic vista of the city skyline from a distance becomes an abstracted silhouette, constituting a symbol of modernity and standing in for the actual city; the panoramic representation of the urban sphere becomes the city in this sense and subsequently influences how the city is viewed and interacted with by its inhabitants and visitors. Jansson and Lagerkvist argue that this abstraction and distancing provided by the panoramic view allows the city to emerge in a more digestible form that can be consumed and comprehended more easily (2009:27-28). Ralph Hyde proposes that the desire to see the city from above must “be as old as the city itself”; he claims that the panorama was not an invention but merely a device that “captured, reproduced, and marketed” a long-standing “compulsion” to view one’s surroundings from great heights in order to “distance oneself from the detail and appreciate the whole” (1988:45).

As with the 18th century fondness for climbing mountains in order to see above the horizon, the city offered the opportunity to see the world from on high. From the top of a skyscraper or from the window of an airplane we can see what we believe to be the city limits but this is only an abstract view; we cannot see what is happening on the ground or underground or inside the walls of the very skyscraper from which we peer. From such heights the city appears as an abstract blob or blurry shape that can help us to understand to some degree how all of its constituent parts fit together, but it is far from knowing the city as a whole.

The juxtaposition of viewing the city from above versus from below has been discussed by many scholars (most notably Michel de Certeau). I do not wish to reiterate the debate that these writers have already outlined; rather, I want to propose a more nuanced approach of investigating the notion of closeness and distance. I am interrogating closeness and distance through movement of figures walking within the urban realm, looking at their relationship to the time and space of the city using the panorama as the framework for this exploration.

The photographic images that I have taken use the panoramic format to explore the urban sublime. In particular, I am looking at the sublimity of time within the city: time as a formless infinitude that is impossible to grasp fully, yet a concept that we must grapple with constantly in order to make sense of the city and of our relationship to the city. I am exploring the sublime from the ground level (rather than from above) in order to highlight the relationship between the individual and the landscape. I am interrogating how the interaction of the body with the ground (through walking) gives rise to the sublime.

Temporality, the Moving Image and the Panorama

The movement of the figures within these panoramic images is fundamental to my examination of urban temporality and the urban sublime. Movement is a crucial element within the perception of temporality; the relationship between movement and time plays a vital role within the process of perception and within duration. The representation of movement and the representation of time were the subject of much experimentation and fascination in the 19th century leading up to and including the invention of photography and cinematography. The panorama painting and then subsequently the moving panorama were “antecedents of the cinema” (Miller 1996:38) – they were important developments within this attempt to capture movement and time within an image.

Jonathan Crary argues that temporality first became associated with vision and perception as a result of the fascination with the body in the 19th century. Through the various scientific experiments which looked at the physiology of the eye and perception, several optical devices were invented to study the concept of the afterimage. The phenomenon of the afterimage became central to a new formulation of vision in which the observer is seen as autonomous, whereby “an optical experience that was produced by and within the subject” occurs (Crary 1992:98). The afterimage effect introduces temporality into vision in the sense that the images change over time within one’s mind. Perception and cognition were seen by many in the 19th century as “essentially temporal processes dependent upon a dynamic amalgamation of past and present” (Crary 1992:98). The studies of afterimages led to the creation of several optical apparatuses, which eventually became forms of entertainment: “Linking them all was the notion that perception was not instantaneous, and the notion of a disjunction between eye and object” (Crary 1992:104). Some of these optical devices included the thaumatrope, Farraday wheel, phenakistiscope, and diorama (Crary 1992:112). These devices all attempted to create an illusion of movement with images, thus they were the precursors to the modern cinema. The panorama was also a precursor to the moving image. Although in its original format the panorama painting did not present movement, later versions of the panorama attempted to evoke a sense of movement (Oetterman 1997). Furthermore, the phantasmagoric spectacle of the panorama presented to the urban masses was the forerunner to the modern day cinematic experience.

Thus the panorama metamorphosed from its original 18th century painted format to photographic and cinematographic formats. The cinema eventually took over from the panorama as the preferred form of mass entertainment within the city (Oetterman 1997, Hyde 1988). Many of the first films were panorama films, with this type of film being the largest genre of moving images produced between 1896 and 1912 (Uricchio 2008:104). Giuliana Bruno assigns the origins of the moving image in part to the ‘vedutismo’ or ‘art of viewing’ the city that she claims “emerged in early modernity, before panorama paintings” (2008:22). These city views were paintings depicting

urban scenes and had “become an autonomous artistic genre in the late seventeenth century, evolving from a pandemic of urban imaging and the drive to geographical expansion” (Bruno 2008:22). Early film, particularly the panorama genre, took its influence from view painting and filled in the gaps that painting could not render. The technology of the moving image was able to portray the fleeting moments of the city and create views (such as the bird’s-eye perspective) that were only imagined by the painting, thus modernising the image of the city (Bruno 2008:22). Stephen Barber asserts that cities in the first half of the twentieth century were transformed by the moving image being “brought into existence through the impetus and movement of film images, viewed collectively in the form of exhortative newsreels and feature films within crowded cinema spaces” (2002:17).

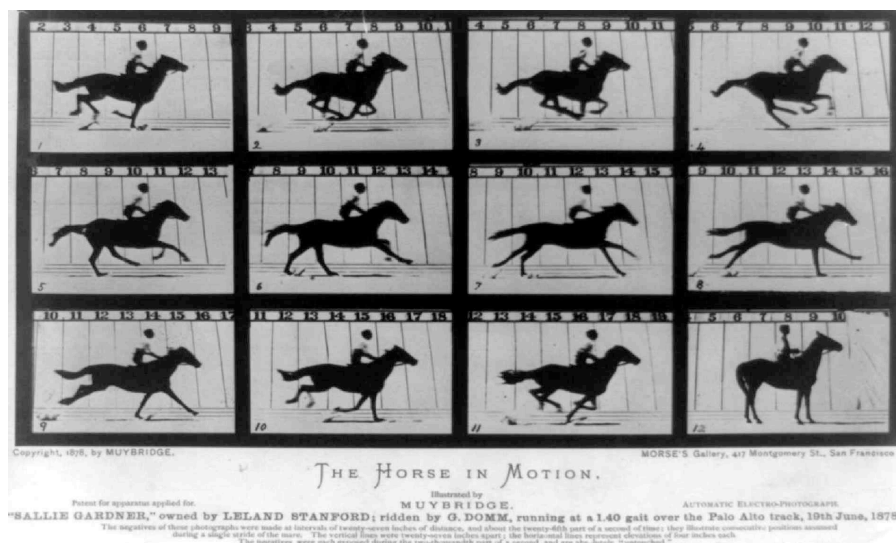
However, prior to the invention of the moving image, Eadweard Muybridge and Etienne Jules-Marey experimented with representing the relationship of movement and time through photography. Both photographers recorded the movement of figures (animals and people) through space using slightly different techniques. Marey’s photographs captured the sequential movement of bodies in a series of action shots that were unified in a single frame, while Muybridge’s images depicted various stages of movement in multiple, separate frames. Muybridge’s photographs perform a function of deconstructing movement and presenting to the viewer through technology what the human eye cannot detect, while the discontinuity imposed by the individual frames of his images allowed for a way of seeing that coincided with the temporalities of industrialisation (Crary 1999:139-142).

Jonathan Crary argues that Muybridge’s images reflect the shift in perceived notions of time and space of the 19th century created by industrialisation:

The segmentation of Muybridge’s work should be understood not simply as the breakup of a perceptual field but also as the claiming of an instantaneity of vision from which space is deleted. It announces a vision compatible with the smooth surface of a global marketplace and its new pathways of exchange. ... *The Horse in Motion* has to be

understood as an uprooting of perception from any stable time-space coordinates. (Crary 1999:142)

In the 19th century, notions of temporality were shifting due to industrialisation and urbanisation creating faster modes of transport and production, as well as different forms of visual representation (Webber 2008, Kern 2003). The speed at which things moved within the city began to shape how time was perceived (this discussion was begun in Chapter 1 and will be returned to later in this chapter).



Muybridge, *Horse in Motion*, 1878

(<http://inventors.about.com/od/weirdmuseums/ig/Eadweard-Muybridge/The-Horse-in-Motion.htm>)

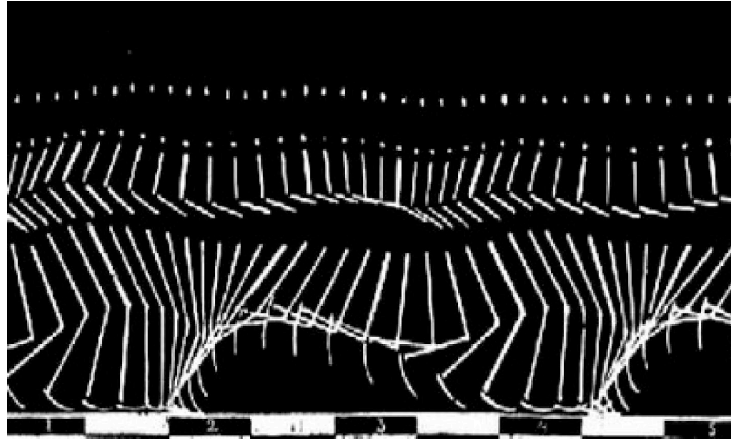
Etiennes-Jules Marey also made photographic studies of the movement of bodies through space. His work differed from Muybridge in that he used a single camera and a single photographic plate to capture the successive stages of movement in one frame (Doane 2002:49). Marey's method was called "chronophotography" due to its focus on the representation of time, yet Mary Ann Doane argues that his primary concern was movement and that time was a "by-product" of his "obsessive concern...with the analysis of bodies in motion" (2002:46). Following the studies of Hermann von Helmholtz in physiological time, Marey was interested in the concept of "lost time" which was the "time during which nothing seems to happen- the time between the

reception of the nervous shock or impulse by the muscle and the muscle's contraction" (Doane 2002:47). This "lost time" is similar to Bergson's notion of the gap between received movement and executed movement within perception: "The human experience of perception hence pivots upon a temporal lag, a superimposition of images, an inextricability of past and present" (Doane 2002:77).

Marey's images disrupted previous notions of temporality and spatiality due to the multiple images of a single figure appearing within the frame. Marta Braun explains the revelatory nature of Marey's work:

Since the advent of linear perspective in the Renaissance, the frame of an image has, with rare exceptions, been understood to enclose a happening at a single instant in time and in a single space. Marey's photographs shattered that unity; viewers now had to unravel the successive parts of the work in order to understand that they were looking not at several men moving in single file, but at a single figure successively occupying a series of positions in space. (Braun cited by Mary Ann Doan 2002:49)

Marey's photographs were characterised by blurring due to the overlapping of figures in the frame; moreover, the amount of detail within the images in turn led to abstraction of the pictures. Marey began to remove some of the detail within the photographs in order to create further abstraction- he did this by clothing the subjects in black and attaching luminous dots to their joints along with luminous connective striping and then photographing them against a black background (Doane 2002:54). In this sense Marey is stripping the photographs down, reducing the movement of figures to white lines, giving only a hint of detail and transforming the photographic image into something that resembles a painting or drawing. These photographs bear little resemblance to the figures they represent; the details have been removed to produce an image which is a record but which I would argue goes beyond representation.



Marey, *The Study of Movement*, 1830-1904

<http://photographyhistory.blogspot.com/2009/02/etienne-jules-marey-1830-1904-study-of.html>

My panoramic images which depict figures moving through space use a similar approach to Marey's photographs. While I have used several frames (whereas Marey used a single frame), I have pieced these frames together creating a panoramic format, which provides the illusion of a single frame. The images have been stripped down to reveal a simplified rendition of figures walking against minimal or no background (the background within the images will be discussed later in relation to speed and movement within the city). The basic shape and outline of the figures is the primary focus along with the saturated monochromatic colour, which fills the frame and envelops the figures. This approach allows the movement of the figures to be highlighted, displacing them from any specific, recognisable urban context; this displacement, distancing and abstraction operates on a similar level to that of the standard panorama (as discussed earlier), in which the panoramic view of the metropolis, for instance, allows the city to become more digestible and comprehensible, revealing a nuanced perspective that is not afforded by a close-up view. In this same vein, the displacement of these moving figures within the frame of these panoramic montages causes the temporality and the spatiality of the city to rise to the surface of the images in a way that is not possible in the context of the dynamic rhythm and movement of the everyday urban environment. Much of the movement that occurs within the urban everyday becomes blurred – the rhythm of the city's pace is hypnotic and

often we become so accustomed to the onslaught of stimuli that we filter out much of this information. Buses speeding by, airplanes flying overhead, people walking past all become background noise as we are focused on our own travel and movement throughout the day. Similar to Bergson's notion of perception as a choice (as discussed in Chapter 1), whereby the perceiver chooses to focus on those images of most value and interest, I would argue that we choose to 'see' that which is necessary to accomplish our daily tasks. Extraneous information is often discarded and remains in the background of our everyday existence; thus the intricacies and subtleties of movement within the urban sphere often occur in a virtual realm. As I outlined in the previous chapter, these everyday occurrences exist virtually due to the fact that they are not seen, nor can they be seen by most city dwellers. They cannot be seen by many urban dwellers for several reasons: 1) the expanse of the space and time of the city prevents us from witnessing all occurrences in every location at every moment of the day; 2) the subtlety of movement is not always perceptible to the human eye; 3) perception is a choice and we choose to filter out certain information that is of less value or interest.

My panoramic images (both the still and moving images) serve to reveal the representation of time and movement that cinematography employs, by exposing the various instants captured by the camera. Marey had a similar focus within his work, whereby he eschewed the moving image in favour of the still image because he:

had little interest in the synthesis of movement, which was the goal of cinematography, and, in an extraordinary move, he would attempt to rearrange the images taken with moving film so that they embodied characteristics of fixed-plate chronophotography. In other words, he would laboriously cut out the individual images from a strip of film, place them next to one another so that they slightly overlapped and rephotograph them. (Doane 2002:57)

I have employed a similar technique within my panoramic images, in which some of the stills have been taken from moving images to create a still

panorama. I have also taken videos and then broken those down into stills subsequently piecing them back together to create moving images (please refer to chapter 2 for a more detailed explanation of this technique).

Doane explains that for Marey cinema “refuses to acknowledge the loss of time on which it is based” because it conceals the gap between the frames of still images that make up the filmstrip (2002:62). Marey was concerned with horizontality in order to “suppress the separation between individual film frames (the site of loss, discontinuity in film)” (Doane 2002: 57). My panoramic images take the form of a horizontal filmstrip, so that past, present and future sit side by side rather than appear in quick succession as in the typical vertical filmstrip format. Bernard Tschumi discusses such a format when addressing the perception of the coexistence of time: “We can hardly hope to grasp this atemporal perspective, in which before and after coexist, unless we see it as a film. Only, a film in which the sequence shot would constantly keep the beginning and the end in view...” (2000:x). The panoramic images that I have produced attempt to mimic duration in this sense by combining a multiplicity of instants into one image. The horizontal layout places past, present and future actions side by side in a manner that is not seen in daily life; it is a device that plays with the perception of time and forces the viewer to witness past, present and future contiguously. I would argue that past, present and future are experienced simultaneously and virtually through duration, within our everyday lives in the city; these panoramic images are an experiment in finding out what happens when duration is presented visually in the physical format of a photograph (if it can be portrayed in the first place). These panoramic photos are an attempt to actualise the virtual realm of duration by breaking down movement into distinct moments and then piecing them back together to create a horizontal layout of past, present, and future. These images present time taking place over an expanded duration illustrated by the series of movements of people walking through space, condensed into one panoramic image, which shows the various stages of these movements in one view.

Time-Image and the Present

The notion of the present is key to understanding the relationship of time to the moving image. The moving image appears to the spectator as taking place in the present moment (versus the still image which is typically read as a past instant) (Doane 2002:103). Deleuze asserts, however, that the “cinematographic image” is not in the present; rather, it is what the image represents that is in the present and the image itself is “a set of relationships of time from which the variable present only flows” (1989:xii). Within the time-image “perceptions and actions ceased to be linked together” with characters “caught in certain pure optical and sound situations” where aberrant movement becomes valid. In these pure optical and sound situations the characters exist only in the interval of movement, in the space between perception and action (Deleuze 1989:39). Within these pure optical and sound scenes the character within the film becomes a ‘seer’ rather than an ‘agent’ where “the situation no longer extends into action through the intermediary of affections” and “is cut off from all its extensions, it is now important only for itself, having absorbed all its affective intensities, all its active extensions” (Deleuze 1989:261).

In *Cinema 2*, Deleuze proposes that the time-image is a model of time constituted by a series of simultaneous peaks of the present. Deleuze uses the work of Robbe-Grillet to illustrate this model, stating “in his [Robbe-Grillet’s] work there is never a succession of passing presents, but a simultaneity of a present of past, a present of present and present of future” (Deleuze 1989:98). The time-image reveals a complex relationship between moments; the present is both passing and continually present, we jump from various present points and past points contiguously and make sense of time in this non-linear manner. The moving image allows us to understand these non-linear temporal connections in a way that we may not otherwise perceive: “What is specific to the image...is to make perceptible, to make visible, relationships of time which cannot be seen in the represented object and do not allow themselves to be reduced to the present” (Deleuze 1989:xii). My panoramic images are an attempt to portray these relationships of time that

are occurring within our minds virtually – to actualise and make extensive within the physical plane temporal connections that move across past, present and future.

The passing of the present moment is a fundamental aspect of the temporality of modernity. Within the context of the fleeting nature of the modern metropolis, Leo Charney analyses the possibility of experiencing a moment by “fully inhabiting it” (1995:279). Charney distinguishes between sensation and cognition, where a sensation is felt in the moment and cognition occurs only after the moment has passed. Drawing upon Heidegger, Charney explains that the present exists only as felt experience “not in the realm of the rational catalog but in the realm of the bodily sensation” (1995:281). We experience a direct sensation which Heidegger calls the ‘moment of vision’ which allows us to be “present inside the present” and creates a feeling of ecstasy. Charney equates this ecstatic feeling, which overtakes all other sensations in that moment, with the sublime (1995:282). The moving image mirrors the transience of modernity such that the present moment fails to be captured on film: the images are continuously moving forward requiring the viewer to piece together the fragments of the passing present internally via bodily experience (Charney 1995:292). This direct experience of time is similar to Deleuze’s concept of the time-image, where pure optical and sound sensation occurs. Although Deleuze does not equate the sublime with the time-image (he does so only with the movement-image) I want to argue that the time-image can be read as sublime, in the sense that it eludes the boundary of narrative and exists in a formless state of being: a state of pure colour and light. While it may seem unusual to link the time-image with the sublime, such a link has also been made by Melinda Szaloky in a chapter entitled ‘Mutual Images: Reflections of Kant in Deleuze’s Transcendental Cinema’ (2010). Szaloky connects the time-image with the sublime through an analysis of Kant’s aesthetic reflection. Szaloky explores the notion of the suspension of time that occurs within the ‘aesthetic reflection’ and ‘aesthetic lingering’ of the sublime:

The time of aesthetic lingering is, after all, that of a mind in suspension, one searching itself for (and as) a missing universal – a new speculative construct perhaps. This might be a moment “when we cannot remember” and when “sensory-motor extension remains suspended,” as Deleuze has it, for whom such instance of “disturbances of memory and...failures of recognition” constitute “the proper equivalent of the optical-sound image.” (Deleuze cited by Szaloky 2010:65)

The optical-sound image is the time-image and the aforementioned ‘aesthetic lingering’ is reminiscent of Leo Charney’s notion of the sublime as the experience of ‘fully inhabiting’ the present moment through direct sensation of this moment, which was outlined earlier in this section.

Specifically, the time-image relates to the unboundedness of the sublime through ‘centres of indetermination.’ Centres of indetermination are intervals “between a received and an executed movement”, the space/time between the perception-image and the action-image (Deleuze 1986:62). It would appear that this gap is the point at which the sublime takes hold; it is the ‘now’ in which the image is received on an unconscious level, where the viewer connects with the image without interruption (before the reaction has time to set in and a conscious analysis of the image interrupts this pure connection or pure perception). Deleuze proposes that the centres of indetermination allow for the possibility of the time-image: “the centre of indetermination...can itself have a special relationship with the whole, duration of time. Perhaps here there is the possibility of a direct time-image...” (1986: 69).

Dromoscopy and Walking

The way that we experience the modern city is often described as cinematographic, with Paul Virilio claiming the “transportation revolution” has triggered “a cinematic projection of reality” (Virilio 2008a:113). The fast pace with which we travel through space via modern transport methods has changed the way that we view the external environment. Paul Virilio deems this phenomenon ‘dromoscopy’, a state in which we perceive the world at an

increased rate of celerity. Dromoscopy causes inanimate objects to become “animated by a violent movement” (Virilio 2008a:101); the spectator or traveller is moving via an automobile or train and this creates an illusion that the objects in the landscape are moving around him/her. The destination of the journey becomes increasingly important as we insist on getting there faster and faster, thereby nullifying the landscape and effectively erasing space:

With the speed of the continuum it is the goal [*objectif*] of the voyage that destroys the road, it is the target of the projectile-projector (of the automobile) that seems to trigger the ruin of the interval, it is the fleeting desire to go right to the end as fast as possible that produces in the opening out [*écartment*] of the travelling the tearing apart [*écartèlement*] of the landscape. (Virilio 2008a:105)

The relationship of the spectator/traveller to the landscape changes with the speed of travel. Space becomes memory rather than actuality; we recall the slower route through the landscape that existed previously and this is how we understand the space traversed within dromoscopy (Virilio 2008a:105). The fast succession of images perceived through the windscreen creates a landscape of simulacra. The landscape becomes “perforated” (Virilio 2008a:104) by the driver going straight through it like a tunnel, the scenes unfolding as though in a video game. Ironically, the faster the speed the more distant the horizon becomes. The constant chasing of the horizon is a futile pursuit yet it has important consequences on the visual field. Virilio claims that speed “*becomes, in a certain way, a premature infirmity, a literal myopia*” by distancing us from “sensible realities” (2008a:109). By continually striving to reach the horizon at an accelerated rate we are becoming more detached from the landscape.

This tendency toward speed plays an important role within the urban realm. There is an undercurrent of acceleration that characterises our daily routes through the city although we may not actually be moving at a fast pace. The urban sphere is a place of both heightened speed and paralysis. It seems that

everyone in the metropolis is in a rush to get to their destination as in the dromoscopy that Virilio describes, yet the density of people often makes it impossible to attain the speed that we so desire. Furthermore, within the city walking is still a preferable form of travel for many people, as it is often the most accessible way of getting to one's destination. Walking through the urban landscape provides direct access to the external environment (without the shield of the windscreen) and slows down the pace with which images are perceived by the mind. However, Virilio's dromoscopy is still a relevant concept within the practice of walking in that the overall pace of the urban realm affects our perception of it. We become de-sensitised to the mass of stimuli passing by us. We tend to focus on getting to a destination, and we filter out much of the external world through which we are moving.

Walking is a particular form of moving through the landscape which actualises the potential of routes through space linking locales physically within the body and virtually through memory. Christopher Tilley cites de Certeau's discussion of the art of walking as "an art of consciousness, habit and practice, that is both considered by place and landscape and constitutive of them" (1994:29). The routes we take through space tend to be repeated creating distinct paths, which are vestiges of memory as well as harbingers of the future. Bodily movement shapes the landscape through the traces imprinted on the physical environment; as we repeatedly move from one place to the next taking the same route each time a path emerges that then lays the precedent for future movement. Tilley argues that there is usually a specific reason for the privileging of one route over another. Once a path has been forged this becomes the preferred route since it is easier to traverse a cleared path than create a new one (Tilley 1994:29-31).

Walking is a primary means of movement for human beings, as this was the only way of getting from place to place for thousands of years. Although we now have other modes of transport, we still walk everyday, if only from the front door of our home to the car or from our workplace to the bus stop. In his book *On Foot: A History of Walking*, Joseph Amato concludes we always return to walking no matter how many other means of faster transport exist,

walking continues to form the basic and primary mode of travel (2004:277). Walking provides a particular relationship between self and surroundings; it is a privilege (although often taken for granted) that allows unique access to the landscape enabling perception of the terrain through direct access with it: “Walking establishes intimate contact with a place. It attaches us to a landscape...Walking coagulates time, expands distance, and makes places dense and prickly with details and complexities” (Amato 2004:276). Walking also can act as a form of resistance. The paths that we take daily through the city have been laid out for us by city planners and others before them, yet we shape these paths with our individual memory and narrative, appropriating the space and making it our own (de Certeau 1984). Rebecca Solnit claims that walking “is one way of maintaining a bulwark against this erosion of the mind, the body, the landscape, and the city, and every walker is a guard on patrol to protect the ineffable” (2002:11).

Walking is an important means of synthesising the phantasmagoric nature of the city with corporeal experience. As Solnit proclaims, “Walking allows us to be in our bodies and in the world without being made busy by them. It leaves us free to think without being wholly lost in our thoughts” (2002:5). Walking through the city streets allows for a simultaneous engagement and disengagement with the constant activity swirling around us – alternating between consciously perceiving the rhythm and movement of the urban sphere and unconsciously taking it in while absorbed in our own mental activity.

The photographs I have taken for this project depict figures walking through the streets of London. I have used the panorama format as a means of referencing the landscape and the relationship of movement to the landscape. Also referencing the panoramic film genre of the early 20th century, I have created videos of these figures walking. Panning horizontally across an expanse of the urban sphere, I have focused on the movement of the figures, with the background/landscape becoming a secondary focus. I have used coloured filters and a high contrast between light and dark which contributes to the background becoming blurred and less prominent, thereby

creating a more abstract sense of space. This relationship of the figures to the abstracted background makes reference to Virilio's notion of the disappearing landscape as seen within the dromoscopy. The landscape as viewed from a moving railway carriage or an automobile becomes blurred and this transforms our perception of the landscape in general, so that even while we are walking the image of this disappearing landscape remains within our minds.¹¹ The minimal background provides a decontextualisation and abstraction so that the movement of the figures is emphasised.

Eadweard Muybridge's work also presented a similar decontextualisation and groundlessness which allowed his images to be "detached from any binding continuities or trajectories, in a 'decoding' of perceptual experience" (Crary 1999:147). His images of movement, for example, *The Horse in Motion*, "exist outside of a syntactical and semantic organization that supported historical narrative" (Crary 1999:147). Muybridge's images are devoid of a social or historical context with little or no ground in which the "machinic objectivity in play here does not stake out a subjective position from which a 'this happened' or a sense of 'having been there' could be *authenticated*" (1999:147). This lack of context provides the images with a sense of autonomy and a "floating identity" (Crary 1999:147) allowing them to transcend the boundaries of a specific locale. While this is true to some extent, there are details that provide contextualisation of the images, the items of clothing, the horse-drawn carriage, the 'look' of the prints – all of these specificities provide some social and historical context through which we read the images. However, it is important that the images have little or no ground with which to place the figure; this ungroundedness relates to the panorama

¹¹ I am also referencing a type of 18th century panorama which focused on movement and attempted to simulate movement of people walking past a stationary observer, the backgrounds within these panoramas also became secondary. The mobile panorama was a variation on the extended panorama whereby the canvas was attached to two tubes and then rolled from one tube onto the other. This process of rolling the canvas gave the illusion of motion so that the landscape appeared as if seen from the window of a moving train. Prior to the moving panorama there was a more primitive version containing figures rather than landscapes. These "forerunners of the moving panorama" (Oettermann 1997:63) depicted parades and processions of people providing the impression that the figures were moving past the stationary viewer rather than with the standard panorama which depicted a landscape (1997:67). In order to heighten the illusion that the figures were moving, the paintings were usually depicted without a background.

in two ways. Firstly, the panorama defied a traditional sense of figure and ground relationship by eliminating a vanishing point and creating a continuous surface upon which the eyes could focus. There is no single point of focus within the panorama, forcing the eye to scan the entire image continuously, thereby disrupting the habits of perception with which the eye views 'standard' images within a frame. This leads to an uncanny effect, which will be discussed in the next section of this chapter.

Moreover, the act of walking becomes a point of fascination in these images; a relatively commonplace activity of travelling through the city becomes a marvel. By taking this activity out of context and slowing down the motion, a sublime effect is achieved allowing the viewer to reflect on who these people are, where they are going, what they are feeling, and it triggers personal associations within the viewer with regard to their own experiences of walking through the city (e.g. banality, boredom, tiredness, exhilaration). I am attempting to convey the movement that we take for granted as isolated and suspended, allowing viewers to reflect on how their movements through the landscape of the city impact their interaction with it. For example, in the red photograph below, the figures are suspended in animated movements, with the girl in the middle raising her hands in the air toward the figure in front of her. This suspended motion within a nondescript space – a space that is familiar yet simultaneously defamiliarised by the colour and blurred background – prompts the viewer to wonder what these figures are thinking, where they are travelling, and what the relationship between them might be.



Covent Garden, Panorama, author's photograph

Movement, Landscape and the Body

The relationship between the body and the landscape is important in examining the perception of time and space within the urban realm. How we move through the landscape provides the basis for our interaction with it and our understanding of the space around us. The notion of landscape is complex – it is layered with multiple meanings and shifting referents (Cosgrove 1988:13). Denis Cosgrove argues that landscape is a construction; it is not “merely the world we see” or the world we interact with, it is a “way of seeing the world” (1988:13). Landscape refers to the “external world mediated through subjective human experience” (Cosgrove 1988:13). The basic starting point for the concept of landscape is the relationship of humans to the land that they inhabit. Is it impossible to separate oneself completely from the land that one inhabits: where does the self end and the environment begin? We are constantly shaping the external environments in which we live while at the same time these environments are shaping us. The concept of landscape is a means of asserting control over the external world, it is a way of stepping back from the land and viewing it as a bounded notion (Cosgrove 1988:9).

In my panoramic photographs I am attempting to explore the relationship between the individual and the landscape looking at the movement of the body through urban space. I am looking at walking as a particular way of moving through the city, as the body forms the primary sensory device through which we interact with the physical environment. Tim Ingold and Lee Vergunst declare that walking is not just “what a body *does*; it is what a body *is*” by nature of the body being “grounded in movement”, thus movement and walking are primary to the body’s being (2008:2). As Bergson states in *Matter and Memory*, “perception as a whole has its time and final explanation in the tendency of the body to movement” (2007:41). Movement allows us to experience time and space; if nothing moved, we would have no reference point for the passage of time or the delineation of space. Movement is necessary for life, all organisms are continuously moving – once they cease

to move they cease to live. Thus movement forms the fundamental criteria of existence.

The panorama was developed as a tool for representing landscape and ultimately became a way of understanding the viewer's relationship to landscape. As discussed previously the fascination with viewing the expansive horizon fuelled the interest in the painted panorama. The painting became a way of relating to the horizon and to the landscape by taking the viewer out of the natural landscape and placing him/her in a simulated context. Therefore, just as Virilio claims that landscape within the dromoscopic society becomes simulacra, the panorama also turns landscape into simulacra. Landscape as representation has the "potential to both obscure and articulate lived experience" (Tilley 1994:25), as the panorama illustrates by shifting and defining the relationship of the viewer to landscape.

Moreover, the panorama confuses the sense of depth due to the absence of a vanishing point; the expansiveness of the layout creates a plane in which the eye must continually move across and around the image without focal point (Crary 2002:20-22). I would argue that the panorama creates a disturbing or 'uncanny' effect¹² by confounding the relationship between viewer and image; in a non-panoramic image the viewer is directed by the vanishing point where to focus his/her eye and feels a sense of comfort at knowing how the relationship between figure and ground operates. In the panorama, the sense of depth is made strange by this lack of vanishing point with both figure and ground in focus uniformly. The scale of the panoramic image creates another layer of this uncanny effect – the large scale of the original painted panoramas further obscured the relationship between subject and object, with viewers unable to distinguish the distance between themselves and the image. The panorama "involves a detachment from a wider field of possible sensory stimulation and creates a calculated confusion

¹² The uncanny and the sublime are related concepts, with the uncanny being rooted in the sublime. Anthony Vidler asserts that the uncanny "seemed at times indistinguishable from the sublime" (1987:10); he goes on to state that the uncanny lies on the margins of the sublime, encompassing the unpleasant aspects of the sublime and residing in the "terrible sublime" (Vidler 1987:11).

about the literal location of the painted surface as a way of enhancing its illusions of presence and distance” (Crary 2002:19). The panoramic images that I have created are also intended to be viewed large-scale (being projected on a cinema screen) and operate in a similar manner, creating an illusion of three-dimensional space that the viewer could potentially enter. The colour within these images further heightens the sense of the uncanny by creating a virtual urban realm made up of pure red or pure blue, saturating the eye and potentially creating a sense of discomfort. The notion of the uncanny will be explored further in the proceeding chapter with regard to light and its ability to disorientate the sense of sight.

Blurred Boundaries

This blurring of the boundaries between subject and object, individual and whole, inside and outside, virtual and actual, that occur within the simulacra and the panorama create this uncanny effect as well as the aforementioned sublime effect. Visual representation is one of the means of attempting to create false yet useful distinctions between individual and whole, virtual and actual. While it is impossible to delineate absolutely the borders between inside and outside, images can help us to understand the relationship between these entities.

Images (paintings, photographs, videos) are contained by the rectangular canvas, screen, or piece of paper upon which they rest. This frame creates an inside and outside of the images, yet there is a fluidity between these two states. Derrida analyses the sublime in terms of the *parergon* or ‘frame’ (Cheetham 2001: 104), stating “there cannot, it seems, be a *parergon* for the sublime” (Derrida 1987:127) yet imagination takes hold and creates a limit or ‘cise’ (Derrida 1987:140). This ‘cise’ is two-fold in that it ‘de-limits’ and ‘delimits’ at the same time, thus the inside and outside of the frame or *parergon* are symbiotic: “This double trait of a cise which limits and unlimits at one and the same time, the divided line upon which a colossus comes to cise itself, incise itself without cise is the sublime” (Derrida 1987:144). The cise

both establishes the limits of an entity while making the infinite known. As Philip Shaw states, “it would be impossible to conceive of the unlimited without the limited, and vice versa” (2008:119). What rests inside the frame continually makes reference to what is outside the frame and also influences what exists beyond the frame (as noted in the previous chapter). The outside of the image is only artificially separated by the frame; for example, the figures walking in my panoramic photos and videos do not stop walking once the shutter has closed within the camera. This delineation is an arbitrary framing that acts as a ‘cise’ in capturing the motion upon film in order to present a visual rendering of this previous activity. Thus there is a fluidity between outside and inside the frame as Derrida asserts and they are “mutually definitive” (Cheetham 2001:105).

This is the experience that I have attempted to evoke through my panoramas. The still images have been created using montage, piecing together several frames and then blurring the boundaries between those frames digitally. These images are made up of several frames within a larger frame and yet the lines between these interior frames have been erased so that what was formerly ‘outside’ the image is now ‘inside’. The expansive format of the panorama seeks to overwhelm the viewer and draw him/her into the frame so that subject and object become one. As with the time-image these panoramic images are meant to portray figures in a purely visual situation without narrative action. The movement depicted in these images allows temporality to be perceived as a fluid entity rather than in a standard filmic format where one image succeeds the next (see image below). These panoramas are essentially ‘time-images’ in that they are attempting to transcend narrative by taking movement out of context; the action of the figures in the images becomes pure sensation rather than contributing to a story. The walking figures are the focus of the panoramas with the background becoming secondary (at times indistinguishable altogether); movement is isolated within a nondescript landscape (which references the notion that the speed and pace of industrialisation and urbanisation have created a landscape of simulacra).



Regent Street, Panorama, author's photograph

The paintings of Barnett Newman and Mark Rothko create similar sensations, although they are not deemed panoramas; however, their vast canvases of abstract colour fields function in a similar capacity to the panorama with regard to the depth and lack of vanishing point. Barnett Newman addresses the blurring of outside and inside in his paintings as well as in his essay 'The Sublime is Now' (Shaw 2008:121). His abstract paintings consist of blocks of colour which "draw the eye into the canvas, to the point where it becomes impossible to distinguish between object and subject" (Shaw 2008: 121). The sublime is conjured through the sensation of viewing this mass of colour. This sensation is similar to Deleuze's time-image in that it is a pure optical experience devoid of narrative and conscious thought – time and space are transcended, received by the body instantly without interference.

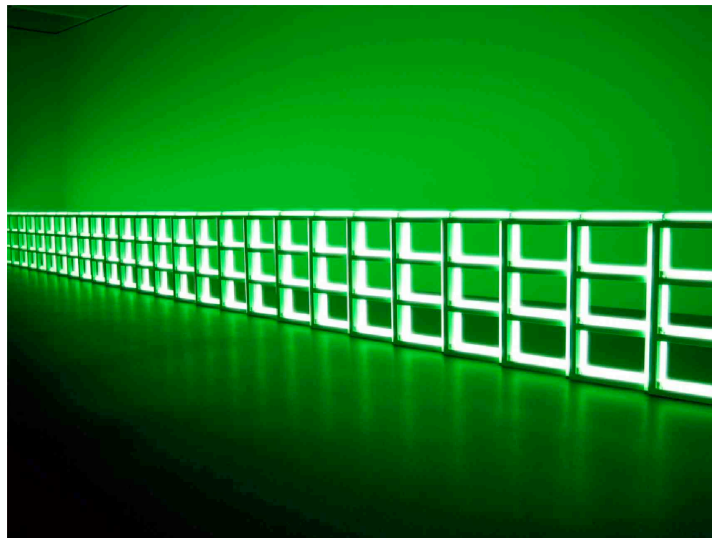


Barnett Newman, *Vir Heroicus Sublimis*, painting, 1950-1951

<http://www.usc.edu/schools/annenberg/asc/projects/comm544/library/images/551.html>

The colour within these images is important in creating a sublime 'time-image', contributing to an experience similar to the 'now' that Newman references. The use of monochromatic vivid colour within the images contributes to a sensation of merging with the image, entering into this mass of colour and transcending consciousness (if only briefly), and experiencing the beyond: the infinitude of time and space. I am aiming to envelope the

viewer in an expanse of colour in a similar manner to Dan Flavin's light sculptures. Flavin's fluorescent light sculptures transmit a wave of intense colour filling the space in which they stand and providing the viewer with an interaction that both overwhelms and delights simultaneously. The lights are often too bright to look at for extended periods of time. The sense of sight is overloaded and this creates displeasure while simultaneously the pure fields of colour draw the viewer in so that the boundaries between self and artwork are blurred, thereby fusing the self with the infinitude of time and space for the duration of viewing these sculptures. The viewer becomes hypnotised by the colour and light.



Dan Flavin, untitled, sculpture, 1973

<http://poulwebb.blogspot.com/2011/05/dan-flavin.html>

Similarly my panoramic images are an attempt to engage the viewer in a 'pure' sensation devoid of thought and conscious analysis, this is where the sublime occurs. In both the moving and still panoramas, I have created an expanse of vibrant colour with the intention of capturing the fascination of the viewer and allowing him/her to connect with the pure sensation of colour and form in those split seconds before conscious recognition or thought takes hold. The images attempt to produce a sublime effect in content and form, with the mesmerising movement and rhythm of the urban sphere highlighted in the passing figures, suspended in a mass of saturated colour. These images present a phantasmagorical, dream-like urban space, from which the

viewer can experience the sublime temporality of the city. As soon as thought enters and consciousness takes over, the sublime ceases to occur; yet the aftermath of this experience is equally valid. The memory of the sublime experience offers another layer of sensation and continues to infuse our perception through duration, with the past and present intermingling. In effect, the memory of the sublime is equally powerful and significant within understanding the limits of self and our relationship to the infinitude of time and space. Thus representing the sublime is a valid endeavour despite the ultimate futility of this effort: the split-seconds of unconscious engagement with the photograph, painting or installation that occur within the viewer have a lasting impact that resonates beyond this moment. The now is ongoing, exponentially repeating and transforming, affecting every experience thereafter. It is necessary, however, to remind the self of this sublime experience, as memory fades and mutations of this memory take hold; this is why it is important to continue making art work that explores the sublime.



Regent Street, Panorama, author's photograph

Sublime Temporality

I would argue that the sublime is found in the temporal. While time in some sense is considered to be measurable and divisible, I am looking at time as a formless entity. This formless notion of time is equivalent to the Bergsonian and Deleuzian concept of time as monism (as discussed in Chapter 3) in which duration allows for a pluralism and monism of time to coexist. Time in this unbounded capacity does not allow a parergon to be applied to it, yet in order to make sense of its infinite magnitude, which is greater than human comprehension will allow, we cut time into pieces (as in the 'cise') separating past, present and future. Through duration we experience these 'cuts' as

continuous (referring again to Deleuze and Bergson's notion that time is both one and many). It is impossible to place moments of time next to each other because time is continually passing, creating a layering of past, present and future within each moment; yet my panoramic images are an attempt to disrupt the present moment. These images bring together several contemporaneous presents, sitting alongside one another in such a way as to reveal their relationship to each other in an external capacity. This is an attempt to physically portray what happens within the mind through duration.

Lyotard discusses the notion of time and sublimity in his essay 'The Sublime and the Avant-Garde' in which he writes, "The avant-gardist task remains that of undoing the presumption of the mind with respect to time. The sublime feeling is the name of this privation" (1989:211). In looking at Barnett Newman's work, Lyotard argues that the 'now' Newman was referring to is not simply the present moment but is an instant that "dismantles consciousness"; it is an occurrence that takes place which we do not analyse consciously (1989:197). Once we ask 'what happens' rather than simply knowing 'something happens' then "we supply the sublime event or object with a concept and thereby shut down its capacity for transformation" (Shaw 2008:122). Once time is contained by consciousness it ceases to be sublime, yet in thinking time and representing time we are able to recognise our inability to conceive of its magnitude and its sublimity.

Lyotard views the sublime as an event that is an explosion of energy distinguishing something from nothing (Shaw 2008:122). The terror that characterises the sublime stems from a threat that "it is possible that soon nothing more will take place" while the "sublime is the feeling that something will happen...that something will take 'place' and will announce that everything is not over. That place is mere 'here, the most minimal occurrence" (Lyotard 1989:245). While for Derrida the sublime is a false separation of inside and outside, consciousness and the beyond, for Lyotard the sublime is a boundary between nothingness and presence: "The boundary separating something from nothing, the pleasure of creation from the terror of privation, is slight, but it is enough, according to Lyotard, to make us feel the sublime"

(Shaw 2008:122). It is not the significance of what this presence is that constitutes the sublime; rather, it is the event itself that “interrupts the chaos of history and which recalls, or simply calls out that ‘there is’, even before that which has any signification” (Lyotard 1989:247). In the Deleuzian sense, the event has more virtual potential than the actualisation of the singularity; what takes place in the actual realm lives beyond this realm in an undetermined virtual capacity, crossing boundaries of time and space. This virtual potential allows for the mystery of the sublime event. The sublime is inconceivable yet undeniable; it pushes the imagination to its limits to conceive of the beyond, which is not possible but which is always present: “The absolute is never there, never given in a presentation, but it is always ‘present’ as a call to think beyond the ‘there’” (Lyotard 1994:150). This instant, this ‘now’ evokes the sublime, yet once this instant passes and we try to analyse it, the sublime sensation ceases. It is an impossible cycle, yet I would argue that attempts to represent the sublime are necessary in order to understand the limits of our capacity to comprehend the virtual potential of the urban realm and our perception of it.

Following on from this, the virtual realm can also be considered sublime since duration is part of the virtual. The virtual and the sublime are elusive states of being that are contained within all things infinitely yet when we attempt to put boundaries around them they slip away into a void. In creating a simulated landscape (or in the case of my images, a timescape), the panorama is a visual depiction attempting to capture the infinitude of time and space. By nature of its form, the panorama as image is an actualisation of the virtual realm of duration and of the sublime. This process of actualisation nullifies the virtuality and sublimity of that which it is depicting – it is impossible to limit the sublime and the virtual, thus when they are captured in an image they cease to be both virtual and sublime. The goal is to reveal the virtual and the sublime without altering them – in essence to show difference in itself (or pure difference). Through these panoramic images I am attempting to reveal the virtual and the sublime by actualising the becoming of the everyday movement of the city.

Conclusion

Boundaries between moments in time and space are essential to our understanding of the external world, yet these are continually shifting thereby creating a sublime effect. Our daily interactions with the urban landscape are dictated by the movement of our own bodies and of objects around us. The speeding up of movement by modern modes of transport has created a shift in perspective of time and space, with the landscape becoming increasingly distant. Landscape has become simulacra, mimicking cinematic experience with images zooming past us at such great speed that we lose sight of what they refer to in actuality. Walking allows us to slow down the pace of the city to a certain degree and through this movement we can regain a closer interaction with the landscape; yet our internal perception of time and space remains accustomed to the fast-paced cinematic whirl of images and thus we still fail to perceive the bulk of these images consciously. This unconscious reception of the landscape and of the temporality of the city is the sublime; it eludes representation yet attempting to capture the sublime remains important for our understanding of this state of being.

The sublime is paradoxical in that it is both a state of incomprehensibility and of greater understanding; it is a state in which the mind cannot conceive of what lies before it and yet it is also a point at which the mind realises its own limitations and has a greater knowledge of what extends beyond. Through both my still and moving panoramic images I am attempting to confront this duality by evoking the sublime in the presentation of pure movement, light, and colour. By coming into contact with these images the viewer is able to experience the sublime effect of the city and of time in a distanced manner. Just as the traditional 18th century panorama painting enabled the viewer to experience the natural landscape from a distance – a simulated encounter – my panoramic images provide a simulation of temporality and movement within the city.

This reconfiguration of the panorama as a temporal depiction allows the virtuality of duration to become actualised, highlighting the relationship

between temporality and the visual in making sense of the urban realm. These panoramas of time provide the space in which to consider the relationship of the self to the landscape/cityscape. This relationship is difficult to pinpoint and can evoke a sensation of the sublime and the uncanny, with the individual often disappearing into the morass of the urban realm. Through visual depiction a cathartic release is felt by both the artist and the viewer in creating a parergon where perhaps it did not exist previously. The frame of the image establishes an artificial outside and inside, allowing the artist and the viewer to create a boundary (if only temporarily and synthetically) between self and whole. This boundary of the frame is the edge from which we may peer, viewing the infinitude of the beyond at a safe distance. The panorama of time allows us to fluctuate between reason and imagination and between comprehension and perplexity fluidly. We are still in danger of being consumed by that which is greater and unknown yet through visual rendering we can walk this duplicitous line between clarity and confusion more gracefully.

Chapter 5: *Lumino-city: The Role of Light within the Perception of Urban Temporality*

The third and final photographic project of this thesis, which will be outlined in this chapter, considers the role of light within the perception of urban temporality. As in the preceding chapters, I will examine the perception of urban temporality in terms of shifting boundaries between moments in time and between the individual and the whole of the city. Light is an integral element within visual perception and within the production of photographic images. Continuing to look at the moving image (and the integration of its constituent parts) as a metaphor for perception, I will explore how light functions to both reveal and conceal matter within the process of perception as well as within the photographic process. Light has the power to illuminate, yet it can also disorientate. Light is not solely benign; rather, it has the capacity to harm by engendering blindness when it is present in excessive amounts. Furthermore, a dearth of light can hinder the sense of sight causing a temporary impairment of vision and forcing the mind to rely on other senses. For instance, the city in darkness becomes an indistinguishable mass – we cannot see shifts in movement in such a void, thus confounding the perception of time and space.

This dual nature of light forms the basis of my examination of the perception of urban temporality within this chapter, in which everyday urban activity has been recorded at various times of the day using a manipulation of light within the camera in order to overexpose and underexpose subject matter. This underexposure and overexposure is used as a tool to create a sublime effect, disorientating the viewer by reducing the legibility of the images. This distortion of light blurs the boundaries between: moments in time, subject and object, individual and whole, and time and space. I have taken photographs and videos of several locations within London exploring the role of sunlight at various times of the day (including Finsbury Park, Soho, Euston, and the East London Line Overground between Highbury and Islington and New Cross). I have also taken moving images at night looking at the role of artificial light emitted by street lamps and cars. I am examining the effects of overexposure

and underexposure in order to reveal the relationship of light to time. As in previous chapters, I am looking at urban temporality as a virtual multiplicity as Deleuze (and Bergson) have described, in which duration provides a unified sense of time by weaving together coexisting planes of temporality. The images within this chapter attempt to disrupt the boundary between recognition of objects/phenomena and a state of disorientation – in order to examine where this boundary lies. I want to argue that the line between familiarity and strangeness and distance and closeness is shifting and impossible to determine absolutely. These images attempt to portray this becoming of difference within the perception of urban temporality and to draw attention to the role of light within this virtual multiplicity.

I will begin by examining the role of artificial light in the urban realm and its impact on the time and space of the city. Electricity and digitisation have altered long-standing diurnal rhythms, shifting notions of temporality within the urban sphere. Paul Virilio's concept of chronoscopic time or exposure time will be analysed in relation to this changing relationship between light and time. Virilio's notion of chronoscopic time focuses on the speed of light as the foundation for the speed of images, with light transferring images across great distances seemingly instantaneously. This light-speed transferral of images has shifted our reliance upon the direct light of the sun as a primary light source within the urban realm, so that we have become increasingly reliant on the indirect light of machines: the computer, television and other similar devices.

I will then draw on Bergson and Deleuze's theories equating light with matter and image. In particular, Bergson's notion of perception as subtraction will figure prominently in my examination of light and temporality. Looking at this Bergsonian notion of subtraction, much of the information within the images I have taken has been subtracted by the camera through the overexposure or underexposure of light, presenting subtle shifts in colour and movement. I will then compare Deleuze's time-image with Virilio's exposure time (or chronoscopic time) – both utilise the moving image as the foundation for a non-linear depiction of time.

Following on from Virilio's claim that the city is becoming overexposed due to the influx of instantaneous images via information technology, I will argue that the role of light within the perception of urban temporality has shifted with the invention of photographic media and continues to shift along with the evolution of digital visual technology. Using the photographic images I have taken, I will interrogate the changing role of light within the perception of the urban sphere and I will explore the possible future influence of light upon the boundaries between self and the city and between matter and image.



taken from East London Line Overground, still frame from moving image, author's photograph

Light in an Age of Mechanical Reproduction

As discussed in Chapter 1 and again in Chapter 4, the increased speed of communication and transportation technology in the 19th, 20th, and 21st centuries has influenced the way that time and space are perceived, most particularly within the urban realm. As Stephen Graham states, cities have "always been places where innovations in transport, communications media,

printing, publishing, the processing [of] information and the creation of knowledge have been concentrated” (2004: 35). Nigel Thrift explains that there was “a change in consciousness of time and space” due to the ‘great acceleration’ occurring between the late 19th and early 20th centuries (2004:40). For Virilio speed is the fundamental element influencing perception of time and space within this current era of information technology; he states that “speed causes time to expand at the moment when it shrinks space” (2000:37). The acceleration of speed with regard to modes of transport and communication technologies is continually increasing, thereby allowing us to reach destinations faster across greater distances. Time expands in the sense that there is no longer a distinction between past, present and future, while space in a three-dimensional sense is shrinking due to technology driving us across vast distances instantaneously. In this regard space becomes erased (Virilio 2008:110, 115-129). Thrift argues, however, that space is both shrinking and expanding – speed of travel and communication make distances shorter yet simultaneously the distances reached are greater, thereby creating a more expansive sense of space (2004:40). It could also be argued that time is both shrinking and expanding, with the time it takes to travel and to receive information being reduced significantly. Previous notions of time and space have shifted with both the expansion and contraction of the temporal and spatial realms. This disruption of time and space by technology has been created in part by the element of light and its changing role in dictating the rhythm of daily life.

In a chapter entitled ‘The Light of Speed’ in *Negative Horizon* (2008a), Paul Virilio discusses the role of the sun within the history of human perception of temporality. The sun has been a constant source of light dictating the rhythm of daily activity with the ‘setting’ sun and the ‘rising’ moon heralding a natural shift in the events of the day. For Virilio time is measured at the most basic level by the “alternation of day and night, the order of daytime and its absence” rather than the number of hours or years that pass; fundamentally all measurement of time throughout human history has been “shadow and light” (2000:60). The sun has traditionally been the dominant source of light determining the boundary between day and night, with nighttime signalling

the end of work for that 24 hour period and slowing down the frenetic activity of the urban sphere. Yet with industrialisation, machines have influenced this diurnal rhythm and decreased the reliance on the sun as the guiding light of daily human activity. Faster transport modes and telecommunication technology defy the darkness of night by illuminating the world 24 hours a day with electric light, as well as connecting all time zones within the globe so that effectively there is no longer a distinction between day and night: “In fact, night and day no longer organize life, in the ‘false’ (dromoscopic) day’, where sunrise is equivalent to sunset...” (Virilio 2008a:129). The world is always awake and active (at some location on earth) and we can perpetually be linked to this location no matter where we are via technology. Through technology we are able to disrupt the natural rhythms of night and day, the computer screen illuminates our lives so that we can work throughout the night and connect to others who are in daylight, effectively preventing the sun from ever setting.

Prior to computers and information technology, the invention of gas and electric lighting transformed the space and time of the city. Stephen Kern asserts that the linear progression of time, which was one of the “features of traditional time” and “the structure of history” along with the “uninterrupted forward movement of clocks, the procession of days, seasons, and years”, was challenged by the development of electric light (2003: 29). Kern cites the ability of the electric light bulb, as compared with previous forms of illumination (e.g. candles, gas lamps), to modify the “routine alternation of day and night” (2003:29). Scott McQuire states that electric light has been seen as “evidence of the ability of technological progress to subdue even the basic diurnal rhythms of nature” (McQuire 2005:127). Nigel Thrift also remarks upon the temporal shift created by artificial lighting with regard to the ability of industrial production to continue through the night, with shift systems allowing for non-stop production (Thrift 2004:41).

Furthermore, the city at night has long been associated with danger and fear, with medieval cities preparing “for dark like a ship’s crew preparing to face a gathering storm” (Schivelbusch 1988:81). Thrift cites gas lighting,

implemented at the end of the 18th century, as the beginning of this revolution of artificial light, in which “ a technology that had not significantly altered for several hundred years began to change” (2004:40). Gas light throughout the 1800’s and then electrical light at the end of the 19th century had significant impacts upon the city. One of the changes that lighting innovations produced was the removal of “the dangers that had once lurked in the dark”, thus creating more social activity at night and different spaces for people to congregate (Thrift 2004:41). Scott McQuire argues that city lights have “long had a powerful symbolic pull” in terms of being seen “as the key to achieving a new level of control over the lived environment” (2005:127). Thus electric lighting allowed for newfound control over the time and space of the city, with the bright street lights illuminating previously hidden spaces, while simultaneously “effectively deleting” certain spaces by “casting unattractive areas into impenetrable darkness” due to the selectivity of placement of street lights (McQuire 2005:133). The first electric street light was the arc-light, which mimicked the light of the sun, whereby “the light it cast had a spectrum similar to that of daylight” and “the eye saw as it did during the day, that is with the retinal cones, while in gaslight, it saw as it did at night, with retinal rods”; thus moving from gas light to the arc-light stimulated the eye’s ability to adapt to the dark (Schivelbusch 1988:118). The arc-light was described as emitting a “powerful light which illuminates both sides of the streets, chases away the shadows, floods every corner with light” (Poncet de Cluny 1880 cited by Schivelbusch 1988:118). Thus electric lighting was perceived as a powerful luminous force, which “not only illuminates but intoxicates” (McQuire 2005:133).

Electrical light was extremely popular and drew crowds in the 1880’s when it first appeared. Electric street lighting overwhelmed its spectators at first, producing a sense of awe and being seen as potentially “supernatural” and “miraculous” (McQuire 2005:128). These illuminated urban nighttime spaces created spectacle and phantasmagoria. Nigel Thrift states, “manufactured light was of central importance in the cultural construction of the ‘dream spaces’ of the nineteenth century” (2004:41), and David Nye uses the term ‘phantasmagoria’ to describe the light displays at the world fairs and the

'Great White Way' of New York's Broadway (1994:xv). The fascination with electric light came partially from the fact that it was the first time in history that light was separated from fire. This realisation that lights could attract the attention of the public was motivation for owners of department stores, amusement parks, theatres, and the organisers of world fairs (among others) to incorporate electric lights into their buildings and displays (Nye 1994:176-177). In addition, floodlighting of buildings began in 1907 with New York's Singer Tower, which was then its tallest building, and this led to the development of illuminated skylines. Illuminated signs further contributed to the dazzling display of night lights. Nye describes this luminous urban spectacular as "a shimmering new world" and as an "avatar of the sublime" (1994:143). Scott McQuire also attributes the awe-inspiring quality of electric light in the city as sublime, specifically the "technological sublime" which he describes as "wonder and terror" evoked by industrial machinery and technology (McQuire 2005:128). Nye explains that the technological sublime "exalted the conquest of nature" and the electrical sublime "dissolved the distinction between natural and artificial sites" and "created a synthetic environment infused with mystery" (1994:152). Nye equates the electrical sublime with Edmond Burke's notion of the sublime; he sets this sublime apart from the 'natural' sublime of Kant. Although Burke did not live to see the electrical displays, he discussed lighting as "productive of grandeur" (Burke cited by Nye 1994:151) and considered darkness "as a cause of the sublime" due to the fear and terror that it produces (Burke quoted by Nye 1994:144).

The sublimity of the illuminated cityscape came from the indecipherability and ephemerality of the environment. The city at night confused the boundaries between physical objects and distorted the sense of depth perception:

The electrical sublime eliminated familiar spatial relationships. In the night city there were no shadows, no depth, no laws of perspective, and no orderly relations between objects. At night the urban landscape no longer seemed physically solid. (Nye 1994:196)

The physicality of the landscape seemed to depend on the electric lights and when these lights were switched off, the built environment disappeared into the dark void (McQuire 2005:132, Nye 1994:197-198).

Light and the Urban Uncanny

Scott McQuire argues that electric street lighting within the city caused an “apparent loss of physical solidity” due to the power of light to illuminate or hide urban buildings at night, creating “a strange environment that no longer easily conformed to the stable ‘ground’ of the traditional city” (2005:132). Electric street lighting causes an “overlapping of previously discrete spaces” which “intensified the ambiguous relations between reality and fantasy, the animate and the inanimate, that characterize the urban uncanny” (McQuire 2005:132).

The city at night became a dream-like space amid the spectacle of bright lights of electrical advertising signs (which flashed on and off in a cinematic fashion creating an illusion of motion) and the mesmerising floodlights illuminating skyscrapers: “What emerges for the first time is an other city, an oneiric city that exists only at night and whose dream forms have only tenuous connections to the prosaic spaces of the waking day” (McQuire 2005:131). Anthony Vidler discusses the uncanny in relation to light, signalling the hidden spaces or dark spaces of the city as producing fear and threat:

space is assumed to hide, in its darkest recesses and forgotten margins, all the objects of fear and phobia that have returned with such insistency to haunt the imaginations of those who have tried to stake out spaces to protect their health and happiness. (Vidler 1992:167)

A doubling effect is created, whereby the fascination with light and transparency produced by a fear of the dark in the late 18th century led to “the fascination with those same shadowy areas (Vidler 1992:169).

Anthony Vidler explains that the uncanny or *unheimlich* which is etymologically rooted in the domestic or home, brings up issues of “identity around the self, the other, the body, and its absence: thence its force in interpreting the relations between the psyche and the dwelling, the body and the house, the individual and the metropolis” (1992:x). The relationship between the individual and the city has often been characterised by anxiety, estrangement, and alienation – the “labyrinthine spaces” of the modern metropolis creating this uncanny effect (Vidler 1992:ix). As noted in the previous chapter, the uncanny has its roots in the sublime, specifically Edmond Burke’s notion of the sublime. Burke’s sublime was equated with terror and although the uncanny was recognized by Freud as “‘all that is terrible,’ that is, within the traditional sublime” (Freud cited by Vidler 1992:21), it has distinctive qualities that set it apart from the sublime. The uncanny, like the sublime, is difficult to define; it is a sensation that eludes representation in many ways: “the ‘uncanny’ is a representation of a mental state of projection that precisely elides the boundaries of the real and the unreal in order to provoke a disturbing ambiguity, a slippage between waking and dreaming” (Vidler 1992:11). Vidler claims that the postmodern uncanny exists in Baudrillard’s simulacra where the uncanny’s “propensity for the double, for the elision between reality and fiction, its insistent *trompe l’oeil*, gives it a central role in the explication of the simulacrum” (Vidler 1992:9-10). This confusion between ‘real’ and imagined or virtual and actual (as discussed in Chapter 1 and then again in Chapter 3) is a false dichotomy, whereby these parts make up the same whole, they are simply different aspects of this whole. The eye cannot always detect differences between phenomena (as in the optical illusion of the moving image, or certain light waves on the colour spectrum) and this alters our sense of perception of the external world. I want to argue that this disparity between the physical and mental realms (or internal and external realms) is the key to understanding perception. The perceived disjuncture between physical and mental realms reveals the extent to which the notion of a dichotomy of virtual and actual is impossible to delineate – if the human mind is incapable of perceiving all that exists in the universe, how can we ever claim to differentiate between ‘real’ and imagined or virtual and actual?

The images that I have created for this project explore this notion of the doubling effect of the uncanny and the sublime in terms of blurring the boundaries between legibility and illegibility. The images have been overexposed and underexposed (similar to the panoramic images in the preceding chapter) in order to confound the sense of figure and ground, subject and object, and virtual and actual, thereby drawing attention to the uncanny and sublime element of the relationship between the individual and the whole (of the city). The light streaming through the shutter of the camera has saturated the images causing the legibility of the captured scenes to be reduced, with some of the subject matter transformed into abstract shapes and lines (see example below).



Finsbury Park, author's photograph

The potentiality of light to both enhance and distort perception is important when examining the relationship of light and time. Although light is necessary for perception and according to Deleuze is equivalent to and ever-present within all matter (this concept will be discussed later in this chapter), its existence does not automatically engender perception or recognition. With this photographic project I am exploring this boundary between recognition and distortion, perception and non-perception, in order to understand further

the relationship between the individual and the city (between the parts and the whole). In looking at these images the viewer is forced to decipher the faint subject matter appearing through the overexposure and underexposure of light; this deciphering perhaps leads to a reliance on memory of past experience in order to help fill in the details via imagination thereby creating an instance of non-linear temporality or Deleuzian duration similar to the time-image (i.e. pure colour and light). These images do not conjure a linear temporality or linear narrative; rather, they transcend linearity, with the present moment encompassing all prior and subsequent moments (future moments will become past moments instantaneously and are thus automatically incorporated into all present moments).

There may appear at first to be a disjuncture between the notion of the uncanny and the Deleuzian time-image, given that Deleuze argued extensively against Freudian psychoanalysis (see *Anti-Oedipus* by Deleuze and Guattari 1984), however, I want to propose that it is useful in making a link between these seemingly disparate concepts. Claire Colebrook has argued in *Deleuze and the Meaning of Life* that a dualism between Freud and Deleuze can be overcome. She explains that Freud's *Beyond the Pleasure Principle* begins with "the image of unity and the bordered organism as a myth" (Colebrook 2010:175) and presents a "paradoxical entity of the living being" which is simultaneously "a *being*, somehow differentiated from 'life' and yet as a *living* being compelled to come into relation with life" and therefore "we cannot begin with a bounded individual" (Colebrook 2010:176). We must deduce the possibility of a "strange boundary" which simultaneously allows the being to both be other than life and be a part of life (Colebrook 2010:176). Colebrook demonstrates that this possibility within Freud of the existence of an unbounded being has similarities with the vitalist perspective of Bergson and Deleuze, whereby "life can only be intuited by considering force *before or beyond* the relation between the organism and its world" (2010:177). These resemblances lurking beneath the apparent discrepancies between Deleuze and Freud are useful in examining the relationship of the uncanny and the time-image. I want to argue that the sublime is the key to linking these concepts – specifically, the notion of unboundedness within the

sublime. In Chapter 4, I outlined the relationship between the time-image and the sublime and in the preceding paragraph I discussed the connection between the uncanny and the sublime. The doubling effect of the uncanny distorts perception by blurring the boundaries between the virtual and actual, creating an uncomfortable sensation. I am proposing that the time-image, as exemplified in the photographs and videos in this chapter, can also create an uncomfortable sensation due to the distortion produced by the colour and light within the images. In the following section I will discuss the use of colour within this project and how colour contributes to the sensation of the uncanny and the sublime within the images.

Colour and Light

Colour is equivalent to light – different wavelengths and frequencies of light produce different colours. When all colours are united they produce white light, however when they are separated they reveal a spectrum of various hues, some of which have a frequency that is too fast or too slow for the human eye to perceive. Using coloured filters on the lens of the camera I am subtracting certain wavelengths of light and allowing others to dominate the visual field. This subtraction of colour and light is reminiscent of Bergson's notion of perception as the subtraction of information. The saturation of colour distorts the images so that depth of field is erased in many instances, with the intensity of colour and light potentially producing an uncomfortable, disorientating and uncanny sensation. For example, the yellow videos of moving light (taken from the East London Overground line ► see DVD 1 – Chapter 25 and DVD 2). depict direct, bright sunlight which may cause the body to flinch as though actually looking at the sun. In addition, the red and yellow images of the setting sun in Finsbury Park (see image below) have a similar effect.



Finsbury Park, author's photograph (► see DVD 1 – Chapter 22)

The intensity of light and colour creates a potentially uncomfortable yet pleasing experience. Ronald Bogue describes such a sensation in discussing Goethe's notion of light:

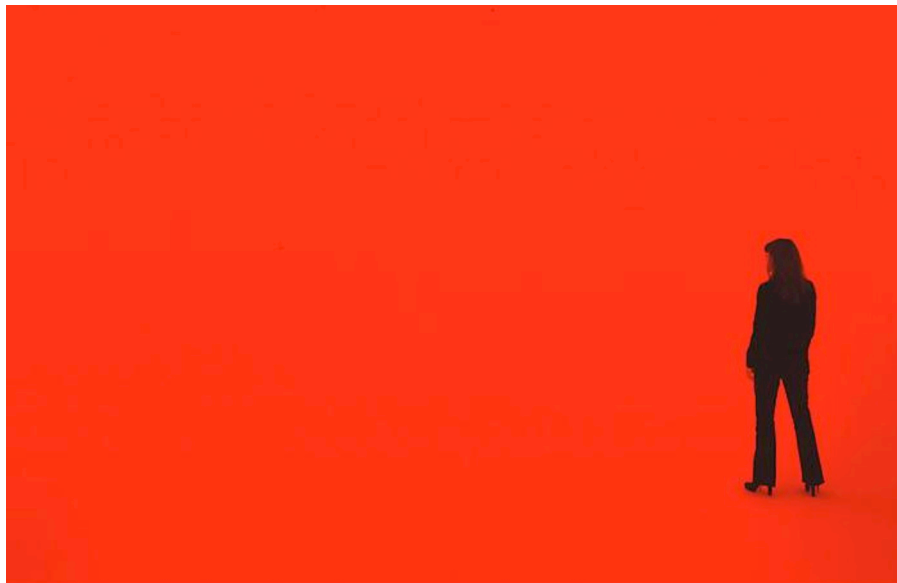
Light in itself is invisible, and the world of color makes up the visible, but between invisible light and visible color is brilliance, dazzling and blinding light at the edge of the visible, an excess of visual sensation that can scintillate but also burn, and hence a possible source of both pleasure and pain for the eye. (2003:61)

This pleasurable yet painful experience is another instance of the sublime, which as discussed previously is connected to the uncanny. The effect of light and colour realised by the artist James Turrell's *Dhātu* (2010) installation is similar to what I am trying to achieve with my overexposed photographs. *Dhātu*, which was recently exhibited at the Gagosian Gallery in London, is a light installation that essentially creates a void. The light emanating from the installation envelops the viewer so that the eye can no longer distinguish depth of field, evoking a sensation of timelessness or the closest thing possible to pure duration devoid of space. It is described on the Gagosian

Gallery's website as "an emptiness filled with light that allows the viewer to feel its physicality. Light like this is seen rarely with the eyes open, yet it is familiar to that which can be apprehended with the eyes closed in lucid dream, deep meditation, and near-death experiences" (Gagosian Gallery, www.gagosian.com, accessed October 2011) sensation of being within Turrell's light installation evokes the uncanny (as well as the sublime) by completely blurring the boundaries between the safety of the installation's enclosure (which could be equated with a sense of home) and the edge of the structure leading to a drop several feet below. The walls and the floor meet at a rounded edge in order to purposely eliminate a seam between the two, and the mass of colourful light projected onto the walls and floor further contributes to a distortion of spatial parameters. It was unnerving to approach the end of the installation toward the drop-off point as it was difficult to judge the distance accurately; yet I was overwhelmingly tempted to keep close to the edge of the installation, as that was where the light source originated. The intensity and saturation of light in that area of the installation was profoundly alluring with certain colours having a more pleasing effect than others. For instance, when red light was projected I found myself feeling uncomfortable and could not tolerate being as close to the light source, even closing my eyes at times. While the purple and blue lights I could tolerate more easily and found it enjoyable to be immersed in them.

Turrell's work explores the materiality of light by focusing on its physical aspect rather than "something that illuminates the rest of the world" (Trachtman 2003:3). Although Turrell works with light, he describes his medium of choice as perception; he explains that he strives to engender an awareness of perception within the viewer: "I want you to sense yourself sensing. To see yourself seeing. To be aware of how you are forming the reality you see" (Turrell cited by Trachtman 2003:3). Turrell's objective in drawing awareness to the process of perception through his use of colour and light is similar to the aim of my photographs and videos, in which I have attempted to disrupt the taken-for-granted appearance of everyday situations, prompting the viewer to contemplate how he/she makes sense of his/her surroundings. The materiality of light is an important factor to consider within

the process of the perception of time and space. The materiality of light contributes to an embodied experience of Turrell's art work, whereby the viewer is physically encapsulated (as in *Dhātu*, 2010) by the light and it becomes difficult to distinguish where one's body ends and the art work begins, the two entities work together to produce the work of art. The work of art relies upon the body's perception and reaction in order for it to come alive – in this case light is the material which enhances this process. The fluidity of light makes it a particularly effective material to work with in highlighting the process of perception with regard to time. Turrell comments on the temporal aspect of his work, explaining that, "Often you have to wait for an effect to develop" over time when viewing the work (Turrell cited by Trachtman 2003:4). The changes in light occurring over time within Turrell's work (for example, as discussed earlier that changes from red to blue to purple and so on in the *Dhātu*, 2010 installation) highlight the role of light within temporal perception.



James Turrell, *Dhātu*, 2010, photograph of installation

<http://www.gagosian.com/exhibitions/october-13-2010--james-turrell/exhibition-images>

My photographic work in this chapter considers the perceived immateriality of light in relation to the photographic process, which renders light in a physical capacity by exposing the digital sensor or analogue film to light over time. I have photographed direct sunlight, reflection of sunlight, shadow, and artificial

light. I have overexposed the images on most occasions in order to saturate the picture and the eye with light and colour – this was an experiment in playing with the boundaries of the technology of the Nikon Coolpix camera that I used. I did not know entirely what results I would achieve by overexposing the cameras in this way and using the various filters. The less control I had, the better the results were in terms of ‘painting’ the city anew – exposing the urban sphere in this manner produced a city that is almost unrecognisable and indecipherable. This indecipherability references the power of light to render the external world perceptible. These images also reference Bergson’s notion of subtraction within perception (I will discuss this concept in the following section). Through the overexposure, much of the information and detail of the landscape is erased or reduced to minimal shapes and forms. By focusing on these shapes and the movement of colours, the images seek to draw attention to the nuances of light and shadow present in the everyday urban environment, which are often taken for granted in the process of perception. These images do not portray time or duration in the same capacity as the first two photographic projects (as outlined in Chapters 3 and 4), yet there is a similar objective in these studies of light and colour. The images in Chapters 3 and 4 portrayed time in a linear capacity using the moving image or filmstrip as the basis for the structure of the passage of past, present and future. The still images in this chapter do not make reference to a past, present or future; despite existing within a series, each still images stands on its own without reference to a linear structure or narrative. Furthermore, the moving images in this chapter (► see DVD 1 – Chapter 25 and DVD 2). disrupt a linear notion of time – I have pieced together several fragments of movement that have not taken place in a linear sequence. Through editing and montage, I have created a moving image where future, past and present are mixed together, jumping from one to the other. I have attempted to make these jumps seamless in order to mimic how I perceive duration- as a device that unifies time, creating a monism from a pluralism as Bergson and Deleuze have proposed.



Soho, crop from larger image, author's photograph

All matter is image: the Bergsonian theory of perception

In using images to understand the relationship between time and light (as with this photographic project), it is useful to look at Bergson's theory of perception in which he states that all matter is image: the entire universe is made up of images that are acting and reacting to one another "on all their surfaces and in all of their parts" (Rodowick 1997:28). Images are not external to us nor internal to us, there is no distinction between interiority and exteriority in this sense. We are images, including the body and the brain. The body and brain are acting and reacting to energy and matter, thus "subjectivity is nothing more than a body's preparation to act or respond in a sensorimotor relation" (Rodowick 1997:28). Since all matter is image, images exist a priori where "matter is already image" without consciousness creating this image (Bergson cited by Rodowick 1997:27).

Movement is integral to perception and all perception is "sensori-motor, an instrument for translating an external movement via the senses into an ensuing motor action" (Bogue 2003:30). For Bergson, image, matter, and movement are equivalent (Maratti 2008:29-30). Perception exists in order for

us to makes sense of our surroundings by receiving movement and then reacting to this movement in the form of an action. This action is deduced through subtraction rather than addition: we subtract information from the environment by choosing to focus on that which interests us and disregard that which is of no use or interest so that “living beings react only to those entities and circumstances that concern their future action” (Bogue 2003:30). Images-matter exist in themselves and are virtual in the sense that we perceive only a portion of these images; there is much greater potential for perception than we actually perceive. We subtract information from these images to create new images within our minds.

Light plays a fundamental role within the notion of matter as *a priori* image. Bergson discusses light in terms of a diminution of light similar to the subtraction that takes place within perception. “If present images are light, representations are subtractions of quantities of light, or selective filterings of light. When we perceive objects, it is ‘as if we reflected on their surfaces the light that emanates from them, light which would never be revealed if it passed on unopposed’” (Bergson cited by Bogue 2003:31). Images are light and when we perceive them we reflect light back onto them so that “our representation of that object consists of the light rays we reflect” minus the rays that we choose to filter out; we are mirrors that reflect objects according to Bergson (Bogue 2003:31). Although it seems that the perceiver creates perception, in fact perception is not separate from the object perceived. Perception is subjective in one sense yet ultimately this subjectivity is overridden by the interconnectedness of the perceiver and the perceived; they are merely parts within the same whole. Perception takes place within the object perceived, not within the perceiver:

When I observe a luminous point P, its rays strike my retina at cells a, b, and c, and neural impulses are then conveyed to the brain. I may speak as if perception takes place in the eye or the brain, but ‘the truth is that the point P, the rays it emits, the retina and the nervous elements affected, form a single whole; that the luminous point P is a part of this

whole; and that it is really in P, and not elsewhere, that the image of P is formed and perceived. (Bergson cited by Bogue 2003:32)

Deleuze pushes the role of light further in his discussion of the plane of immanence. While Deleuze follows Bergson's notion of image, matter and movement, he adds light to the equation (Bogue 2003:34). All images are virtual with perception being an actualisation of these images and this actualisation occurs "within the flow of light when a living image...selectively reflects light" (Bogue 2003:34). For Deleuze the plane of immanence "is entirely made up of light," whereby, "The image is movement, just as matter is light" (1986:60). The plane of immanence is equivalent to Bergson's 'present image'; it is an "infinite set" where all matter and all images in the universe are contained (Rodowick 1997:29). For Deleuze, image equals movement whereby the "identity of the image and movement leads us to conclude immediately that the movement-image and matter are identical" (1986:59). He goes on to say that in movement-images there are only "figures of light" (which are also blocs of space-time) which are images in themselves, and if they do not appear that is "because light is not yet reflected or stopped" (Deleuze 1986:60). Rodowick argues that "the luminosity of matter in movement is not that of the physical and human eye organized in relation to bodies human or otherwise, but rather that of the propagation of energy throughout the entire universe" (1997:30). Movement in the plane of immanence is not yet subject to consciousness, it is at the level of molecules and atoms vibrating throughout the universe as a result of energy shifts (e.g. heat, cold, gravitational pull, radiation, etc) (Rodowick 1997:30). Thus the light that exists within matter is the energy spreading throughout the universe, "a diffusion of propagation of light on the whole plane of immanence" (Deleuze cited by Rodowick 1997:30).

Bergson and Deleuze call into question the role of light within Western philosophy, in which it had been traditionally equated with perception and consciousness. The Western philosophical tradition had identified "spirit with an interior light that illuminates the world, bringing things out of their 'native darkness'" (Deleuze cited by Rodowick 1997:32). Paola Maratti asserts that,

“Philosophy had always deemed light to be an attribute of spirit and considered consciousness ‘a beam of light which drew things out of their native darkness’ (Bergson cited by Marrati 2008:31). Deleuze explains that phenomenology was still within this tradition but the “intentionality of consciousness” became the ray of light rather than an internal light so that “all consciousness is consciousness *of* something” (1986:60). For phenomenology consciousness is *of* something whereas for Bergson consciousness *is* something: “Things are luminous by themselves without anything illuminating them: all consciousness *is* something, it is indistinguishable from the thing, that is from the image of light” (Deleuze 1986:60-61). Consciousness and matter are parts of the same whole, one does not illuminate the other. Deleuze asserts that light is consciousness rather than consciousness being light; consciousness is a screen which “stops, reflects, or subtracts” light (Rodowick 1997:32). Rodowick sites Jean-Paul Sartre’s explanation of Bergson’s “reversal of the role of light in Western metaphysics” and states that consciousness “is a luminosity flooding the subject. There is no illuminated matter, but rather, a phosphorescence diffused in every direction that becomes actual ‘only by reflecting off certain surfaces which serve simultaneously as the screen for other luminous zones’” (Sartre cited by Rodowick 1997:32).



Finsbury Park, author’s photograph

Moving Image and Exposure Time

The moving image is a useful tool in conceptualising the equation of matter, light, and time: “After all, what is cinema but a material set of images made of light, shadows, and movement?” (Marrati 2008:32). Deleuze focuses on the moving image in his analysis of Bergson’s theory of perception. The plane of immanence is a mobile section, a bloc of space-time “since the time of the movement which is at work within it is part of it every time” (Deleuze 1986:59). Deleuze goes on to explain that there is an infinite series of these space-time blocs which are continual presentations of the plane of immanence “corresponding to the succession of movements in the universe” and he dubs this “machinism” or the “machine assemblage of movement-images” which he equates with cinema (1986:59). Deleuze asserts that Bergson was ahead of his time in conceiving of the universe as cinema or “metacinema” (1986:59). By adding light to the equation, Bergson’s theory of perception can be read potentially as “a conceptualization of the relationship between the cinematic visual image and the material world” (Bogue 2003:34) with the flow of light or flow of images constituting the movement-image giving rise to the concept of the “universe as cinema itself” or “metacinema” (Deleuze cited by Bogue 2003:35).

Claire Colebrook explains that Deleuze’s theory of human perception “relies on a slowing down of molecular perceptions” (2002b:146) so that we “take the mobile flow of life and see the world in ‘snapshots’ of immobilised images” which enables us to “see movement as a passage from one of these images to another, or from one point to another” (2002b:149). According to Deleuze cinema mobilises perception by “presenting flows of movement, a moving camera following another moving body” (Colebrooke 2002b:149). Cinema presents movement itself in the form of the movement-image where the ‘open whole’ is continuously becoming and shifting through the mobile sections of movement rather than simply a movement from “one point to another in an already given homogenous space” (Colebrook 2002b:151).

But art and cinema can develop to create perceptions that are different in kind from those of the everyday stimulus-response mechanism. Cinema interrupts or dilates vision, freeing it from action and actualised images, multiplying points of view and presenting movement itself – not a movement governed by the purpose of fixed terms. (Colebrook 2002:150)

Furthermore, the time-image allows the past to disrupt the present so that we see time as a virtual whole rather than an ordered sequence. The time-image presents time as a virtual multiplicity which is becoming: “The time-image presents this flux of difference itself: no longer a spatial or ordered image of time, but time as the power of imaging” (Colebrook 2002b:159).

The moving image captures light, movement and time, allowing for a reflection of light onto the surface of film producing movement-images and time-images, whereby the parts of the whole fit together in an acentred manner. The parts or shots are not revolving around a central image (as they would in human perception, e.g. the body) yet this potentially gives the moving image an advantage: “Instead of going from the acentered state of things to centered perception, it could go back up towards the acentered state of things, and get closer to it.’ This tendency of returning to the acentered flux of matter is perhaps the central defining quality of cinematic movement-images” (Deleuze cited by Rodowick 1997:31).

Stephen Kern also claims that the invention of the cinema challenged the notion of an irreversible forward moving time. The moving image could be manipulated to compress time through editing and montage. In addition, film reels could be projected backwards. George Méliès’ work used trick photography in which he stopped the camera and changed scenes creating illusions, such as a skeleton turning into a living woman in *The Vanishing Lady* (1896) (Kern 2003:30). Louis Lumière was the first to run film backwards through the projector; Kern recounts a description of one of Lumière’s films played backwards in which broken glass flies through space and forms again

into its original shape suggesting “a Cubist decomposition in reverse” (Kern 2003:30).

Similar to Deleuze, Virilio draws upon photography and cinema as a way of examining the perception of time. He asserts that photography changed temporality into an “exposure time which ‘surfaces’...and thus succeeds the time of classical historical succession” of chronological time (Virilio 2000:59). Virilio describes the time of photography as ‘light-time’ whereby “the photographic plate is therefore nothing but *exposure of the time* (space-time) of its photosensitive material to the speed of light, that is, to the frequency of the photon-bearing wave” (2000:59). With the moving image a continuous light-time occurs so that time no longer stops as in still photographs. Virilio anticipates that the shadow and light of photographic exposure will replace the shadow and light of the sun so that the “old chronometric system of before, during and after” will become a “‘chronoscopic’ system of underexposed, exposed, and overexposed” (2000:60). Ian James explains that the exposure to light of phenomena over a certain period of time allows these phenomena to appear in the same manner that photographic exposure of film or digital recording of images occurs (2007:39).

This *indirect light* is ultimately the result of the fusion of optics and kinematics, a fusion which now embraces the whole range of ocular, graphic, photographic and cinematographic representations, making each of our images a kind of *shadow of time* – no longer the customary ‘passing time’ of historical linearity but the ‘exposed time’ which...surfaces. (Virilio 2000:61)

He goes on to say that the exposure time of photography became shorter and shorter as the technology advanced:

For more than a hundred and fifty years, then, temporal speed-up has led to advances in what still and moving photography represent. It is the ‘light of time’- or, if you prefer, the time of *speed-light*- which has illuminated the world around us, to such a point that it seems to be no

longer a mere 'means of representation' akin to painting, sculpture or theatre, but a veritable 'means of information.' (Virilio 2000:60)

This speeding up of images has disrupted previous notions of temporality, whereby past, present and future are eliminated due to human perception of the speed of light. The speed at which light travels appears to be instantaneous to the human mind, thus information (or images) travelling at this speed are transmitted and received seemingly instantaneously. In this instance, Bergson and Deleuze's equation of light = image = matter = movement becomes apparent. Moreover, Deleuze's concept of going beyond representation is relevant to this light-speed exposure time, whereby images are light (the artificial light of the digital screen) transferred – image and referent are one. Images in this sense do not represent depicted subject matter; rather, the "means of information" as Virilio described is equivalent to image (2000:60).

The speed of light allows phenomena to appear in exposure-time (or chronoscopic time) in an instant, to be exposed by light instantaneously or as fast as light can travel within the gravitational pull, so that a journey extending in space no longer takes place. The images and information utilise a 'generalized arrival' "whereby everything arrives without having to leave", thus eliminating the successive components of the journey and "being overtaken by *arrival* alone" (Virilio 2008b:16).

This generalized arrival is a phenomenon of telepresence (or teletopology) in which the perceiver and the perceived remain relatively static relying on the transfer of information via the light-speed of technology. The intensive duration of telepresence/teletopology is similar to Deleuze and Bergson's notion of duration, in which past, present, and future are contemporaneous on one plane of existence. Duration, as outlined by Deleuze in *Bergsonism*, is a virtual multiplicity made up of all the layers of the past which are contracted in the present so that the "whole of our past is played, restarts, repeats itself, *at the same time*, on all the levels that it sketches out" (Deleuze 1991:61). Deleuze states that there is a "single illusion about the essence of Time" that

causes us to believe that: “(1) we can reconstitute the past with the present; (2) we pass gradually from one to the other; (3) that they are distinguished by a before and an after; and (4) that the work of the mind is carried out by the addition of elements (rather than by changes of level, genuine jumps, the reworking of systems)” (1991:61-62). These misconceptions about time are contained in Virilio’s notion of extensive duration and chronological time in which the past precedes the present and one follows the other in a linear manner. Deleuze (following Bergson) accedes that there is some succession within duration but only due to its ‘virtual coexistence’ which allows succession to occur – “duration is only succession relatively speaking” (1991:60). Although duration is a multiplicity it is by the same token a monism; in other words, time is a unified whole within which there are different strands of existence: “Bergsonian theory of *simultaneity* thus tends to confirm the conception of duration as the virtual *coexistence* of all the degrees of a single and identical time” (Deleuze 1991:85).

Virilio’s notion of the relationship between light and time seems to overlap both a phenomenological perspective and a Deleuzian approach. Virilio is drawing upon phenomenology’s notion of perception as an embodied experience whereby “the positioning and movement of the body in relation to its surroundings” is primary within perception (James 2007:13). Virilio is looking at the “relation of technology to bodily situatedness” (James 2007: 26) and this is his focus in analysing the perception of temporality within the dromosphere. It appears that Virilio views the perception of time as shifting from a centred state of being (phenomenological perspective) to an acentred one (Deleuzian perspective), with chronoscopic time or light-time evolving into something resembling Deleuze’s time-image. In both light-time and the time-image the instant lives beyond the moment of recording so that a non-linear conception of temporality emerges, whereby the ‘now’ is ongoing, transcending a linear notion of past, present, and future.

Although Virilio’s concept of duration within chronoscopic time overlaps Deleuze’s duration of virtual multiplicity, there is a significant divergence between the two. Virilio sets up a binary between intensive and extensive

duration where the two durations are separate and opposed. He appears to contradict himself at times by creating this bifurcated framework while at the same time discussing the notion of space-time (as introduced by Einstein's Theory of Relativity) which has come to dominate the light-time of the information age. Virilio appears to be arguing for both this new intensive duration without extension into space (the erasure of space in essence) and a space-time ("technological space-time" (Virilio 1991:13)); this is where his argument falters. Deleuze (following on from Bergson) avoids this trap of pure duration without extension or time without space. As discussed in Chapter 3, Deleuze remarks that pureness of time is impossible to attain:

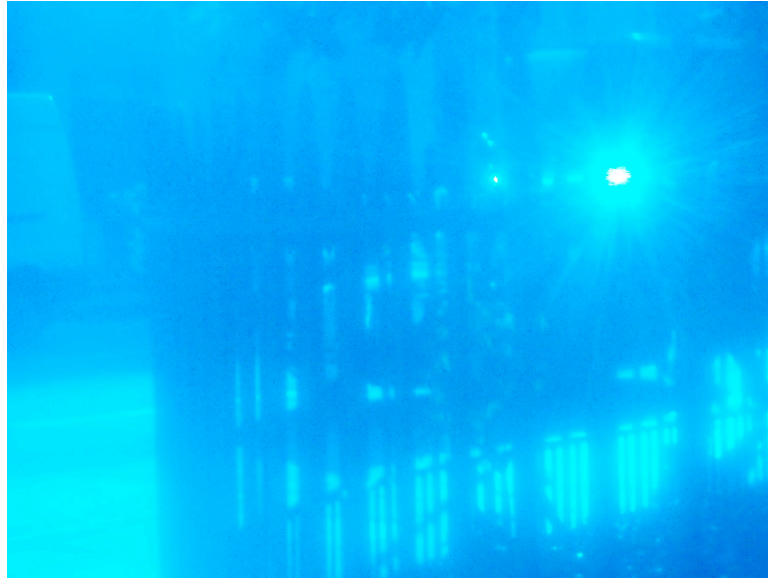
Bergson is aware that things are mixed together in reality; in fact, experience itself offers us nothing but composites...For example, we make time into a representation imbued with space. The awkward thing is that we no longer know how to distinguish in that *representation* the two component elements which differ in kind, the two pure *presences* of duration and extensity. (Deleuze 1991:22)

Deleuze explains that "*there is always extensity in our duration, and always duration in matter*" (1991:87). Matter and space are never contracted or expanded enough to be pure, thereby a mixture of the two is inevitable:

matter is never expanded (defend) enough to be pure space, to stop having this minimum of contraction through which it participates in duration, through which it is part of duration. Conversely, duration is never contracted enough to be independent of the internal matter where it operates, and of the extension that it comes to contract. (Deleuze 1991:88)

I would argue that the boundary between space and time is impossible to delineate and it is more plausible that one is contained within the other in their actualisations, as Deleuze purports. Perhaps light is the element with which space and time can be interwoven gracefully, an intermediary through which extension and duration can mingle. Light carries the images of duration,

which become actualised through photographic technology. The boundaries between moments in time and between light and dark are difficult to pinpoint, yet using photographic media we can interrogate these shifting entities. For example, the videos I have taken at night of streetlights and car lights illuminating the surface of the road depict subtle changes in brightness – shifts which are not always detectable or noticed by the eye in the midst of daily life (► see DVD 1 – Chapters 26 and 27). In particular, at night when walking down the street, we do not always look at subtle details in the environment since we are concentrating on getting to our destination safely. In my experience, I tend to walk more quickly at night and focus simply on my immediate surroundings rather than looking further afield. The images I have taken on Euston Road of light reflecting on passing cars also provides insight into the shifting boundaries between light and dark and moments in time (► see DVD 1 – Chapter 32). The movement of the cars interrupts the stream of sunlight and creates a quick alteration between light and dark – a spectacular pattern of flashing light is produced in this commonplace, everyday occurrence. The camera captures this banal incident and highlights it, thereby allowing it to stand out as extraordinary. The blue filter that I have used and the overexposed nature of the images further enhances the spectacular quality of the images. Photographic technology in this instance allows the viewer to contemplate subtle shifts in movement and light (similar to the way that the bus project and panorama project created a space for contemplation) and to examine the relationship between the fragments and the whole of the city.



Euston Road, author's photograph (► see DVD 1 – Chapters 31 & 32)

Overexposed City

While photographic technology can be used to reveal the blurring of boundaries occurring between the individual and the whole of the city, it can also further distort the lines between the virtual and actual realms.

In a chapter entitled the 'Overexposed City' Virilio explains that a blurring of boundaries occurs within physical space via the screen of the computer and the television, thereby creating a "visibility without any face-to face encounter in which the *vis-à-vis* of ancient streets disappears and is erased" (1991:13). Virilio uses the term overexposed to refer to the indirect light of machines that floods the urban realm – not necessarily an influx of available light but an overexposure of images lit up through the telecommunications revolution (which originated with the moving image). He deems this overexposure as potentially harmful to the physical infrastructure of the city, which he claims is disappearing.

Through this teletopology "people can't be separated by physical obstacles or by temporal distances. With the interfacing of computer terminals and video monitors, distinctions of *here* and *there* no longer mean anything" (Virilio 1991:13). This term 'teletopology' has been coined by Virilio to denote the viewing of a place from a distance, derived from the "Greek *tele*, meaning

distant or far...and from the Greek *topos*, meaning place or common place” (James 2007:48). Teletopological devices are those that transmit images through time and across space (such as television or the internet) creating “a separation of what is perceived in any visual field and the ability of our body to touch, use or manipulate that which is perceived” (James 2007:48). Thus a loss of the “richness or density of sensible experience” occurs (James 2007:48-49). The images transmitted through television or the internet are replacing the objects that they are representing; these virtual transmissions are standing in for the actual ‘reality’. Ian James asserts “the virtual comes to dominate over the actual” (2007:66). Virilio explains the passage of the image (via ‘tele-presence’) surpasses the value of the ‘real object’ which it represents:

This advent of the real ‘passage’ to the detriment of the real object and subject – a phenomenon so indicative of the primacy of the image over thing resulting from the new supremacy of real time over real space... (Virilio 2000:7)

The materiality of urban architecture and infrastructure is disappearing according to Virilio and is being replaced by the immateriality of televisual/telecommunications technology: “Instead of operating in the space of a constructed social fabric, the intersecting and connecting grid of highway and service systems now occurs in the sequences of an imperceptible organization of time in which the man/machine interface replaces the facades of buildings as the surfaces of property allotments” (Virilio 1991:13-14). The old structure of cities, in which gates or walls delineated physical space, has been transformed into a space-less audio-visual border. Virilio claims the “urban wall has long been breached by an infinitude of openings and ruptured enclosures” which are as effective as the physical wall at “constraining and segregating” (1991:15). Further commenting on the penetrability of the boundaries between surfaces, Virilio cites the ‘new scientific definition of surface’ as “an exchange between the two substances placed in contact with one another” (1991:17). He claims that this definition “signals a change in the notion of limitation” and that the “limitation of space has become

commutation” so that “what used to be the boundary of a material, its ‘terminus’, has become an entryway hidden in the most imperceptible entity” (Virilio 1991:17). This notion of the imprecise boundary between entities is similar to Derrida’s concept of the ‘cise’ in his theory of the sublime (as discussed in the previous chapter); furthermore, this constant exchange of information between substances and surfaces also relates to Bergson’s notion of the open whole.

Christine Boyer also engages with this notion of the dematerialisation of the city. She claims that “we experience an extreme sense of disembodiment” due to the obsession with the “latest electro-optical devices and their reproductions and appropriations” (1996:119). Boyer goes on to say that this disembodiment and disappearance have led to “the ultimate stage of disenchantment with the city, in which phantasmagorical illusions that urban form might hold have been dissipated and dematerialized into thin air” (1996:119). Boyer argues that the influx of images within the urban sphere causes a destabilisation of the “sense of physical reality, because public space appears impermanent and nondescript with the persistent flow of information”, thereby causing the perception of the physical city to shift; she asserts that our “sense of sight is dulled by this hyper-imageability” and we tend to divert our eyes to shield them from the onslaught of images (1996:150).

Stephen Graham asserts that the notion of a disappearing city due to digitalisation and information and communication technologies (ICT’s) is oversimplified and fails to account for the materiality of the physical components of ICT’s as well as the continued mobility of bodies in space and time within the urban sphere: “End of city perspectives also ignore the rapid rise in all forms of physical mobility at all geographical scales. These have actually grown in *parallel* with the application of ICT’s; they have not been replaced by ICTs” (Graham 2004: 12). Graham cites the “growing gridlock of city stress; the staggering rise of global automobile ownership; the exponential growth of airline travel; intensifying levels of consumer and business tourism; growing energy consumption; and a general acceleration of

flows of goods, commodities and raw materials at all scales across the world” as evidence that the city is not disappearing (2004:12). He discusses the invisibility of much of the material make-up of ICT’s which often causes people to perceive them as immaterial. Furthermore, ICT’s are becoming commonplace – they are increasingly being incorporated into everyday life and this contributes to their invisibility by being “taken for granted” (Graham 2004:18). Graham proposes that the city is shaping ICT’s just as ICT’s are shaping the city and the current and future metropolis fuses old and new technologies in “an ongoing blizzard of change” (2004:11).

Moreover, the transcending of space whereby closeness and distance occur simultaneously recalls Simmel’s concept of ‘the stranger’ in which the individual is both near and remote within social interaction. The stranger is also the ‘potential wanderer’ where “wandering is the liberation from any given point in space” (Simmel 1950). Virilio speculates on such a wandering and liberation from space in the overexposed city – he concludes that it is not possible to escape entirely: “Where does the city without gates begin?... It begins with the urge to flee and escape for a second from an oppressive technological environment, to regain one’s senses and one’s sense of self” (Virilio 1991:19). Is it possible that the overexposed city impairs our vision by saturating our sense of sight, just as too much light can disorientate and eventually cause blindness? If this is the case, it is important that we maintain a balance of closeness and distance with the city, enabling the relationship between self and whole to come into view without the obstruction of too much or too little light.

Conclusion

What is happening to the sense of self within the overexposed city? The boundaries between the self and the whole of the city are continually shifting. In this era of teletopological devices – instantaneous transmission of images across distances – I would argue it is becoming more difficult to distinguish between the self and the whole. The relationship between near and far, between subject and object, between time and space has been disrupted by

this instantaneous teletopology. The virtual realm becomes increasingly important as actualised physical interaction becomes less – images or matter-images pre-dominate interaction within the present-day city. Virilio argues that the body is the last urban frontier (2008b:11): the last physical terrain upon which the city rests. While this may be an extreme view of the city as a disappearing landscape, Virilio is addressing the notion that the distinction between self and whole has become more significant than ever.

Light has become a pre-eminent factor in this slippery border between self and city. The role of light within the perception of time has shifted from a primary reliance upon sunlight to what Virilio terms 'indirect' light of machines. The photographic age and subsequent generations of photographic technology have created an emphasis upon indirect light as a means of transferring images through space. The speed of light has become the standard for measuring time, transferring images via light waves across vast expanses of space instantaneously. Light has the potential to both help and hinder, to reveal and conceal – its dual nature is played out within the perception of direct sunlight and other light sources as well as indirectly via the onslaught of information transmitted at the speed of light through television and computer screens.

What is the future of the city in this age of light-time? How will we negotiate the urban realm in an era of increasing dependence on indirect light? This increasing reliance on the indirect light of machines is not necessarily detrimental to the self or to the city; rather, it is important to be aware of the changing relationship between the self and the city and between the self and the time and space of the city. As long as images continue to exist (therefore as long as matter continues to exist since all matter is image), the self will continue to thrive – there may be a constant re-negotiation of the self through an increasing reliance upon virtuality and light; yet the self has the potential for expansion within the teletopological era of light-time. This expansion or liberation of the self has the potential to be both beneficial or harmful (just as light has the potential to hinder or assist). We must continue to negotiate the relationship between the self and the city so that we do not lose a sense of

individuality while also avoiding becoming excessively removed from the whole – a balance must be attained between overexposure and underexposure of both city and self. Photography and the moving image provide important tools for negotiating this border between overexposure and underexposure and in understanding the relationship between self and whole.

Chapter 6: *Conclusion: Reconfiguring the Everyday as Sublime*

The everyday experience of the metropolis has been explored in the preceding chapters through an optical engagement with the nuances and facets of the dynamic urban realm. Examining the complexity of urban temporality, the dense layering of fragments that make up the perception of time within the city has been examined by photographically recording and processing various elements of the urban sensorium. In an attempt to interrupt the amorphous, contiguous whole of temporality, photographic technology has been used to separate moments of time artificially in order to highlight and re-present these events. By breaking up time into photographic images, the space for critical reflection upon the relationship between image, time and perception within the everyday realm of the city has been created. The preceding chapters have outlined an interaction between theoretical and practical research focusing on visual art as a method for disrupting taken-for-granted notions of the everyday. In essence, the everyday has been reconfigured as sublime. By re-contextualising mundane daily occurrences and transforming them into pieces of art, they become objects of contemplation, which stand out rather than blending into the background of daily life. Highlighting these fragments of everyday urban life is important in creating a new understanding of the complex relationship between the multitude of diverse elements which come together to create the dynamic whole of the metropolis.

This chapter will continue the consideration of the relationship between the city and its constituent parts by further exploring the photographic image as fundamental to understanding the perception of urban temporality. Focusing on three elements that comprise visual perception (difference and repetition, panorama, and light), this thesis has utilised the moving image (and its relationship to the still photographic image) as a device for investigating the process of visual perception of temporality. I will begin by revisiting these three photographic projects (outlined in chapters 3, 4, and 5) in the following section and then proceed by reflecting upon how these three ‘fragments,’ which may seem separate, combine to create a dynamic ‘whole’. This ‘whole’

which comprises the thesis will then be discussed with regard to the interdisciplinary methodological approach of my research and the future potential for this type of research strategy. Lastly, I will conclude by considering the changing role of the image within the context of digital technology and its impact upon the perception of urban temporality (a discussion begun in the previous chapter that will be expanded upon).

Urban Montage: a Multi-Layered Approach

The first empirical chapter of the thesis (chapter 3) began the examination of urban temporality through a window overlooking the repetition of movement occurring at a North London bus stop. The constant stream of buses and people passing through this hub provided a prime location from which to study the relationship between movement, temporality and image. As mentioned in chapter 3, an ongoing engagement with the rhythm of a place over time is important in understanding and analysing such rhythm (Lefebvre 1996:220-223). Having observed and interacted with the bus stop in Highgate over a span of nearly two years, an intimacy with the place was formed and this provided a unique perspective; this familiarity with the bus stop and my observation of the many layers of activity taking place there, created a rich starting point for the fieldwork and for an investigation into the perception of time. Chapter 3 presented Gilles Deleuze's notion of difference and repetition in relation to the activity of the bus stop. I argued that differentiation, which is the actualisation of the virtual, occurs through photography. The repetition of movement (at the bus stop and throughout the city) often precludes the perception of difference (difference between moments in time, between people, between buses, etc) due to the magnitude of seemingly identical activity recurring over, weeks, months, and years. By photographing the repetition of movement at the bus stop, difference was made apparent through the actualisation of virtual potential of this site – the relentless becoming of this dynamic locale, which typically remains imperceptible, was transformed into visible, actual photographic images. Chapter 3 asserted that the event of the photograph and the moving image allowed the actualisation of the virtual to take place and be captured in an external image, yet in turn

through this photographic event the actual becomes virtual once again; the photographic image transcends the moment of its capture by simultaneously preserving this moment and encapsulating future moments to become an amalgam of time. The photographic images of the bus stop actualised the virtual potential of the bus stop, presenting the everyday activity at this site in a novel capacity, distorting the mundane movement into a captivating display of vibrant colour and shapes – an attempt to highlight the elusive process of becoming, the continually shifting fragments making up the whole of this bus stop (and the greater whole of the city).



Highgate bus stop from Chapter 3, author's photograph

Chapter 3 concluded with a discussion of the ability of photographic images to transcend the boundaries within which they appear, moving beyond representation. This chapter presented the capacity of photographic technology to aid our perception of difference through creating temporary boundaries between moments in time. The significance of photographic imagery in the differentiation of temporality and movement within the urban realm is vast; photographic technology allows us to engage with the rhythm and pace of the city in a manner that is not possible in the context of our daily lives. *In situ* we are swept up by the phantasmagoria of the metropolis and carried from place to place by the current of the city's relentless movement –

photographic imagery enables us to view the city from a critical vantage point, temporarily erecting boundaries between self and whole, internal image and external image, and virtual and actual.

The study of difference and repetition with regard to the virtual urban realm in Chapter 3 provided the first layer of the investigation into the perception of urban temporality. The theoretical framework laid out in chapter 3, which drew upon Henri Bergson's concept of duration and Gilles Deleuze's notion of the movement-image, in its examination of the relationship between time, movement and image, was expanded upon in Chapter 4 through an analysis of the blurred boundaries between virtual and actual existing within the panorama. Looking at the panorama's role in vision and visuality within the urban sphere, I argued that the panorama emerged as a result of changing notions of temporality and spatiality occurring in the 18th and 19th centuries. The panorama's emergence coincided with aesthetic, scientific, technological and economic shifts, which created a desire to consume the landscape visually in this all-encompassing manner. While the images of the bus stop in Chapter 3 portrayed the fragments of daily urban activity from a narrow, focused view of one particular location over time, the panorama images presented various non-descript locales. The bus stop images presented the difference and repetition of the city through a study of detailed minutiae of everyday ritual and habit of the location; however, the panorama presented an expanded view of the city street with much of the detail abstracted. The panorama format presented the temporality of the city in a horizontal filmstrip, in order to disrupt the present moment. The panorama's expansiveness allowed for an extended view of the movement through time and space of the urban realm – the images traced the movement of figures walking through London, slowing down their interaction with the landscape to reveal fragments of movement making up past, present, and future in a single, sweeping view. These panoramic images presented motion in a similar capacity to Etienne-Jules Marey and Eadweard Muybridge, in which the increments of movement take place in a succession of still images. This breaking down of movement reveals the components of the moving image, which I argued also make up the elements of duration.

The Deleuzian notion of going beyond representation was addressed again in Chapter 4 with regard to the theory of the sublime in relation to the temporal. Drawing upon the work of Leo Charney (1995) and Jean-François Lyotard (1989), I examined the ability of the present moment to “dismantle consciousness” (Lyotard 1989:197) and to create a feeling of ecstasy through “fully inhabiting” that moment (Charney 1995:279). The possibility of experiencing the present moment as pure sensation prior to cognition was argued to be found in Deleuze’s ‘time-image’ which is an instant of pure optical experience (Deleuze 1989).



British Museum, panorama from Chapter 4, author’s photograph

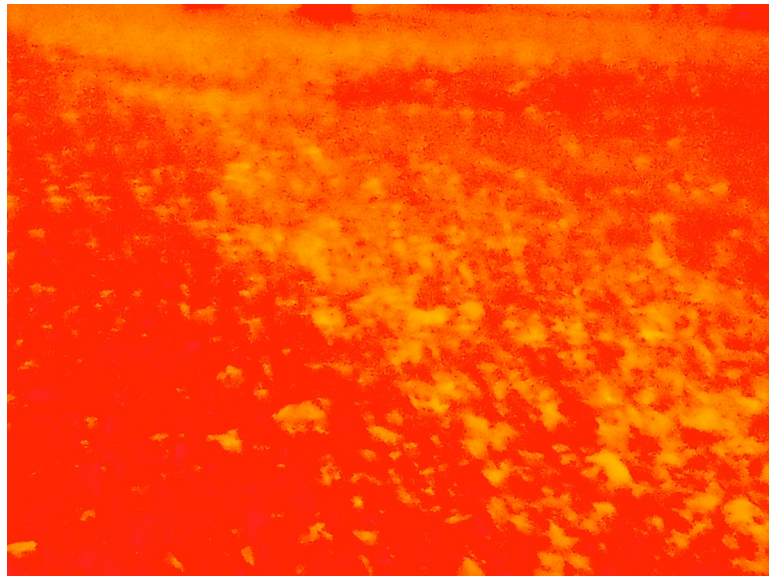
The panorama was employed as a device to explore this engagement with the sublime; its expansive form fostered an experience akin to the sense of engulfment and overwhelm characterised by the sublime. The virtual urban realm was explored further by drawing upon the disorientation created by the lack of vanishing point within the panorama. This lack of distinct focal point disrupts the sense of depth perception, thereby highlighting the indistinguishable borders between subject and object, self and whole, background and foreground. The panoramic images in Chapter 4 drew attention to the often imperceptible boundaries between fragments of temporality that make up duration – the multitude of moments within the urban realm which we witness ceaselessly throughout the day and night and that we often fail to perceive consciously. The panoramic images referenced the spectacle of urban phantasmagoria of the mesmerising metropolis using vivid colour and depicting figures walking trance-like through the city. Following Christine Boyer (1994), it was argued in Chapter 4 that the landscape of the city has been altered by the panoramic visual format, thereby demonstrating the cyclical relationship between internal image and external image of perception. The layout of the urban built form has been

influenced by the panoramic vista; furthermore, images depicting the cityscape as an expansive panorama, have shaped how the landscape of the city is digested (Jansson and Lagerkvist 2009). The panoramic images in Chapter 4 presented a distanced vantage point from which to digest the overwhelming expansiveness of the sublime metropolis.

The third project of the thesis, outlined in Chapter 5, continued to build upon the framework of the first two empirical chapters, by presenting a third view of the city through photographic studies of light. Just as the panorama disrupted expected relationships of subject and object, and figure and ground, light has a similar capacity to obscure visual perception. Chapter 5 explored light as a vital ingredient within visual perception and within photographic imagery. The dual nature of light – its power to both distort and enhance perception – was highlighted as a significant factor in the perception of urban temporality. The shifting boundaries between moments of time and between self and whole continued to be examined in Chapter 5 with regard to duration and the overlapping of past, present and future. Henri Bergson and Gilles Deleuze's equation of light, matter, image and movement provided the foundation for investigating the relationship between light, time and the photographic image. The photographic image is a record of light reflected onto a surface and then captured by film or digital technology. This recording of light takes place over time and thereby illustrates this equation of light and time – the length of time that the digital sensor or film is exposed to light within the camera has a direct impact upon the brightness of the image. Moreover, the legibility of the image is directly affected by the amount of light recorded and subsequently by the amount of light used to develop the photograph in the dark room or digitally.

The images created for this study of light and time explored this direct relationship between the legibility of light and the photographic image by deliberately overexposing the still and moving images to disorientate the viewer. The images presented in Chapter 5 interrogated the blurry boundary between recognition and distortion in order to expose further the uncertain delineations between virtual and actual. The overexposed images in Chapter 5 portrayed an increasingly abstracted view of the city, further distorting the

everyday banal increments of movement and time making up the whole of the metropolis. Building upon the photographic investigation begun in Chapter 3, the studies of light present a more abstracted 'reality' as compared with the less distorted images of the bus stop. This distortion draws upon Bergson's notion of subtraction of information within perception (Bogue 2003). This notion of perception was originally referenced in Chapter 1 with regard to perception being a choice, whereby information is disregarded or discarded based on its relevance to the individual's task at hand.



Finsbury Park, crop from larger image, from Chapter 5, author's photograph

In the final section of Chapter 5, Virilio's 'overexposed' city formed the basis of my investigation into the role of digital photographic technology in shaping how we perceive time within the modern metropolis. Chapter 5 theorised that digital technology eliminates a linear sense of time by transferring images at the speed of light which the mind reads as instantaneous – past, present and future are dissolved into an amorphous mass of temporality (Virilio 2000). The virtual urban realm was explored within the context of night and day; the diurnal rhythm which traditionally dictated daily life in the metropolis has become altered due to the invention of electric light and other artificial light sources. Paul Virilio's notion of teletopological devices creating an urban realm dictated by the speed of light provided the basis for an interrogation of the changing role of light within the perception of urban temporality (2000).

This teletopological temporality was argued to be reminiscent of duration – a virtual realm in which images from the past, present and future coexist. The perceived immateriality of the digital realm was argued to be a significant factor in this fusion of past, present and future. The image and referent join together in the digital dromosphere to form a simulacrum that becomes the primary image, whereby the virtual realm becomes increasingly significant. The images transmitted via light-speed stand in for the ‘real’ objects, thereby creating an immaterial realm of images according to Virilio. This changing relationship between light and time with regard to digitisation and the future of the photographic image will be discussed further in a later section of this chapter.

Convergence: Fragments and the Whole

The three empirical photographic studies presented in this thesis have examined different elements of urban temporality, with each project presenting a separate yet related aspect of the research. These photographic projects informed each other and worked together to formulate a wider picture of the city. By breaking down the metropolis into diverse fragments and then piecing those elements back together, a new whole has been created that presents a nuanced perspective of the perception of time within the city.

In a similar capacity to Cubism (discussed in chapter 2), these varying ‘angles’ of the urban realm that the different chapters present, serve to create a layered view of the city: a montage of the metropolis. Just as Walter Benjamin’s *Arcades Project* comprised fragments giving rise to a layered picture of Paris that could be traversed in a non-linear capacity (Gilloch 1996), I have collected a host of images from which to construct a multi-faceted view of the metropolis. In the first chapter I argued along a vitalist perspective whereby the city is considered to be an open system (Nigel Clark 2002). The three photographic projects within the thesis have presented several dimensions to the city in an attempt to portray the dynamism of the metropolis in its ever-changing becoming; this becoming is impossible to present in its entirety due to the nature of its continual renewal and

transformation, however it is important to engage with it (in this case through photographic imagery) in order to heighten our understanding of this complex process.

The photographic readings of the city presented in Chapters 3, 4 and 5, disrupted traditional notions of the role of the panorama, difference and repetition, and light within the everyday experience of the city. I chose aspects of the city which I felt were hidden in terms of their taken for granted status as basic components of daily life. I wanted to scrutinise these mundane elements in order to bring them to the fore of conscious perception. Simmel's notion of closeness and distance as outlined in 'The Stranger' (previously discussed in Chapter 5) has informed this multi-layered approach to the visual reading of the city. I began with a close-up study of the incremental, innumerable actions occurring at a London bus stop – the daily life of this locale was photographed as a case study for the micro-movements making up the whole of the metropolis, tiny movements that are often unseen yet have monumental impact when pieced together. Each nuance of activity that occurs within everyday life has an affect upon every other action, despite our inability to see this 'bigger picture.' Every interaction made and every movement performed has ramifications upon the functioning whole of the city. Depending upon how close we are to the interaction made, our level of perception varies; in other words, if we are too close to the activity, we cannot see the widespread impact of our actions; and if we are too far away we fail to perceive the immediate effects. Thus it is necessary to provide varying perspectives from close-up and from afar in order to achieve a balance, facilitating comprehension of the relationship between the parts and the whole.

After photographing from the close-up view of the bus stop, I chose to broaden the frame to include a panoramic picture of the fragmented movement within the urban realm. The panoramic view provided a different angle from which to observe the countless movements occurring daily within the city streets. The panorama (as discussed in Chapter 4) is an effective device from which to disrupt the relationship between closeness and distance

of the individual interacting with the city – the boundaries between subject and object and between figure and ground are distorted, thereby displacing frames of reference and causing the viewer to question his/her relationship to the image and ultimately to the metropolis as a whole. The third photographic view of the city presented in this thesis further blurred the boundaries between closeness and distance by utilising a vantage point that is often far from the subject matter but which has been abstracted or cropped to zoom in on a narrow section of the image. This cropping provides the effect of critical distance by isolating certain elements (for example, in the video which depicts the headlights of cars reflecting on the road ► see DVD 1 – Chapter 27). and allowing the viewer to see nuances that typically are witnessed more easily from afar. The ‘zoomed-in’ perspective provided by the technology allows details to be revealed which often become visible solely when witnessed nearer to the subject matter. A mixing up of closeness and distance in this final photographic project of the thesis adds a third layer to the metropolitan montage.

Varying views and angles from these three photographic interactions with the city come together to formulate a larger reading of the urban sphere, which can be juxtaposed in countless ways to create a dynamic whole. The visual components of this research can be joined in numerous combinations to produce myriad kaleidoscopic images of the city. Each individual image has been created using montage or a derivative thereof; moreover, these smaller montages have been put together to create a larger montage incorporating all three photographic readings of the city on DVD 2. This montage format has been referred to throughout the thesis as a method of artistic creation and in relation to perception, specifically with regard to duration and the notion of the moving image as a model for the process of perceiving temporality.

In the first chapter, Walter Benjamin’s use of montage, which I drew from Graeme Gilloch (1996) and Susan Buck-Morss (1989) was promulgated as a primary influence upon this study – in particular, his use of non-linearity as well as his layering of text and city, building the city anew through his words and his use of the dialectical image. I have used a similar approach to my

visual reading of the city by fusing text and image in an interactive capacity, thereby producing a hybrid form of 'theory-practice', which was presented in Chapter 2. I argued in Chapter 2 that 'theory-practice' was essential to producing research that reflects the fluid, transient quality of the urban realm. An iterative relationship between theory and practice was asserted as crucial in developing cutting edge urban sociological research – research which emerges in an organic capacity alongside the transitory metropolis. A dialogue between theory and image has been created within this research, with both elements influencing each other equally to develop a fluid, emergent form. It was argued in Chapter 2 that practice-led research in which art makes up the practical aspect of inquiry is a powerful research method. Art has a unique capacity to provide novel understanding to the subject of research through its flexibility, spontaneity, and unstructured nature. In particular, the combination of art and theory utilised within this thesis presents a model of research in which chance has become an asset rather than a hindrance. As discussed in the first two chapters, chance is an important factor within the everyday activity unfolding on the city streets; the random confluence of events taking place at any moment gives rise to the unpredictability and volatility of the urban sphere. This unpredictability is responsible for the city's sublime quality; the arbitrariness of the metropolis has the potential to overwhelm the individual and subsume him/her into the vastness of its labyrinthine web. This thesis has sought to explore the boundary between the self and the whole and to access this place of the virtual through a method of photographic interaction.

Working in an interdisciplinary manner, I have fused art practice with sociology using photographic technology to mediate between the two disciplines. Within this research, the sociology speaks to the art and the art speaks to the sociology in an ongoing dialogue facilitated by the photographic tradition. The fluidity between art and sociology and between practice and theory that has characterised this research has been carried out through an examination of difference, becoming and the virtual realm. In the following section I want to expand upon the examination of art and its role within researching difference, becoming and the virtual. I will revisit the discussion

of the significance of art within urban sociological research (which was begun in Chapters 1 and 2) in order to bring together various strands of the thesis that have remained relatively separate until now. I will return to the notion of the virtual and difference in itself, which was expounded in Chapter 1, relating these concepts to art and the creative process in a discussion of representation, the sublime and the photographic event.

Difference, the Virtual and the Sublime Photographic Event

The virtual has been a recurring feature of this thesis – where self and whole converge is where the virtual realm can be experienced directly. The sublime aspect of the virtual, its overwhelming magnitude and its refusal to stand still, precludes it from being captured in an image absolutely. This difficulty in pinning down the virtual led me to engage with it from a multi-faceted approach. It seemed the only way to get close to touching the boundaries between the virtual and actual, self and whole, was to explore various sides to this unwieldy entity. As discussed in Chapter 3, the virtual is a realm in which infinite potential of becoming exists. Thus the virtual urban realm is a place of endless change and continual becoming; although we do not see this virtuality it is ever-present and affecting our everyday lives continuously. This thesis is an attempt to draw attention to the virtual urban realm and bring it to the fore of sociological inquiry, placing particular emphasis on the role that images play within the virtual urban realm. The virtual can be thought of as a kaleidoscope (drawing again on Bergson's metaphor, which was first mentioned in Chapter 3) in which a multitude of images are turning and colliding to constitute an infinite, ever-changing montage. This multi-faceted kaleidoscopic model of perception is reminiscent of Deleuze's concept of becoming. This virtual montage is equally 'real' and is as significant to daily life (Colebrook 2002a) as the actual realm, yet it is often overlooked due to its hidden nature. Claire Colebrook has argued that Western thought "has always privileged a politics of the actual over the potential, and does this by stressing human life as already expressed and constituted" (2002b:xxx). Following a Deleuzian framework, I want to argue for the importance of examining the virtual in order to disrupt the taken for granted perception of

the everyday realm and to uncover the hidden potential within the everyday for transforming our perception of visible 'reality'. It is through art, specifically through photographic imagery, that I have attempted to reveal the virtual realm of the city within this thesis.

Art provides a unique capacity for disrupting the 'dream-state' created by the phantasmagoria of the city, to borrow Walter Benjamin's terminology. Benjamin used the dialectical image to shock the reader into a new understanding of the city, to see the city from a different perspective in order to engender a shift in the relationship between the individual and the whole of the city. Benjamin (1997) engaged with Surrealism's method of jolting audiences to see the everyday as extraordinary through their artistic and literary renditions of the urban realm (Surrealism was discussed in detail in Chapter 1). In this vein, this thesis has sought to interrupt the quotidian experience of time within the city in order to challenge existing notions of perception. By challenging the way that we perceive temporality within the urban sphere, awareness of taken for granted or hidden aspects of the events in everyday life begin to emerge. In revealing these unnoticed or unconscious daily events, the relationship of these events and their impact can also surface in a more profound way. The significance of these innumerable actions making up the mundane activity of daily urban life is far-reaching: by allowing the multitude of seemingly unimportant movements within the urban everyday to be emphasised, a new understanding of difference can emerge.

Understanding difference is fundamental to comprehending the virtual; it is also fundamental to comprehending perception and how we make sense of everyday life. Claire Colebrook explains that difference (according to Deleuze) allows us to "think the whole of life": "Life is difference, the power to think differently, to become different and to create differences. The philosophical ability to think this concept will help us to live our lives in a more joyful and affirmative manner" (2002a:13). Each individual is part of the same whole, each person, each action, each moment in time, combines to form the whole of the city, yet each of these individual fragments remains distinct from the next. The distinction between individual parts is not always apparent and

the boundaries are continually shifting –for this reason, an ontological investigation of difference is essential. Difference, however, is typically mediated by identity and representation (Deleuze 2004:xiii-xiv); Deleuze declares in *Difference and Repetition* that “the majority of philosophers had subordinated difference to identity” and that “they had introduced difference into the identity of the concept, they had put difference in the concept itself, thereby reaching a conceptual difference, but not a concept of difference” (2004:xiii). In *Difference and Repetition*, Deleuze sets out to liberate difference from identity and representation, declaring, “We propose to think difference in itself independently of the forms of representation which reduce it to the Same...” (2004:xviii). James Williams asserts that the goal of *Difference and Repetition* is to argue for and explain the existence of pure difference (2003:29).

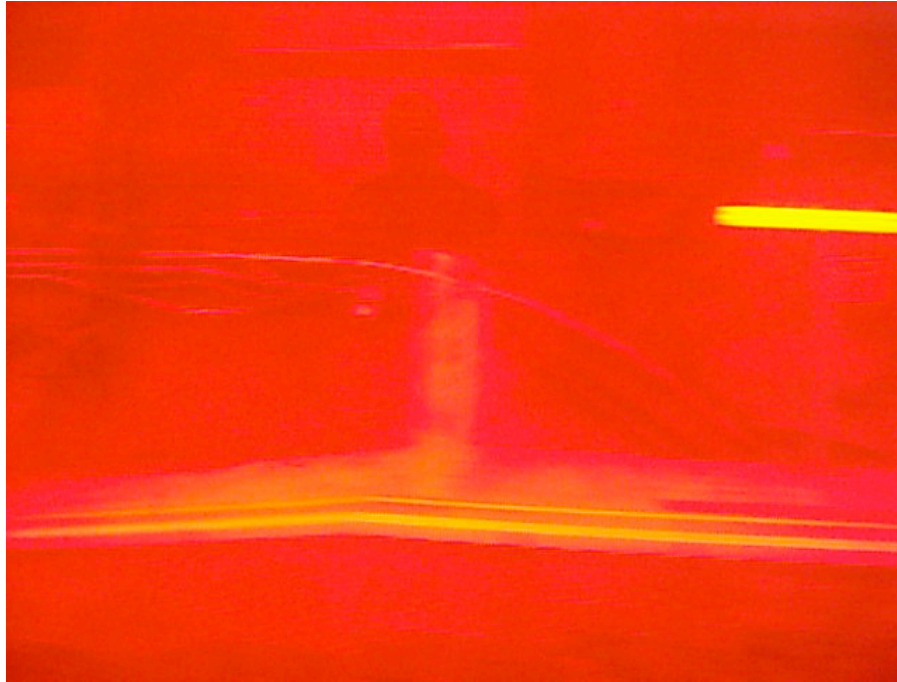
In essence, it is not possible to represent the virtual realm. In order to convene with the virtual, it is necessary to move beyond representation to experience ‘difference-in-itself’ as Deleuze has described, whereby the mediation of identity does not interfere. Deleuze’s notion of difference in itself (as outlined in chapter 3) requires that it be unmediated, so that it is not filtered by representation or identity. In order to experience difference in itself we must go beyond representation and beyond the human realm. Difference in itself is an aspect of duration; we can experience difference in itself in reaching beyond the actual realm into the virtual and bypassing representation. One of the ways to bypass representation is through art and the act of creation. James Williams explains that for Deleuze art has the ability to “affirm difference without having to depend on representation” through its “multiplication of destabilising perspectives” (2003:78). In *Difference and Repetition*, Deleuze writes: “when the modern work of art develops its permutating series and its circular structures, it indicates to philosophy a path leading to the abandonment of representation” (2004:82). Deleuze declares that art has the potential to both reveal difference and create difference anew (Colebrook 2002a:13, 7). In discussing Deleuze’s theory of art, Daniel Smith explains that, “The work of art, as a compound of sensations, is not a unification or totalization of differences, but rather the

production of a new difference and ‘style’ in art always begins with the synthetic relations between heterogeneous differences” (1996:48).

The ability of art to both reveal difference and produce new difference is essential in the examination of urban temporality within this research. This thesis has attempted to investigate the realm of the virtual and to access difference in itself through art via a photographic reading of the city. The event of the photograph has been the vehicle through which I have engaged with difference in itself. As stated in Chapter 3, the event is the device through which difference occurs and through which becoming occurs. Furthermore, singularities (which were also discussed in Chapter 3) are events which herald turning points, such as points of crystallisation or boiling points, yet which avoid the trap of identity (Williams 2008:93). Singularities allow difference to arise and duration to flow through this difference while remaining free from the confines of representation and identity; thus singularities are the key to accessing difference in itself. It is possible to engage with difference in itself by travelling along singularities – being carried across and through these points of significance without being restricted by the paralysing constraints of representation (Colebrook 2002a).

I argued in Chapter 3 that photographic imagery (both still and moving images) are singularities which allow us to travel beyond the human realm and to be freed from the limits of representation. Photographic imagery enables us to experience difference in itself through the event of photographing. I want to argue that difference in itself resembles the sublime, whereby difference in itself is the ‘now’ of which Barnett Newman wrote (Lyotard 1989) (as discussed in Chapter 4 with regard to the panorama) and the ‘now of recognisability’ that Benjamin described (Charney 1995). The notion of the sublime has recurred throughout the thesis as an important element within the concept of going beyond representation in reaching the virtual realm (see Chapters 4 and 5). I also want to argue that Deleuze’s time-image allows difference in itself to be accessed. As argued in Chapter 4, the split-second engagement that occurs in experiencing the sublime, allows us to extend beyond conscious thought and beyond the confines of identity and

representation. The centres of indetermination, which exist in between received and executed movement or perception and action (Deleuze 1986), create the scope for the time-image to occur. As argued in Chapter 4, a similar process occurs within the sublime in which the present moment is disrupted by an explosion, which constitutes creation. According to Lyotard, the sublime is that which delineates the creative force distinguishing something from nothing (Shaw 2008). In this sense, the sublime also relates to the *élan vital*, the “internal explosive force” (Ansell Pearson 1999:21) which is the essence of existence (Deleuze 1991:94) and which allows difference to become actualised (Boundas 1996:91). The act of photographing can be equated with this explosive force of the *élan vital* or the sublime as creative force – it is an event which disrupts the present moment. The act of photographing transforms the present moment into a physical object and allows it to live beyond the present, becoming an actualisation of difference. In particular, in photographing the city, a realm of chance encounters and fleeting movements, the process of recording images through the camera allows the photographer to engage with these ephemeral instants in a suspended manner – the act of photographing suspends this split-second confluence of virtual and actual where the sublime takes hold. Timothy Druckrey discusses the concept of ‘image-as-event’ as important in understanding the image as ‘experiential’, whereby “the navigation of the image” is a “dynamic process in which the contingent stability of the moment itself is extended” (1996:25). The ‘now’ of the sublime becomes extended (although still brief) through the act of photographing whereby the photographer is able to convene with difference in itself through the creative process. Creativity and the act of creation are elements of the sublime (in the Lyotardian sense) which allows us to go beyond the human realm and experience difference in itself.



from East London Line Overground, image from Chapter 5,
author's photograph

In addition to encountering difference in itself through the lens of the camera as a photographer, there is another stage which takes place once the image has been developed as a photograph or moving image. The experience of the viewer encountering the photographic image is also an event which engenders sublimity. As discussed in Chapter 4, representation of the sublime is impossible; however, the sublime can be conveyed through the process of encountering a photographic image, again emphasising the process of the encounter, whereby the sensation that is felt by the viewer in observing the photographic image can produce a sublime quality. The impact that the perception of the photographic image has upon the viewer can cause him/her to bypass conscious thought and experience the pure colour and light of the image (akin to Deleuze's time-image as argued in Chapter 4) and experience pure difference in this fleeting moment. The exchange between the viewer and the image has the potential to bypass conscious analysis and create an event which crystallises the sensation beyond the present moment. This event *becomes* the sublime rather than the image *being a representation* of the sublime. In Chapter 3 I argued that the still photograph and moving image extend beyond what they present within the frame – they are

disseminated and transmitted beyond the original context from which they arose, thereby creating new circumstances, narratives, stories, and memories associated with the images by the viewers that encounter them. There is infinite virtual potential of these actualised images.

Thus imagination plays a significant role within the photographic event as it does in the recognition of difference. In Chapter 3 I presented Deleuze's notion that the cycle of difference and repetition relies on the imagination in order for this process to be perceived (Deleuze 2004). The imagination is vital to perceiving difference within repetition and vice versa. Although we cannot always see difference or recognise difference we use our imagination to understand that it exists – we make leaps within our mind to produce a picture of the whole (that we will never be able to see absolutely) in order to simulate some comprehension of this whole and its constituent parts. Chapter 3 outlined Claire Colebrook's argument that imagination is crucial in enabling us to achieve Deleuze's goal of going beyond the human realm and freeing ourselves from the constraints of identity and representation (2002a:129). Imagination is fundamental to the photographic event and allows us to experience the photographic image outside of linear temporality and narrative. Going back to Kracauer's assertion that film mesmerises by evoking a state between dreaming and waking (as discussed in Chapter 1) (1960:163, 165-66), the event of viewing photographic images relies on the imagination taking hold, carrying us beyond the present moment into a realm where past, present and future coexist. This virtual realm exists always yet it is not always able to be perceived – photographic images enable the perception of the virtual through the process of the event.

Interdisciplinarity and the Virtual

I have used photographic imagery to investigate the perception of urban temporality by practical application of theoretical and philosophical concepts, and then I have re-analysed those concepts based on my visual research. As argued in Chapter 2, the interaction between practical and theoretical research within this thesis has been ongoing throughout, with each informing

the other equally. This is a cyclical process which includes many layers, and I believe this approach is vital in order to reflect and respond to the multi-layered, multi-dimensional urban realm. Using an interdisciplinary method has contributed to this multi-layered approach to the research; working within different disciplinary trends has made me think through what my original contribution of this thesis comprises. My original contribution involves the fusing of sociology, critical theory, cultural theory, philosophy and art in a method that engages with the urban realm via the sublime. Photographic engagement with the city has enabled me to bypass conscious thought in the creative process and then the theoretical research has allowed me to analyse this in a conscious, rational manner. In essence, drawing on the Surrealist technique of automatism and the Situationist practice of the *dérive* (as discussed in chapters 1 and 2), I have attempted to allow my unconscious creative capacity to interact with the city through the visual, and then I have consciously engaged with the results of this creativity to produce a nuanced understanding of the urban realm.

The images that I have created for this thesis have attempted to reach the sublime and experience the pure difference of the urban realm. I chose this method of interacting with the city in order to engage with the fluidity and dynamism of the urban sphere – a method incorporating chance and spontaneity in both the practical and theoretical aspects of the research – so that I could respond directly to the nuances of movement making up the perception of urban temporality. While I acknowledge that it is impossible to capture the entirety of the process of becoming and of difference in itself in a photographic image, it is the exercise of attempting to do this which is equally important as the end result. The process of photographing is integral to the research as much as the actual images that result from the photographic act. It is through this practice that the sublime is achieved (if only momentarily) and difference in itself is experienced – this enables an understanding of the boundaries between self and whole, virtual and actual, individual and city to become apparent through the creative process. Daniel Smith explains that for Deleuze the “aim of art is not to represent the world, but to present a sensation (which is itself a composition of forces, an intensive synthesis of

differential relations)” (1996:40). This practical interaction with the sublime can then be analysed through theoretical research to formulate an understanding of difference. In other words, the experience of the sublime through the creative process is unmediated by thought, it is pure difference; once thought takes over (which it inevitably does) then theoretical analysis becomes relevant to the research process.

I believe this method of fusing the creative process with theoretical analysis in an interactive, interdisciplinary capacity offers insight into what the undertaking of visual sociology constitutes and where the future of the discipline lies. The freedom that the artistic process allows in responding to the constant becoming of the urban sphere is vital to accessing difference in itself, which refuses to stand still. Difference is continually becoming along with the metropolis and in order to engage with it and to analyse it theoretically, I believe sociologists must use creative tools to produce research that *lives* and *becomes* along with the city. Urban sociological research does not stand apart from the city that it examines; rather, the research is part of the city just as the city is part of the research. Research is a fragment of the open whole of the metropolis and it must continue to evolve and become alongside the city in order for it to remain relevant and vital. Vitality is a characteristic which Les Back (2007) proclaimed was required for sociological methods to remain pertinent, as I cited at the start of the thesis, and this can be found within a research strategy that engages with difference through artistic process. I propose that keeping up with the constant metamorphoses of the metropolis requires that the virtual realm of the city remain at the forefront of future visual sociological research.

The Photographic Image in the Digital Age

Paul Virilio and others (Graham 2004, Robins 1996, Hansen 2001) have argued that the virtual realm is becoming increasingly important due to the rise of digital technology. The relationship between photographic imagery and the perception of time is changing alongside the technological shifts occurring within the metropolis. The perception of time and space has shifted due to the

light-speed technology of the digital age (as outlined in chapter 5) with past, present and future collapsing into a seemingly instantaneous transmission of images across vast distances.

The increasing speed of transportation and communication technology has been a theme throughout this thesis – it has continually informed the study of urban temporality in relation to the production of images (both internal and external images, and virtual and actual images). This increased speed has created a changing visual perspective of the city via the windscreen of the car, the window of a moving train or plane (Virilio 2008a, Boyer 1994) and through the presentation of images by the cinema projector or television screen. The amount of images and the speed at which images are presented to us has proliferated with technological shifts in the past several centuries. The relationship of the individual to the whole of the city is becoming increasingly blurred within this amorphous time-space continuum. The virtual is becoming less abstract yet no less virtual, and this heralds a nuanced understanding of the boundaries between virtual and actual, self and whole, and between moments in time. In order to maintain a balance of closeness and distance within this increasingly digital world of simulacra, it is more crucial than ever to examine difference.

The age of digital imagery has generated the notion that we are in an era of 'post-photography' whereby the photographic image is becoming merged with video and computer technologies increasingly to create a convergence that subsumes the photographic still image within a generalised category of hypermedia (Robins 1996:31). This post-photographic age has been characterised by a hyperreality in which image has overtaken the 'real' world, creating a world of simulacra: "The world of post-photography is caught up in this projection of the world as a 'post-real' techno-sphere – the world of cyberspace and virtual reality" (Robins 1996:31). There is an increasing erasure of the distinction between image and referent with the seemingly instantaneous transmission of images through space and time via technology. Encompassing both image and referent, digital pictures replace, in many instances, any actual referent. This scenario recalls Deleuze's portrayal of the

simulacra, in which he declares, “Everything has become simulacra” (2004:82). There is no difference between “things” and “simulacra”; rather, things “are simulacra themselves, simulacra are the superior forms, and the difficulty facing everything is to become its own simulacrum” (Deleuze 2004:81). Furthermore, simulacra contains difference in itself thereby abolishing all resemblance “so that one can no longer point to the existence of an original and a copy” (Deleuze 2004:82). For Deleuze, simulacrum does not involve imitation, but “rather the act by which the very idea of a model or privileged position is challenged and overturned” (2004:82). The simulacrum allows us to challenge represented reality and to experience difference through “pure presence”; it is in simulacra that “we find the lived reality of a sub-representative domain” (2004:82-83). Deleuze explains that if representation “has identity as its element and similarity as its unit of measure, then pure presence such as it appears in the simulacrum has the ‘disparate’ as its unit of measure – in other words, always a difference of difference as its immediate element” (2004:83).

In the digital world of simulacra, the role of the body within perception has come into question with regard to the seeming lack of materiality within the technosphere. Chapter 5 outlined Christine Boyer’s assertion that there has been a sense of disembodiment caused by dematerialisation which has led to disenchantment with the urban realm (1996:119). Jonathan Crary has argued that the relationship between “observing subject” and “modes of representation” has been reconfigured so that “most of the culturally established meanings of the terms *observer* and *representation*” have been eradicated by computer graphics (1990:1). Crary claims that “visual images no longer have any reference to the position of an observer in a ‘real’, optically perceived world” and instead refer to “millions of bits of electronic mathematical data” (1990:2). The blurring of the lines between subject and object and between image and referent can be mediated by an engagement with the virtual realm through artistic enquiry. Mark Hansen has proposed that new media art, which fuses the photographic image with the computer image, has posed a means of engaging with the “indifferentiation of virtual and actual space” that the “digitization of the technical (photographic) image”

has created (2001:77). Hansen argues against the notion that digitisation creates the elimination of the role of the body within vision and within perception; rather, he upholds the Bergsonian perspective of perception in which the body is central to mediating “*between information and form (image)*”: the supplemental sensorimotor intervention it operates coincides with the process through which the image (what I am calling the digital image) is created” (2001:78). Hansen describes the “new world” of the digital age as “a universe not of *images* but of *information*” and he asserts that new media art has the potential to “catalyze the creation of, new modalities through which the body can filter – and indeed give form to – the flux of information” (2001:77).

The Virtual Future

Using a method fusing artistic photographic practice and sociological theory to interrogate the virtual realm of the city, this thesis has attempted to present a nuanced reading of the everyday urban sphere, transforming the mundane into the sublime. By interacting with the urban sphere in this dynamic capacity, a nuanced perspective of the virtual life of the city begins to emerge, which I believe has potentially important ramifications upon visual sociological research. As I have stated throughout this thesis, the city is constantly changing and this dynamism fascinates, enchants, frustrates and confounds those who encounter it. In order to study this dynamism, I believe it is necessary to engage with it and to incorporate it into research methods – this particular form of engagement with the city is fundamental to understanding the hidden, virtual realm, which is becoming increasingly important within the digital age.

While the virtual realm has always impacted everyday life, in particular through duration, as has been argued within this thesis, it has been in large part overlooked (Colebrook 2002b) due to its hidden nature. The invisible world of the virtual, which makes up reality along with the actual, is being increasingly pushed to the forefront of the everyday, particularly in the urban realm (Graham 2004). Digital technology is revealing the blurred boundaries

between virtual and actual in a way that previous technologies have not made apparent. While photographic technology and other visual technology (the panorama, for instance) have always been devices for examining the virtual realm, digital technology has enabled this examination of the virtual to become more accessible. The changing relationship between time and the image has enabled the virtual realm to be reached more easily and thereby has allowed difference in itself to be revealed more readily. The virtual is the potential that lies within the becoming of all things, and it is fundamental to perception. The invisibility of the virtual realm often causes it to go unnoticed, with the virtual potential in everyday life remaining hidden and separate from the actual realm. Claire Colebrook has asserted that if “we look at all the bizarre, aberrant and different expressions of human life we begin to intuit the virtual powers that are capable of transforming life beyond what it actually *is* to what it might *become*” (2002b:xxx). By examining the virtual life of the city, we open up a greater potential for the future of what the metropolis might become.



Soho, study of light from Chapter 5, author's photograph

By connecting with difference in itself through dynamic research methods, as proposed in this thesis, a nuanced perspective of the relationship between

the ever-changing whole of the city and its constituent parts can be revealed. In writing *Difference and Repetition*, Deleuze had “revolutionary aims” to lift all of our illusions of “representations, senses and concepts of identities” and “provide principles” for “connecting best to difference in itself” (Williams 2003:13); he set out to challenge existing notions of identity and representation by emphasising that everything is made up of the virtual and actual and that difference in itself exists within all things (Williams 2003). I have approached this research with a similar goal of disrupting taken for granted notions of perception in order to reveal that “nothing fixed is real” as Deleuze proposed (Williams 2003:13). Experimentation is essential to disrupting fixed notions of everyday life:

To experiment is to introduce thoughts and acts that change an individual perspective on the whole and, thereby, to change it for all individuals, with an eye for the expression of hidden intensities and the destruction of illusions of fixity. (Williams 2003:30)

James Williams asserts that “forward-looking movement depends on creative experiments by individuals” requiring individuals to “experiment in a way that expresses reality as the virtual and actual” (2003:30). It is in this same vein that this thesis has been an experiment – an experiment in expressing reality as the virtual and actual and in introducing ideas and actions that shift the perspective of the whole of the city. As Claire Colebrook states, “Only if we consider those virtual or unfulfilled potentialities can we transform the present into a truly new future” (2002b:xxx). By interrupting the time of the city through the event of photographic media and the creative process, the present moment can be extended and transformed, allowing us to surpass representation and experience the virtual realm. The sublime sensation achieved in convening with difference in itself through the photographic event signals the future of urban visual sociological research, whereby the relationship between the individual and the whole can be reconfigured to tap into the unrealised virtual potential of the metropolis.

Chapter List for DVD 1

Chapter 1	Title Page
Chapters 2 - 10	Correspond to Chapter 3 of the thesis and depict the Bus Project
Chapters 11 - 20	Correspond to Chapter 4 of the thesis and depict the Panorama Project
Chapters 21 - 32	Correspond to Chapter 5 of the thesis and depict the Light Project

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