

**Visual Regimes & Virtual Becomings:  
The Production of (Augmented) Space  
in the 'New Berlin'**

**By**

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## Abstract

This thesis is grounded in the belief that the city is a key site of contestation in an ongoing theoretical debate concerning the nature of the relationship between new media and society. It is guided by a desire to engage with two distinct, but related, theoretical frameworks for making sense of this relationship, the ‘virtual city,’ as informed by the work of Paul Virilio, Jean Baudrillard, and cyberpunk author William Gibson, and the ‘augmented city,’ derived from Lev Manovich’s “The Poetics of Augmented Space.” After providing an overview of these two paradigms of knowledge, it attempts to address the limitations of both frameworks, which the author claims are reductionist as the former tends towards a binary distinction between the material (urban space) and the immaterial (virtual space), while the latter is underpinned by a narrow, Euclidean understanding of space that limits its efficacy in an urban context. In order to address these concerns, the author proposes a methodology for understanding the city as a virtual space that is distinct from the ‘virtual city’ paradigm of 1990s cyber-theory by attempting to open up a dialogue between the work of Deleuzian philosopher Pierre Lévy, and the Marxist dialectician Henri Lefebvre.

Using Berlin as a case study, this framework is deployed in an attempt to generate an understanding of how the city functions as a mediated landscape whose space is produced socially as a result of a dialectical process involving the accretion and entanglement of an ongoing series of representations, political decisions, and social experiences. As a mediated space, the city is understood as being produced and reproduced through acts of representation in both cinema and new media, as well as through the distinctive visual regimes that emerge out of them, which in turn structure the way the city is experienced. It also reads the city as a discursive space and draws connections between the discourses of the ‘New Berlin’—the space that emerged after the city’s reunification in 1989—and the promise of the new inherent in the discourses of new media technologies. Finally, the study argues that the discourses and visual regimes of augmented space in Berlin are not merely informed by virtual processes, but that the virtual and the distinctive social space of the city out of which augmented space emerges work in conjunction to actively structure the ways in which augmentation should be understood as both techno-cultural formation, and as (urban) spatial practice.

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## Introduction

In his essay, “The Poetics of Augmented Space” (2005), new media theorist Lev Manovich attempts to generate a theoretical mapping of a new paradigm that he refers to as ‘augmented space.’ This term is derived from ‘augmented reality,’ a new media technology that uses graphical overlays to superimpose digital layers of information over the physical space of the urban landscape (Manovich 2005, 1-2). For Manovich, ‘augmented space’ represents a productive new way of theorizing the relationship between new media and urban space, as well as the relationship between the real and the virtual. Since the original publication of “The Poetics of Augmented Space” in 2002,<sup>1</sup> the notion of ‘augmented space’ as a mode of inquiry has become increasingly influential in new media scholarship, to the point where it now represents not just a theory, but an entire theoretical paradigm for making sense of the relationship between new media and the city. The growing usage and acceptance of this framework, by scholars such as Alessandro Aurigi (2006), Andrea Mubi Brighenti (2010), and Keiichi Matsuda (2010), mirrors the ongoing technological, social, and cultural advances in digital augmentation, such as the development of a dedicated augmented reality smartphone browser called *Layar* in 2009, as well as the use of prototypes of Google’s *Google Glasses*—a dedicated augmented reality head-worn display—in a segment of Diane von Furstenberg’s showcase at the 2012 New York Fashion Week (Mlot 2012). There has also been a concurrent acknowledgment, awareness, and even promotion of processes of digital augmentation in popular magazines, such as *New Scientist*, *The Economist*, and especially *Wired Magazine*, which in 2009 ran a feature on augmented reality technologies under the title “If You’re Not Seeing Data, You’re Not Seeing” (Chen). This article featured an interview with Tobias Höllerer, an associate professor of computer science at UC Santa Barbara, who outlined his hope that augmented reality would reach a state where he would “be able to point a phone at a city it’s completely unfamiliar with, [and] download the surroundings and output information on the fly” (ibid).

One of the most striking contemporary examples that gestures to the possibility of realizing the scenario described by Höllerer can be found in Berlin, where, twenty years after its fall in 1990, the Berlin Wall has returned via augmented space. The new Wall occupies precisely the same geospatial coordinates that it did during the original’s lifetime

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<sup>1</sup> Manovich released an updated edition of “The Poetics of Augmented Space” in 2005.

in the twentieth century, and exists as one of the many discrete digital layers which are systematically being woven into what Manovich refers to as the city's 'dataspace' (2005, 5). This notion of dataspace, as well as proclamations such as those made by *Wired* and researchers like Höllerer, highlight the persistent intersection of new media technologies and urban space. Building on Manovich's initial theoretical schema, scholars such as Alessandro Aurigi (2006), Gilda Berruti (2008), and Keiichi Matsuda (2010) have already begun speaking of 'the augmented city' as a way of generating a "holistic view of urban space enhanced, and permeated, by technology" (Aurigi 2006, 8). These developments require us to examine precisely how new media technologies impact upon urban space, and to consider whether the result of this meeting is the production of new spatial, social, and temporal formations (Brighenti 2010, 472).

However, augmented space is not the first theoretical paradigm that attempts to think through relationship between (material) urban space and (immaterial) digitality. Throughout the 1990s, new media scholars became increasingly drawn to the notion of the 'virtual city,' which emphasized a blurring of distinctions between urban space and cyberspace as a result of the advent of the Internet and personal computing, and the increasing globalization of major cities around the world. In fact, this tradition can be traced back even further to Marshall McLuhan's 'Global Village' in 1962, and up to the present day via Paul Virilio's 'Overexposed City' (1986), Jean Baudrillard's hyperreality (1994), William Mitchell's *City of Bits* (1996), and the cyberpunk fiction of William Gibson and Bruce Sterling. In the new millennium, the 'virtual city' paradigm has been the subject of much scholarly critique by authors such as Deborah Stevenson (2003), and Stephen Graham (2004). It can now be argued, as Manovich himself does in "The Poetics of Augmented Space" (2005), that theoretical research into notions of virtuality have now been superseded by the contemporary zeitgeist that is the augmented space paradigm. For him, the virtual has been 'domesticated' as a result of the increasing ubiquity and corporatization of the Internet (2005, 3). The banality of everyday actions such as e-mail, MP3 downloads, and online plane reservations, Manovich argues, has drained the transgressive potential from the "original wonder of cyberspace so present in the early cyberpunk fiction of the 1980s" (2005, 2). For him, the figure of the VR user traversing a Gibsonian cyberspace has been rendered obsolete by the image of "a person checking her email or making a phone call using her PDA/cell phone combo while at the airport, on the street, in a car, or any other actually existing space" (Manovich 2005, 3). Here, the replacement of the virtual by the augmented is accompanied by a transformation in



subjectivity, from a VR user who enters cyberspace, to a new transient figure who brings the virtual out into the space of the city. Whether or not one accepts that a paradigm shift has occurred along these lines, there has been little attempt to consider these two theoretical frameworks in relation to each other in any great detail, and the replacement of the former by the latter is often, following Manovich, taken as a given.

This thesis therefore seeks to engage with the virtual and the augmented as two different frameworks for understanding the relationship between new media and urban space. It is situated within the field of new media studies and draws on critical theory in an attempt to address the supposed shift from the ‘virtual city’ to the ‘augmented city’ but, contra-Manovich, I argue in favour of the virtual, albeit one with a different formulation than that often articulated in the new media theory of the 1990s. This thesis is divided into four chapters, and has two overarching objectives. The first is to test the limits the ‘augmented city’ and the ‘virtual city,’ using Berlin as a case study, in order to assess their ongoing efficacy as paradigms that attempt to articulate the nature of the relationship between new media and urban space. With reference to the city-cinema of Berlin in the late twentieth and early twenty-first centuries, as well as to several examples of augmented reality applications, I attempt to demonstrate how each of these paradigms can be associated with a distinctive set of visual regimes that in turn contribute towards the production of Berlin as a mediated city.

Today, Berlin has a reputation as a fertile site for the development and implementation of augmented reality applications. This status, combined with its historically complex, and at times deeply fraught, relationship with the virtual, make it an attractive setting for a theoretical discussion about the limits and possibilities of the city as virtual and augmented space. For example, as Janet Ward suggests, 1990s Berlin was characterized by a desired transformation of the city into a “virtual metropolis *sans frontiers*.” But she also notes that this development was hardly new, as the city had frequently been caught in a complex web of self-representation and self-staging, where virtual notions of how the city *should* be tended to precede (or exceed) the city’s material limits throughout the twentieth century (“Berlin, the Virtual Global City” 2004, 240-246). In addition, the city continues to be haunted by the fragmentary memories of its multiple pasts as divided cold-war city, Nazi capital, and as a beacon of modernity during the Weimar period of the 1920s. These memories persist in a myriad of virtual and material contexts, ranging from the city’s varied architecture and many monuments and memorials, to its poetry, and city-cinema. Collectively, these spaces, landmarks, and representations

work in concert to structure the very character of everyday life in Berlin. Likewise, the recent eruption of activity, both culturally, as well as economically, in the development and usage of augmented reality applications is of interest to me. The city has a (not entirely coincidental) reputation as a major cultural centre, in local, as well as in global terms, and it strikes me that the advent of augmented space has a distinctive and instructive valence in this context. Its emergence raises questions about the 'creative city' framework, and the production of what might be termed a symbolic, or media economy.

As a multiple, and frequently conflicted and contested, matrix of virtualities and mediations, Berlin is therefore a rich case study for a critical discussion of the 'virtual city' and 'augmented city' paradigms. In order to conduct this critique, I draw on the work of the Deleuzian philosopher, Pierre Lévy, in *Becoming Virtual* (1998), whose theory of virtuality is distinguished from those of many '90s cybertheorists in its positing of the virtual as a space of potentiality and possibility that exists as part of a plurality of different modalities of being. As I will argue, it is possible to apply Lévy's virtual to an urban context, using it as a framework to generate an understanding of how Berlin might function as a 'virtual city' without relying on rigid binary distinctions between the material and the immaterial. In doing so, I will demonstrate how Berlin persists as a virtual city in a manner that is not simply in spite of the advent of the 'augmented city,' but rather in a way that might actually structure how augmentation operates, and should be understood and interpreted.

The second objective of this thesis concerns the use of the word 'space' in the augmented space paradigm. For Manovich, 'space' refers to the Euclidean co-ordinates within which digital layers can be drawn, or overlaid. As a result, he treats space as something that exists *a priori*, and that precedes human experience and, consequently, (augmented) spatial practice. I find this articulation to be problematic in that it ignores the ways in which space itself might be socially constructed. In order to address this issue I refer to the work of the Marxist philosopher Henri Lefebvre in *The Production of Space* (1974). Lefebvre fell out with the French Communist Party due to his insistence that the Marxist analysis of spatial formations could not rely solely upon a political economy approach (Gottdiener 1994, 128). For him, a properly dialectical understanding of the production of space needs to take into account the ways in which social relations were structured through space via an agglomeration of spatial practices, representations and representational spaces, which are just as likely to be virtual, symbolic, discursive or quotidian as they are material or economic. Lefebvre claims that representational spaces

“overlay physical space, making symbolic use of its objects,” and therefore “tend towards more or less coherent systems of non-verbal symbols and signs” (1974, 39). His theory of space consists of three interrelated poles: the spatial practices carried out in everyday life, the institutional and bureaucratic representations of space (such as maps, street plans, and urban policies), and the representational space of symbols and signs. I use Lefebvre’s spatial triad as an overarching thematic framework to structure the second, third, and fourth chapters of the thesis, with the objective of theorizing the social space within which augmented space is itself produced. In particular, I am concerned with the period following Germany’s reunification, referred to by place marketers and urban planners as the ‘New Berlin,’ and within which the character of the Berlin-specific applications of augmented space were shaped. It is my contention that the *space* of augmented space in Berlin is social in its character and should be understood as but one aspect of the production of space in Berlin, which is itself an ongoing process that occurs on a much larger scale. Rather than simply functioning as a container, the space of the ‘New Berlin’ renders the city’s augmented space as a deeply fraught milieu that is constituted by an ongoing series of struggles between the city’s inhabitants, the movements of capital, and the decisions of its politicians, planners, and place marketers.

It is worth making a methodological note here, particularly as in many ways it points to the guiding principle or motivating logic for this project. Namely, during the writing of this thesis I was not able to be physically present in Berlin and as a result was not able to experience the city in any kind of immediate phenomenological sense. Rather, this study was conducted entirely at the level of representation, with the nature of my interest in the city as a virtual space rendering my physical absence from Berlin as an opportunity to explore the city in purely mediated terms. This study reads Berlin as a virtual text and as a mediated city that is at once a space that produces representations, but which is also structured by them in turn. Berlin has a long tradition of imagining itself in virtual terms and, as I will demonstrate, many of these processes are conducted at the level of the mediated city through an ongoing production of images, symbols, and myths. My reading of Berlin is therefore rooted in a textual analysis of the city as a space of mediations, and is primarily comprised of close readings of a number of different films produced and set in the city. As a result, my study engages with cinema, but does so primarily as a means of accessing the visual culture of the city more generally, and the exchanges and transformations between urban and virtual spaces in particular. This recognition also informs my analysis of Berlin as ‘augmented city.’ Rather than studying

the technology itself, which requires physical presence to be properly actualized, I focus on the context in which it emerges and its symbolic function within that context. News reports, promotional material, and online blogs all play a prominent role in producing and representing the technological promise of the ‘augmented city.’ As a result, these processes take on a greater significance to me than the various augmented reality applications that they represent (or re-present) in and of themselves.

My examination of Berlin as a mediated city takes place across four distinct chapters, with the discussions in the latter three framed around a corresponding aspect of Lefebvre’s spatial triad. Chapter One consists of a review of the ‘virtual city’ and ‘augmented city paradigms,’ as well as an outline of Lévy’s theory of virtuality, and Lefebvre’s production of space. The objective here is to identify some of the critiques of the ‘virtual city’ paradigm, before using Lévy to produce a different framework for understanding the ‘virtual city’ without resorting to binary distinctions and Lefebvre to understand how the production of space that generates the ‘augmented city’ is the result of social processes.

The second chapter of this thesis introduces the case study of Berlin as a mediated city, and is comprised of an analysis of the *representational* spaces of Berlin, via textual analyses of two films, Wim Wenders’ *Der Himmel über Berlin* [“The Heavens over Berlin”] (1987), and Tom Tykwer’s *Lola Rennt* [“Lola Runs”] (1998), with the objective of devising a methodology for interpreting how our techniques of ‘seeing’ the city shape our everyday experience of it as a virtual space. Here, I focus on the tensions between the production of what Rolf Lindner has called the “cultural texture” of the city, as it is expressed cumulatively in “images, typifications and collective representations” (“The Cultural Texture of the City” 2006, 55), and what Lefebvre refers to as the ‘abstract space’ of capital. I find traces of the former in what I describe as an ‘erotic’ mode of vision generated by the camerawork of Tykwer in the act of filming the urban space of Berlin as a cinematic body in motion. With reference to Lefebvre, I argue that this ‘erotic vision’ opens up possibilities for constructing a spatial Anti-Logos that might provide a counter-frame to the Logocentric, rationalizing tendencies evident in the bureaucratic representations of urban space. I also pay particular attention to the significance of the technological promise of cinema evident in both of these films, and specifically to its ability to produce new visual regimes for mediating the city in ways that have particular significance in a city of borders and divisions (for Wenders), and in a city undergoing radical change, reconstruction and renewal (for Tykwer).

Chapter Three focuses on the more formal conceptualized space of urban planning and place marketing that Ward has described as a ‘virtual reality’ of institutional and commercial projects which often exceed, or even directly contradict, the material realities of everyday life in Berlin. For Lefebvre, this kind of ‘virtual’ space, which he refers to as the *abstract space* of capital, “is the dominant space in any society (or mode of production),” and tends to subordinate the other two poles of his triad (1974, 38-39). My study of this virtual ‘othering’ compares and contrasts another two films, Hubertus Siegert’s documentary, *Berlin Babylon* (2001), and Walter Ruttmann’s *Berlin: Die Sinfonie der Großstadt* [“*Berlin: Symphony of a Metropolis*”] (1927), in order to identify some of the paradoxes that arise in the production of space in the ‘New Berlin.’ In particular, I draw attention to the processes of virtualization that take place under the rubric of the ‘New Berlin,’ and the ambivalent relationship that they have in their discursive usage of notions of newness, as well as in their allusions to the city’s history and memory. Together, the two middle chapters of this thesis are structured in order to reveal the social, cultural and political landscape from which the practice of augmented space emerges. The third chapter of this thesis therefore works through the overlapping contexts that subsequently produce augmented space as a privileged cultural product of the ‘New Berlin.’ However, rather than focusing on augmentation as a technology, I emphasize the symbolic significance that the spatial practice of augmentation carries as part of the continual restructuring of urban social relations in the city.

To this end, Chapter Four reconciles a Lefebvrian framework for understanding space with the textual and discursive readings made in the earlier chapters. As with the city-cinema that preceded it, the promise of augmentation as a ‘new’ way of seeing the city is central to my discussion, because the symbolic resonance of its ascribed potential tends to exceed the actual utility of augmentation as a form of spatial practice. This leads me to treat the visibility of augmentation not just as a technological process, but also as a vital signifier of the ways in which different interests attempt to structure the ways in which we see, and therefore ‘live,’ the city. In this sense, the multiple Berlin-virtual-cities persist in Berlin as ‘augmented city,’ and are not only evident in the accretions of mediation that draw attention to specific augmented reality applications but, following Lefebvre, also actively structure the social space from which it emerges.

This thesis is therefore an attempt to read the city of Berlin as a mediated space, which, following Lévy, is continually being produced (and reproduced) in an ongoing series of transformations between different ontological modalities. In a sense, my

argument represents a defence of the ‘virtual city’ against both its original advocates (in the 1990s), and those who chose to forget or ignore it in the act of championing the emergence of augmented space as a privileged framework for understanding the relationship between new media and urban space. Instead, I draw attention to the significance of augmented space’s ability to generate a *promise* for a new visual economy, while simultaneously remaining sceptical about the efficacy of that promise as a way of generating distinctively new spatial formations. I read the development of augmented space in Berlin as being symptomatic of the promises for transformation that form a central part of the discursive space of the ‘New Berlin,’ and as a continuation of its distinctly neoliberal vision of the city where meaning is generated at the level of individual experience, rather than through an accretion of social processes.

# Chapter One

## Virtuality, Augmentation, and the Production of Space

In this chapter, I summarize the debates around the notion of ‘the augmented city,’ arguing that its particular articulation of the relationship between urban space and new media technologies is reductionist, and relies on an incomplete set of formulations of the relationships between the materiality and immateriality of both the city, and of new media. In an attempt to address these shortcomings, I begin by drawing on the work of Pierre Lévy, whose treatment of virtuality as a set of transformations between different modalities of being will be used to theorize what Andrea Mubi Brighenti has termed ‘the prolongations’ between new media technologies and urban space (2010, 472). My argument is that, far from existing as a canvas onto which virtual layers are added, the city *already* functions as a virtual space, and that its nature is defined by the transformations that take place between its different modalities. Here, I set out to produce a distinction between a Lévyian formulation of what the ‘virtual city’ might be, and earlier attempts to understand the relationship between urban space and virtuality made in the 1990s that invariably drew on the work of the cyberpunk author, William Gibson. Once the city’s (Lévyian) virtual quality has been established, the second part of this chapter will be a meditation on the nature of space itself.

In this, I refer to the work of Henri Lefebvre, who pays special attention to the significance of space as a necessarily social mode of production. Rather than regarding space as a *container* to be filled, Lefebvre’s work offers a framework for understanding space as an ongoing *process* that is simultaneously social, mental, and political in its nature. Where Lévy is concerned with transformations between different modalities of *being*, which cumulatively generate each of the different facets of virtuality, Lefebvre’s theory of the production of space focuses on three different modalities of *space*. After outlining this ‘spatial triad,’ and the dialectical relationship that underpins it, this chapter concludes by suggesting how Lefebvre’s theory of space might be applied to Manovich’s ‘poetics’ of augmented space, a preoccupation that I return to again in the fourth chapter of this thesis.

## Two Narratives for the 'Virtual City'

The debate about the implications of a convergence of digital technologies and urban space is hardly new. In the early 1990s, the increasing ubiquity of personal computers, coupled with the development of the Internet, made access to cyberspace a daily reality for many. Transcendence and escape facilitated by the realm of virtual reality (VR) became a familiar narrative in the media, as well as the subject of science fiction films such as *Johnny Mnemonic* (Longo 1995), *The Matrix* (Wachowski, and Wachowski 1999), *Ghost in the Shell* (Shirow 1995), and *Hackers* (Softley 1995). Simultaneously, a number of theorists began to consider the implications of the intersection of virtual reality and the city. Gene Burd has spoken of the 'communicative city,' a "medium with an internal geographic locale for inter-personal contacts, but [which] also communicates an external mediated and virtual image beyond its boundaries" (2008, 209). This 'communicative city' is a "noun, verb and adjective combined in a McLuhanesque medium that communicates itself and is communicated by others" (Burd 2008, 211). Burd's 'communicative city' combines elements of two distinct (but complementary) post-urban fantasies identified by Stephen Graham in his critique of the 'virtual city' paradigm: "The dazzling light" where the transformative potential of new media technologies would "[shine] above everyday concerns," and the "anything-anywhere-anytime dream" which envisions an Information Communication Technology (ICT) fuelled transcendence of material conditions (2004, 4-6).

William Gibson's 1984 cyberpunk novel *Neuromancer* was particularly influential in providing both of these visions with a distinctive language and style. In *Neuromancer*, cyberspace is described as a "consensual hallucination, a graphic representation of data abstracted from the banks of every computer in the human system" (1984, 67). This treatment functions as a metonym for the "dazzling light" narrative, in which cyberspace is depicted in heavily romanticised terms as a parallel universe whose meaning extends beyond its immaterial boundaries. This narrative was picked up enthusiastically by the cyberlibertarian utopians of the early 1990s, who felt that the development of the internet might bring about an opportunity to (re)build a more democratic society (Graham 2004, 8). For the former US Vice-President Al Gore, this meant that, under the rubric of the 'information superhighway,' new media technologies would combine to produce a "global information infrastructure," that would ultimately become "a metaphor for democracy itself" (qtd. in Mattelart 1999, 189). In the most extreme version of this narrative there



exists a certain (albeit frequently undefined) moment within which a transformation occurs where humanity leaves behind the confines of its material existence, and engages in a mass exodus into cyberspace itself. Jay Bolter and Richard Grusin have named this tendency the ‘theology of cyberspace,’ and argue that it presents a vision where we come to “inhabit cyberspace just as previous generations inhabited nature... The master narrative of our culture is no longer the story of God’s relation to us or of our relation to nature, but of our relation to information technologies” (1999, 181). This narrative relies on a dichotomization of the relationship between the real and the virtual, treating them as “two completely distinct realms” (Graham 2004, 6). Furthermore, this relationship has a hierarchical dimension, with the transcendental allure of cyberspace invariably privileged over what are the apparent confines and limitations of material existence.

The second overarching narrative of 1990s cyberspace identified by Graham, “the anything-anywhere-anytime dream,” focused more explicitly on the relationship between urban space and virtual reality. This narrative directly opposes “the dazzling light,” in that it insists upon a blurring of the distinctions between the material (urban) and the virtual (cyberspace). Again, we can trace the origins of this discourse back to Gibson, specifically to his description in *Neuromancer* of cyberspace as resembling an image of nighttime Los Angeles viewed from five thousand feet above the ground. For Gibson, the metaphor of the city is employed as a way of representing the complex logics of the network. A similar treatment of this idea can be found in William Mitchell’s *City of Bits*, where the author conflates ‘urban’ and ‘network’ in a set of binary pairings: “Façade / Interface, Bookstores / Bitstores, Stacks / Servers, Hospitals / Telemedicine,” (1996, 46-70). Perhaps the most extreme extension of this approach was articulated by Paul Virilio, most notably in his essay “The Overexposed City” (1986), which saw the collapsing of distinctions between time and space achieve terminus in the image of a city devoid of geographical boundaries—the world as an endless virtual suburban vista, bringing about the death of the city proper. Here, as time ‘overcomes’ space, the global is rendered as a free-floating entity inhabiting virtual space in an over-determined metaphor of transformation and technological progress.

However, this vision of a ‘global-virtual’ urbanity is problematic because it tends to obscure the meaningfulness of social proximity and everyday life as a lived experience and ends up producing a dichotomy between notions of space (as abstract/virtual) and place (as concrete/material) even as it attempts to erase the possibility of straightforward distinctions between the two. For Jude Bloomfield, “the presence of the global *in the local*

has not been thought through consistently, because the global has been conceived of as 'out there,' the 'virtual other' in the 'space of flows'"(2006, 44). Similarly, Janet Ward's work highlights a set of tensions that neatly encapsulate two extreme distinctions between the local and the global. "The ideal global city is the virtual metropolis *sans frontières*" ("Berlin, the Virtual Global City" 2004, 240), Ward writes, outlining a common narrative for scholars approaching the theme of the virtual city. In this McLuhanesque treatment, the city is understood as the literal embodiment of the net, producing a new urbanity where "the reality of time and place [becomes] an imaginary matrix of computer nets linking together electronically distant places around the globe and communicating multilinearly and nonsequentially with vast assemblages of information stored as electronic codes" (Boyer 1992, 115). Here, space (the net) and place are framed as a set of binary opposites, where the former is regarded as a virtual entity, while the latter is rigidly material, but whose ultimate destiny is to collapse into each other.

Whether the 'city' is regarded as a metaphor for the Internet, or as part of a larger process of sublimation wherein the rhythms and routines of urban space become increasingly subject to some cybernetic paradigm, the conclusion from such a conception of the contemporary city invariably tends towards technological determinism. Both of these visions of a cyber-urban relation place too great an emphasis on the role of new media technologies in the shaping of the form and function of new urban spatial formations. Nonetheless, the conception of the city as an increasingly virtual, or cyberized, space has begun to have a particular resonance with contemporary urban planners and city councils. Ward argues that "the dream of the city without borders still brings with it the promise of a new type of urban power" ("Berlin, the Virtual Global City" 2004, 240). Global and virtual are conflated here, synonymous twins in the contemporary urban meta-narrative. The result is that major cities seeking to adopt the mantle of global-city status tend to represent themselves as freewheeling interzones, and as sites of creativity and newfound mobilities, which are simultaneously accessible to and from anywhere, but are also accorded a privileged status as command centres in a networked global economy (Ward, "Berlin, the Virtual Global City" 2004, 240).

Ward also articulates the theoretical opposite of this global/virtual paradigm. She argues that the urban problematic was in fact first articulated by Aristotle, in *Politics*, who believed that the ideal state must have a clearly defined set of borders and boundaries ("Berlin, the Virtual Global City" 2004, 242). For Ward, the reality of all modern cities must necessarily lie somewhere in between the two ("Berlin, the Virtual Global City"

2004, 242), and even representational attempts to emphasize a city's un-bounded aspect tend to do so "in the service of some form of desired Aristotelian control" ("Berlin, the Virtual Global City" 2004, 243). Jude Bloomfield echoes this sentiment, arguing that "the global is misconceived as a locus in the nether sphere, not as a set of relationships which is always embedded in real places and localities, however small and whatever the social disjuncture" (2006, 44). Bearing all this in mind, it is evident that there is a need to adjust our preconceptions about urbanity, particularly in relation to the virtual, and in a way that avoids simplistic juxtapositions between concepts such as the global and the local, space and place, and real and virtual.

In this spirit, I will now turn to the work of Pierre Lévy in his book, *Becoming Virtual*, where he constructs a framework whose precise aim is to bypass traditional binary conceptions of the relationship between the material and immaterial. My aim here is to demonstrate how Lévy's virtual can be used to provide us with an alternative understanding of how the city might function virtually. To begin, I pose the question: what is the 'virtual city'? If we take as a starting point the two narratives outlined previously we can either see the 'virtual city' as presenting cyberspace as a parallel urban 'other,' which resides 'out there' in the network, or, as a metaphor for the conflation of the urban and the virtual. In the latter account, cyberspace is treated as an urban environment, which Mike Davis argues functions as "the simulation of the city's information order," where "the city redoubles itself through the complex architecture of its information and media networks" (1992, 16). At the same time, the urban environment is seen as becoming increasingly subjected to the logics of cyberspace in "a new etherealization of geography" that implodes distinctions between time and space (Benedikt 1992, 22). Where the first formulation emphasizes the *materiality* of the new media technologies, which facilitate the experience of virtual reality, the second draws attention to the processes by which new media technologies might lead to a *dematerialization* of urban space. The first formulation treats the material and the immaterial as necessarily separate, when in fact, as Brighenti argues, both the city and new media are constituted by a combination of material and immaterial aspects (2010, 473).

In the second formulation, the conflation of the city and cyberspace has a tendency towards narratives of 'placelessness' and disembodiment, which render urban subjects and facilities (such as libraries, hospitals, and schools) obsolete (Stevenson 2003, 130), or at the very least subordinate to 'virtual' flows or networks. This articulation is equally problematic. It suggests that the virtualization of the city is a relatively new

phenomenon, obscuring the influence of historical developments that preceded the Internet and other new media technologies. For example, the establishment of rail networks had a comparable temporal-spatial affect—albeit of a different order—on urban life, radically reducing the length of journeys between urban cores and rural peripheries during the industrial revolution. The urban/virtual conflation also has a tendency to marginalise the spaces and places which people inhabit and where everyday life takes place (Bloomfield 2006, 44). Cities are not merely places, or static entities; rather, they must be understood as vibrant, dynamic spaces whose very nature is determined by a multitude of social, cultural and political practices and processes. Ultimately, this treatment of the virtual city assumes (and therefore overemphasizes) an implicit conflation of the virtual and the global. For example, Bloomfield argues that: “The global has come to be seen as unmoored, as though inhabiting virtual space” (2006, 44). This notion is also problematic, because it obscures the relationships between the local and the global, and the local and the virtual. When the global is treated as a ‘purely geographic relation of distance’ there is a tendency to occlude unequal power relationships in *social distances* from centres of power (Bloomfield 2006, 44). These social distances play a part in determining how marginalized an urban centre is in the global hierarchy of cities (Bloomfield 2006, 44). Taking all of these limitations into account, any definition of the ‘virtual city’ needs to avoid the displacement and derealisation of space and place, and should instead be able to articulate the specific nature of the relationship between the material and immaterial aspects of both urban spaces and new media.

### **The Nature of the Virtual**

In the introduction to *Becoming Virtual* Lévy cites Jean Baudrillard and Paul Virilio as would-be harbingers of a “cultural apocalypse,” predicated upon crises of “de-realization,” and “space-time implosion,” respectively (1998, 16-17). In opposition to both of these gestures, Lévy sets out to construct a theory of the virtual that:

[as strictly defined], has little relationship to that which is false, illusory, or imaginary. The virtual is by no means the opposite of the real. On the contrary, it is a fecund and powerful mode of being that expands the process of creation, opens up the future, injects a core of meaning beneath the platitude of immediate physical presence. (1998, 16)

Lévy's definition of the virtual is characterized by a rendering that gives it the power of *process* to move between different states, presenting us with "a choice among various modalities of virtualization" (1998, 17). Drawing on the etymological origins of the word 'virtual' and its use in philosophy, Lévy defines the virtual in two stages: The first is static, invoking the possible and the real; the second is a dynamic relation between the actual and the virtual. Here, my concern is primarily with the second iteration, which Marie-Laure Ryan argues "is not a deterministic process but a form-giving force" (1999, 92). The virtual is not a state of illusion, but rather it is a form that requires actualization, it is something that *might be* (Kennedy 2008, 308). Nor is Lévy's virtual purely a mode of being; rather, it is a "*process of transformation from one mode of being to another* [author's emphasis]" (1998, 16). Actualization functions as a response to the virtual and involves a certain degree of "indeterminacy in its processes, and creativity in its striving" (Lévy 1998, 27). The virtual is not drained upon its actualization; it is inexhaustible, and can be actualized repeatedly, which is why Lévy's particular choice of the descriptor, 'fecund,' is so appropriate.

In spite of the virtual's limitless nature, each event of actualization is not necessarily homogenous. In fact, the opposite is often true: "[the text, as virtual entity] is actualized in multiple versions, translations, editions, instances, and copies" (Lévy, 1998, 47). To further illustrate Lévy's point, Ryan uses the example of a musical score, arguing that "color and form are inherent to pictures and objects, but sound is not inherent to musical scores, nor are thoughts, ideas and mental representations inherent to the graphic or phonic marks of texts" (1999, 96). The virtual object's potential meanings can overlap, informing each other at multiple levels, facilitating what Lévy calls a "matrix of potential texts" (1998, 58). It should be noted that actualization is distinct from 'realisation,' where reality is assigned to some clearly demarcated possible outcome (Lévy 1998 25-26). Actualization is a more productive mode; it invokes "a transformation of ideas, a true becoming that feeds the virtual in turn" (Lévy 1998, 25). Each time the process of actualization occurs, something new is revealed about the character of its context. The actual *responds* to the virtual; it is never mere facsimile.

Thus far I have outlined the process by which the virtual becomes the actual, as well as noted the limitless nature of its existence. But as Lévy explains, a reverse process can also occur, which he calls 'virtualization.' This describes the movement from actual to virtual. Here, the real does not simply become a set of possibles; instead virtualization transforms an actuality into a more generalised set of ontological co-ordinates (1998, 27).

Virtualization “fluidizes existing distinctions, augments the degrees of freedom involved, and hollows out a compelling vacuum” (ibid). Once an actual is made virtual its co-ordinates can no longer be precisely located, it is *detrterritorialised*: “its elements are nomadic, dispersed, and the pertinence of their geographic position significantly diminished” (ibid). In order to articulate the nature of the transformations that occur in the processes of virtualization and actualization, Lévy uses the examples of writing and reading. To write is to unmoor one’s ideas, thoughts, and memories from the constraints of time and place, and to give them an eternal quality, which enables them to be reproduced and reprinted endlessly. In response, the act of reading is the moment when the text acquires its meaning: “it is while moving through the text, mapping it, that we fabricate and actualize meaning” (Lévy 1998, 48). In other words, for Lévy, writing is memory externalized and detrterritorialised, while reading represents a *reterritorialization* of the text, a moment that produces an environment in which new meanings can be generated (1998, 48-50).

### **Virtualization, Actualization, and the City**

Virtualization and actualization both play a part in the production of urban space. Each of these processes manifests in the form of events. The moment of actualization functions as a *response* to a problem “here and now,” while the moment of virtualization represents the articulation of a new problem (Lévy 1998, 179). The urban experience can thus be characterised by a series of transitions between two modalities of the city. The virtual proposes a problem. For instance, it might ask the question: how does one experience the city? Actualization is necessarily the response to this question. So when Michel de Certeau speaks of pedestrian movements as forming “one of those real systems whose existence makes up the city” (1984, 97), he is in effect describing the process by which his streetwalkers actively partake in actualising the city in time and space, with each glance and footstep contextualizing the geospatial path along which the walker travels. To navigate the city’s streets is to participate in a process of exchange between its different modalities, as (virtual) *space* and as lived *place*. Lévy illustrates a similar process during a discussion of the relationship between technology and the virtual, where he refers to the example of the hammer, describing the process of its historical invention as a moment of virtualization – a “virtualization of an action” (1998, 95). He argues that “there are few virtualizations of action and many actualizations of tools,” before posing the rhetorical question: “how many times has a hammer been struck?” (Lévy 1998, 96). Obviously, the answer is

innumerably large. In walking a city's streets we also gain new knowledge; we discover shortcuts, dodge traffic, and stumble across previously unknown bars, cafés, shops or parks. Each of these moments of urban encounter not only involves a series of solutions to the urban problem, they also have a transformational quality. In walking the city's streets we also gain a new perspective towards them, 'feeding' the virtual in turn (Lévy 1998, 25).

The process of a city's actualization occurs frequently, whenever we travel through a city's streets or examine a map of its geography, as a necessary aspect of urban experience. But how is a city virtualized? Such a process must be more complex than that which occurs in Lévy's example of the hammer, which perhaps has "three or four" historical variations (1998, 95). The city cannot simply be characterised as a tool, and it has many more historical conceptions, and many more dimensions. The city is subject to both time and space, to the movements of its inhabitants, and to the social, cultural and historical processes which bring it to life. *Becoming Virtual* contains another, more nuanced analogy, relevant to this issue. To illustrate the process of virtualization, Lévy draws on the example of the corporation. Once virtualized, he argues, the corporation experiences a shift in the centre of its 'gravity' (1998, 27). Where the conventional organization can be situated in a building (or collection of buildings), made up of workstations, timetables and so on, the virtual corporation is determined by a "a process of coordination, which redistributes the spatiotemporal coordinates of the labor community and each of its members as a function of various constraints" (ibid). Crucially, this process of virtualization does not derealize the daily realities of the corporation's operation; instead, it redefines them according to a new logic. Thus, "virtualization is one of the principal vectors in the creation of reality" (ibid). Following Lévy then, I claim that the city's material aspect, its urban landscape, is displaced as the ontological centre in the moment of virtualization. However, this is not to say that the city's material realities lose their significance. As Lévy is careful to point out, the virtual is not purely confined to the realm of the imaginary; and its effects can be distinctly material in their nature: "[the virtual] structure[s] our social reality with the greatest force, perhaps even the greatest violence" (1998, 30). The most visceral example of this 'violent' quality can be found in Lévy's chapter on the virtualization of the human body. In a discussion of the processes of organ donation, blood transfusions, and skin grafting Lévy writes that:

Flesh and blood, now shared, are stripped of subjective intimacy and move outside us... this public flesh returns to the grafted individual, the recipient of a transfusion, the hormone consumer. The collective body modifies our private flesh. At times it resuscitates or fecundates it *in vitro* [author's emphasis]. (1998, 41)

For Lévy the process of removing organs, blood and skin, and placing them in the collective pool that is the public health system, is an act of virtualization. Blood that once flowed through the circulatory system of an individual loses its bodily form, its 'subjective intimacy,' and its original context, and instead becomes a latent part of a dispersed and socialized quantity within the blood bank. This passage holds a deep significance because implicit in the scenario it describes is the notion that the virtual is not always abstract, a development that also has dramatic repercussions for how the city should be understood.

### **The Urban Imaginary, and the 'Virtual City'**

So how does Lévy's 'violent' virtualization occur in the urban context? As I have previously discussed, the act of digitizing the city subjects it to the distinct logics of the network. Here we might consider Mitchell's *City of Bits* (1996) as an urban analogue of Lévy's virtual corporation. But this is not the only way in which we have virtualized the city, displacing its constituent material streets and buildings as its 'ontological centre.' Historically, Lewis Mumford has also questioned the city's ontological status "as a purely physical fact" (1937, 93). Instead, he claimed that the city at once:

...fosters art and is art; the city creates theatre and is the theater. It is in the city, the city as theater, that man's more purposive activities are focused, and worked out, through conflicting and cooperating personalities, events, groups, into more significant culminations. (Mumford 1937, 8)

Here, Mumford gestures to the city's dialectical nature as a space that is both the product of human affairs, and also the very *medium* in which these same affairs are subsequently enacted and re-enacted. The media has a crucial part to play in feeding this process, a



notion that is foregrounded in the concept of the ‘urban imaginary,’ and which I claim has some productive parallels with Lévy’s theory of the virtual.

The urban imaginary is a theoretical approach for reading the production and re-production of the city as text. As a field of study, writing on the urban imaginary has been informed by Walter Benjamin’s *Arcades Project* (1982), de Certeau’s writings on everyday life, and Lefebvre’s theory of *The Production of Space* (1974). The theory’s origins can be traced to Richard Wohl and Anselm Strauss’ 1958 essay “Symbolic Representation and the Urban Milieu,” which emphasizes the importance of understanding the city symbolically as well as literally (Lindner “The Gestalt of the Urban Imaginary” 2006, 37). Rolf Lindner argues that the city is a ‘place of imagination,’ which “overlaps the physical space, to the extent that the latter is experienced through the accompanying images and symbols” (2006, 35), while James Donald suggests that “we do not just read the city, we negotiate the realities of cities by imagining ‘the city’.... It is imagination which produces reality as it exists” (1999, 18). In both these cases, the writers treat the city as an entity that cannot be understood in strictly material terms; for them, urban space is inherently virtual in its nature. Furthermore, Lindner rejects the argument that the imaginary should necessarily be opposed to the real (“The Gestalt of the Urban Imaginary” 2006, 36). In a statement that recalls Lévy’s treatment of the process of virtualization, when the actual is transformed into the virtual in “a displacement of the center of ontological gravity” (1998, 26), Lindner “finds [himself] in agreement with the French anthropologist Pierre Sansot, who claims that the imaginary, far from constituting a flight from reality, is another way of connecting to it” (“The Gestalt of the Urban Imaginary” 2006, 36). Here we might say that the city is *rendered* imaginary, in the form of what Donald has called “the varieties of text” (qtd. in Lindner “The Gestalt of the Urban Imaginary” 2006, 40), which simultaneously mirror and project images of the city in a system of exchanges and feedback loops. Lévy suggests that “the process of virtualization is a transition from the act—here and now—to the problem, to the knot of constraint and finality that inspires our acts” (1998, 174). If the act of constituting the city shifts to the problem expressed in the question ‘what is the city?’ then the urban imaginary’s role is expressed as this ‘knot of constraint,’ which mediates between the city as problematic, and the city as lived experience.

Understood in Lévyian terms, the city is a space that we constantly negotiate, actualizing, and occasionally virtualizing, depending on the nature of each encounter. The elegance of Lévy’s theory is that one need not distinguish between different conceptions

of the city (in media texts, as part of discourse, in everyday life), as each can be described by either moment: virtualization or actualization. The city exists as a virtual problematic, which is solved when we actualise it, and in doing so, partake in the unique constitution of the city itself. James Donald evokes a similar sentiment, suggesting that we already live in the imagined city: “The city we do experience—the city as a state of mind—is always already symbolised and metaphorised” (qtd. in Lindner, “The Gestalt of the Urban Imaginary” 2006, 36).

When describing the ‘virtual city’ then, it is important to recognize that it does not function as a singular, monolithic, or stable entity. Its imaginary aspect is continually being negotiated and re-negotiated in a series of exchanges between the diverse groups of people who inhabit it. Bloomfield argues that: “[urban] space is contested when different groups conflict over history, memory, and entitlement – over access to and control of resources and collective myths” (2006, 51-52). These tensions can be played out within the processes of virtualization and actualization of the city, as each contributes to the shaping of our perceptions of urbanity. For Bloomfield, the city’s contested nature is revealed through a series of questions: “What kind of place is it, or should it be? Whose place is it? Who has the right of access to inhabit or use it and who should be excluded?” (2006, 52). The manifestations of conflict over resources and physical space are played out in the form of actualizations: protests, resource consent disputes, cultural clashes and so on.

The symbolic space of the city is also contested. Ward has observed how efforts to re-present the city of Berlin through “an eternal artifice of becoming” are an attempt to create a ‘virtual metropolis’ as a “substitute for perceived deficiencies, past and present” (“Berlin, the Virtual Global City” 2004, 246). This virtual Berlin is not simply the product of a utopian digital vision for the city (although techno-populist narratives are at times employed), but the result of self-referential architectural exhibitions, rebranding packages, and the quasi-theatrical treatment of construction work as signifier of tourism, which Ward aptly terms “building-site tourism” (“Berlin, the Virtual Global City” 2004, 247). In this way, the construction of the city takes on a virtualizing dimension, where “the new character of the city” is congealed within the processes of “construction *per se*” (Marcuse qtd. in Ward, “Berlin, the Virtual Global City” 2004, 247).

Finally, it is important to note that the urban imaginary does not have to function in a manner that is solely reductive. The material dimension of the city does not disappear in the virtualizing process. What the urban imaginary gives us is an idea of the city as a set

of relationships between urban spaces, media technologies and social relations. This explains why Lévy rejects Virilio's dematerializing thesis:

Virtualization does not simply accelerate already known processes or suspend, or even annihilate, time and space, as Paul Virilio has claimed. Based on expenditure and risk, it creates qualitatively new velocities, mutant space-time systems. (1998, 33)

Instead, as Mike Crang has argued, the city should function as "both object and metaphor in a reflexive system where the imagining of electronic space is vital to creating it" (2000, 302). We can even go one step further here, and conclude that the city is not only mediated, but that the media that play a role in constitute it are also inherently 'urbanized' (Brighenti 2010, 473).

One of the most difficult theoretical challenges posed by the simultaneous reflexive processes of urbanization/mediation arises in the question of how to articulate the city as a discursive space as well as a material one. Alan Blum addresses this very concern in his book, *The Imaginative Structure of the City*, which seeks to work through the proposition that "the city is nothing but a sign" (Blum 2003, 26). In other words, any inquiry into the concept of the city should refer not only to its material referent, but also to the cumulative weight of the discursive space that both addresses and is addressed by it. For Blum, this process is necessarily contested and involves a dialogue between many different voices, actors and interests whose aggregate product is the collectivized urban identity: "The 'we' of the city is thus not a thing but an object of desire that comes into view and recedes in conflicts at a variety of points in everyday life" (2003, 29). Thus, Blum is engaged not only with the persistence of the city's symbolic order (its 'imaginative structure'; the city as sign), but also with the ways in which cities are also environments where particular social and economic practices (transportation, labour, exchange, art, communication) take place and, in doing so, "provoke different problem-solving responses from the collective city population" (Donald, 1999, 66). Blum's city is, I suggest, Lévyian, in that he acknowledges its 'two headed' nature, as being "material" (actual/real) and "ideal" (virtual/possible), while also emphasizing the ways in which both aspects leave "persistent, irresolute traces in the life that encounters and sustains its focus as a site of collective action" (2003, 294).

Taking all of this into account, I claim that the ‘virtual city’ is precisely this entity that we call ‘the city,’ inasmuch as the city is already a virtual space whose nature is determined by a series of endless virtualizations and actualizations, which occur in media, in city politics and urban planning, and in the everyday experience of city life. If this is so, what use does the term ‘virtual city’ hold then? For the purposes of this thesis, its theoretical salience exists in its emphasis on the ways in which attempts to speak for (and of) the city by people and institutions, and the ways in which narratives about the city are produced and re-produced in media texts, play a crucial role in structuring city life in complex, and often unexpected ways.

### **The Augmented City**

Having theorized the ‘virtual city,’ I shall now turn towards the paradigm of augmented space, the proposed existence of an ‘augmented city,’ and the question of whether it supersedes the 1990s’ narratives regarding its virtual predecessor. For Lev Manovich, augmented space is “the physical space overlaid with dynamically changing information. This information is likely to be in multimedia form and is often localized for each user” (2005, 2). Augmented space includes ubiquitous computing, wearable computers, tangible interfaces, wireless location services and other emerging technologies, many of which function in various ways to provide connections between their users and their surrounding physical environment, which is often an urban one (Manovich 2005, 6). What these technological apparatuses have in common is their ability to “*dynamically deliver dynamic data to, or extract data from, physical space* [author’s emphasis]” (Manovich 2005, 3). In his definition, Brighenti adds a temporal dimension to Manovich’s conception, suggesting that the “real-time overlay of computer-generated images with the physical environment” should be regarded as a crucial aspect (2010, 11). This delivery of data produces a cumulative effect of a layering of information, where instead of replacing our world with a parallel virtual one, we integrate digital material into our immediate physical environment.

Augmented space is often discussed in relation to the older paradigm of virtual reality. Manovich describes how the 1990s were characterised by a fascination with virtuality, and particularly with a techno-utopian vision of an escape into virtual space, leaving behind ‘the meat’ of physical existence. In the augmented space paradigm, this desire for a departure has been replaced by the contemporary image of a ubiquitous access to dynamic digital information, achieved in a contemporaneous set of interactions

between physical space, and immaterial (digital) layers. However, this is not to say that virtual space and augmented space should necessarily be thought of in dichotomous terms. Manovich argues that the nature of immersion which occurs in each of these two spaces is distinguished by scale (2005, 11). In the VR experience, one's physical surroundings are overwhelmed by the eye's attraction to the screen. When one enters augmented reality, the layers presented via your display function as an addition to the phenomenological experience, rather than taking it over:

So whether we should understand a particular situation in terms of immersion or augmentation depends on how we understand the idea of addition: we may add new information to our experience – or we may add an altogether different experience. (Manovich 2005, 11)

Manovich's emphasis on augmented space as a form of *addition* can also be read as an attempt to resolve the aforementioned debate about whether or not the emergence of virtual spaces might signal a displacement, de-emphasis or even disappearance of 'reality.' As Scott McQuire argues, "instead of the 'annihilation of space and time,' we are experiencing the emergence of new spatial ensembles" (2008, 21). Manovich is primarily concerned with locating what is distinctively new within the phenomenological experience of interactions in augmented space and reaches the conclusion that augmentation should be conceptualized not as a technology, but rather as "an idea and cultural and aesthetic practice" (2005, 2), a treatment which conspicuously attempts to avoid the tendency towards determinism evident in much of the techno-utopic writing of his '90s predecessors.

Manovich is also careful to stress the significance of the relationship between augmented space and surveillance. In fact, he argues that the nature of this relationship is symbiotic, because of the technological crossover between the two practices. The transmission of data to a particular physical location, which is required in most AR applications, necessitates the knowledge of that location from the source of the transmission. To illustrate this tendency, Brighenti claims that "[AR applications] provide specific geo-reference to material territories so that it becomes possible to quite literally 'follow the actor'" (2010, 483). An 'augmented city' is by definition also a surveilled city, then. Manovich argues that the two-way relationship evident in this exchange of data is what transforms physical space into a dataspace (2005, 5). This dataspace has been

described by Scott Page and Brian Phillips as a “mixed reality,” where the technological, cultural and spatial domains that constitute the city are regarded as tightly interconnected (qtd. in Brighenti 2010, 474). In this ‘mixed reality,’ the layers of the material and immaterial are “porous to each other”; they are co-determinate rather than distinct and autonomous (Brighenti 2010, 474). In order to conceptualize the intricacies of such a complex interrelationship, Brighenti proposes that new media can be thought of as providing “specific territorial and visibility regimes in the city, which [enable] us to account for the material and immaterial dimensions and the prolongations between the two layers” (2010, 476). For Brighenti, prolongations are constitutive of territorial spaces whose nature is hybrid, an indeterminate blend of the material and immaterial (2010, 480). This notion of territorial prolongation is based on the same body of work (namely, the twin volumes of *Capitalism and Schizophrenia*) by Gilles Deleuze and Felix Guattari that also informs Lévy’s theory of virtuality. So when Brighenti claims that “a *territory* is to be understood not as an object, nor as a space, but rather as an *act...* territories are not simply *relational*, but also and above all *processual* and *directional* entities [author’s emphasis],” (2010, 477) he alludes to the same theoretical framework that informs Lévy’s argument that territories function as *events*, which are inherently “part of a dynamic of actualization (territorialisation, instantiation in the here and now, particular solution) and virtualization (deterritorialization, detachment, sharing, elevation to a problematic)” (1998, 74-75). Thus, Brighenti’s prolongations between the heterogeneous material and immaterial aspects of augmented space point towards the ‘zones of indistinction’ that have led to its description as a ‘mixed reality.’ These zones occupy the intermediary space between actualization and virtualization, on what Lévy calls a Moebius strip, where “the messages that virtualize the event are at the same time its prolongation; they participate in its accomplishment, its incomplete determination. They become part of it” (1998, 74). To a degree then, augmented reality research is implicitly Lévyian, in that it paradigmatically draws attention to the exchanges between the material and the immaterial, which are played out in the convergence of new media technologies and urban space.

## The Production of Space

Manovich's framing of the ontology of augmented space represents an attempt to move new media theory beyond deterministic formulations of the relationship between the material and immaterial by placing an emphasis on exchange and indistinction, rather than on displacement and derealisation. Central to his thesis is an accentuation of a particular geometric and architectural spatial logic. Although he never provides an explicit definition of 'space' itself, Manovich's use of the term tends to be mathematically and geometrically grounded. For instance, he describes the progression of twentieth century art from wall-mounted two-dimensional objects, to 3-D 'assemblages,' to the 'multidimensional' nature of augmented space; and speaks of the theoretically Euclidean nature of dataspace as "a *continuous* field that completely extends over, and fills in, *all* of physical space [author's emphasis]," and where "every point in space has a GPS coordinate that can be obtained using a GPS receiver" (2005, 16). As such, Manovich is primarily concerned with the problem "of how to overlay physical space with layers of data," and calls for architects and artists to "take the next logical step to consider the 'invisible' space of electronic data flows as *substance* rather than just as void—something that needs a structure, a politics, and a poetics" (2005, 28).

Any attempt to generate a study of augmented space might begin, therefore, with the observation that 'space' is not in itself a neutral category, and in the form of Henri Lefebvre's *The Production of Space*, we already have some idea of what its "structure, politics and poetics" might look like. What follows then is a summary of some of Lefebvre's more salient observations on the meaning of space and an attempt to integrate them in into a framework for the study of the role of augmented spatial forms in the contemporary urban context.

In his later work, including *The Production of Space*, Lefebvre set out to address what he perceived to be a significant omission in Marxist thought: the role of space as a vital realm of social relations, alongside the traditional productive forces of technology, human knowledge and labour power (Gottdeiner 1994, 123). In doing this, he sought to provide a "*knowledge of space*" which would negate what he saw as the unfortunate "transfer onto the level of discourse, of language *per se*—i.e. the level of mental space—a large portion of the attributes and 'properties' of what is actually social space [author's emphasis]" (Lefebvre 1974, 7). For Lefebvre, all human space—be it historical, societal, mental, or even natural—was fundamentally social, and was therefore *socially produced*. He saw this process

as constant and continually subject to shifts, which could occur through the complex entanglement of both material and imaginary relations (Lehtovuori 2010, 54). Lefebvre's project was intensely political in its intent, and it regarded the conflation of the different uses of space in Western thought as obscuring the exercise of hegemony in structuring social relations in space itself (1974, 8-11). For him, the critique of capitalism needed to incorporate a notion of space that embraced "a multitude of intersections," which he theorized using a tripartite structure in *The Production of Space*:

- 1) *Spatial practice*, which Lefebvre describes as the *perceived* space encountered in our daily environment. This space is described as being relatively "cohesive," or material in nature, although he is careful to point out that it is not devoid of ideology (1974, 38-40).
- 2) *Representations of space*, or *conceived* space. The mental (and institutional) space of "scientists, planners, urbanists, technocratic subdividers and urban engineers" (1974, 38).
- 3) *Representational spaces*, or the *lived* space of "associated images and symbols," but which is also the space that exists in the representations of artists, writers and filmmakers. Thus, lived space is a mediation of perceived and conceived space, where, as Lefebvre puts it, "culture intervenes" (1974, 40).

Rather than functioning as a container within which life takes place, Lefebvre describes these three spatial elements as operating together dialectically. The production of space refers both to the process, but also to its outcome (the material, produced space). In contrast to Manuel Castells, for whom the space of flows substitutes a space of places, Lefebvre's production of space does not produce a binary opposition; it does not insist on one or the other (Merrifield, "Place and Space" 1993, 521). Rather, it acknowledges that space is both flow/process *and* 'thing'/place (ibid). In this, his theory of social space is analogous to Marx's theory of commodity fetishism, which argues that although a commodity has the ontological status of an object or material 'thing,' it is also the product of a labour process and its associated social relations (Marx 1890, 49). However, this process is subsequently obscured by the reduction of the 'thing' to its exchange value (the "money form"), which leads Marx to the claim that commodities need to be regarded as *processes* that appear to take the *form* of things (Marx 1890, 49). Lefebvre was acutely aware of the dialectical relationship inherent in the commodity fetish, and explicitly references it in his articulation of the production of space:



We come to think in terms of spatiality, and so fetishize space in a way reminiscent of the old fetishism of commodities, where the trap lay in exchange, and the error was to consider ‘things’ in isolation, as ‘things in themselves.’ (1974, 90)

This has implications for the formulation of the relationship between space and place in Lefebvre’s work. Although references to the ontology of place are not always explicit in *The Production of Space*, Andrew Merrifield argues that the aforementioned dialectical understanding of space as processes (or flow) and as ‘thing’ provide us with a means of articulating it. In his interpretation, place is understood as a ‘moment’ in which all three aspects of the spatial triad cohere (“Place and Space” 1993, 525). The notion of place exceeds mere everyday life. It emerges from the dynamics of social space, taking a specific form that points to an intrinsic interconnection between time and space (Merrifield, “Place and Space” 1993, 521). Significantly, the ‘momentary’ nature of place can never be fully separated from the processes of its own production. Just as Marx understands commodities as representing a *congealing* of the processes of labour-time, so can place can be understood as a congealing of the production of space. Taking all this into account, we can establish that the production of space, as Mark Purcell explains:

...necessarily involves reproducing the social relations that are bound up in it. The production of urban space entails much more than just planning the material space of the city; it involves producing and reproducing all aspects of urban life.” (2002, 102)

In fact, Lefebvre sees social relations and the production of space as being so entangled that he makes the claim that the development of each mode of production (feudalism, mercantilism, global capitalism, etc.) is accompanied by the production of its own distinctive space (1991, 46). Lefebvre calls the distinctive space produced by capitalism an *abstract* space, which is increasingly atomized into the “reproducible, homogenous building blocks of mass society” (Gottdiener 1994, 126):

Capitalism and neocapitalism have produced abstract space, which includes the ‘world of commodities,’ its ‘logic’ and its worldwide strategies, as well as the power of money and that of the political state. This space is founded on the vast network of banks, business centres and major productive entities, as also on motorways, airports and information lattices. (Lefebvre 1974, 53)

Lamenting the death of the Constructivist movement (a period of “prodigious creative ferment”) at the hands of the Stalinists, Lefebvre wonders where the next “new” mode of architectural production might originate (1974, 54). If, as Manovich and others have claimed, augmented space represents a new spatial paradigm, then a discussion of the ‘space’ of augmented space might begin here, with an examination of the interrelationship between what is new (spatially) in augmented space, and the distinctive social, cultural, and political contexts in which these new formations emerge.

In summary, this chapter has provided an overview of the key debates in the field of new media studies surrounding the application of notions of virtuality and augmentation in the urban context. It establishes a distinction between the notions of the ‘virtual city’ espoused by the likes of Virilio, Baudrillard, and McLuhan, which emphasize dematerialization, dispersal and time/space implosion, and my own formulation of the city as a virtual space that draws upon notions of the “urban imaginary,” and that I claim is constituted through concurrent Lévyian processes of virtualization and actualization. This opens up the possibility of recognizing that the paradigm of augmented space also has Lévyian tendencies, in that it explicitly draws attention to the possibility of exchanges between material and immaterial layers. However, there remains a major issue within the scholarship on augmented space to date. The theorization of the notion of space, which tends to be conceived in Euclidean terms, and is understood as existing *a priori*, is problematic. The work of Henri Lefebvre demonstrates that space needs to be thought of as a social construction that is constituted through a complex interplay between both material and imaginary relations. This has implications for the assumptions that underpin the augmented space paradigm, and necessitates an examination of the social space within which it emerges. Rather than focussing on the addition and subtraction of material and immaterial layers in augmented space, I am interested in the notion of the city as a mediated space, constituted via (Lévyian) virtual transformations and (Lefebvrian) spatial processes. As a result, it is worth considering scholarship concerning other forms of media that also work to constitute the city along these lines.

The next chapter of this thesis explicitly takes up this task in the context of Berlin's city-cinema, with particular reference to the ways in which the act of film-making generates modes of seeing, and therefore constituting, the city in both virtual and spatial terms. In this, I pay particular attention to the ways in which the visual economy of the city produces regimes and experiences that, following Lefebvre, structure urban space in accordance with the rational, Logocentric logic of capital, or alternatively, via symbolic processes which emphasize the erotic potential of the city as a space of encounter and otherness.

## Chapter Two

### Structuring Visibility in Berlin's City-Cinema

As we saw in the previous chapter, in recent years there has been a proliferation of scholarly attempts to articulate the significance of the relationship between new media and the city. As an antecedent to this, and as a means of further exploring issues that are foregrounded by the question of representing (or mediating) the city, and Berlin in particular, there is much benefit to be had in considering a body of work which in many ways anticipated questions about mediation and the production of urban space, namely the relationship between cinema and the city. Common to much of this work is an emphasis not just on cinema's ability to provide an accurate representation of everyday urban life, but also on the significance of its role in constituting the very fabric of the city's built environment, and the makeup of its social character. For example, the introduction to Nezar AlSayyad's *Cinematic Urbanism* proclaims that "no medium has ever captured the city and the experience of urban modernity better than film," before going on to note that "movies [also] influence the way we construct images of the world, and in many instances they influence how we operate within it" (2006, 1). For Scott McQuire, the city-cinema relation can reveal "the new conditions of [urban] life, and thereby [wake] city-dwellers from their commodity-inspired slumber," while at the same time comprising "a crucial adaptive mechanism amounting to a form of sensory training for modern city living" (2008, 57). What these claims suggest is that city-cinema does not merely produce a set of sign systems for the consumption of the spectator, but that it also has a role in shaping urban space as a *lived* experience. This is why James Donald has rejected the city's status as "a place," arguing that it should instead be understood as "a historically specific mode of seeing, a structure of visibility that incorporates not only the analytic epistemology theorized by Benjamin and achieved by Vertov [in *Man With a Movie Camera*], but also the primitive fantasies hypothesized by de Certeau and realised in the fantastic cities of Ufa, Hollywood, and Manga" (1999, 92).

There can be little doubt as to the influence of *The Production of Space* on all of these authors, whose work on cinematic urbanism can broadly be regarded as part of "the spatial turn," a trend within critical theory of the last forty years that has resulted in the growing influence of Henri Lefebvre's work in general, and an acceptance of his use of space as an organizing category in particular (Shiel and Fitzmaurice 2001, 5). In fact, in

their edited collection, *Cinema and the City*, Mark Shiel and Tony Fitzmaurice suggest that the recognition of cinema's significance within urban studies is specifically *because* of its privileged status as an inherently spatial form of culture:

[C]inema operates and is best understood in terms of the organization of space: both *space in films* – the space of the shot; the space of the narrative setting; the geographical relationship of various settings in sequence in a film; the mapping of a lived environment on film; and *films in space* – the shaping of lived urban spaces by cinema as a cultural practice; the spatial organization of its industry at the levels of production, distribution, and exhibition; the role of cinema in globalization. (2001, 5-6)

Passages like this bear the indelible mark of Lefebvre's theses on space, which are underpinned by the fundamental principal that space can never exist *a priori*. Rather, space is always regarded as the product of society, while at the same time being a constituent element of society. Shiel and Fitzmaurice's cinematic space exists both within the film, but also extends outwards as an agglomeration of symbolism and imagery that shapes the urban lived experience. The product of city-cinema is therefore a mediated city, a space of representation, mythmaking, and cinematic landscapes and architectures. This mediated city functions as a virtual space, or a 'virtual city,' in the sense that it has a transformative capacity. Through the visual economy of cinema, Berlin's multiplicity (Weimar Berlin, Nazi Berlin, Cold War Berlin, etc.) is not only sustained or acknowledged, but also reproduced in ways that remind the viewer of their ongoing efficacy.

This interpretation would appear to place city-cinema under the third category of Lefebvre's triad, that of 'representational space,' or "space as directly *lived* through its associated images and symbols" (Lefebvre 1974, 39). However, I wish to avoid reducing Lefebvre's conceptual triad to three distinct concepts. To properly employ them it is crucial to grasp how they work together, particularly because Lefebvre's understanding of the dialectic does not operate in the same way as Hegel's or Marx's. That is to say, Lefebvre does not employ the structure where two contradictory terms ('thesis-antithesis' in the former, and 'affirmation-negation' in the latter) are sublated by a third term ('synthesis,' and 'negation-of-the-negation'). In Hegel, the dialectical process produces what Slavoj Žižek has called a "change in perspective," which reverses the original antagonism of the antithesis, transforming its condition from a negative state into a positive—albeit "mutilated" —one (1989, 199). Lefebvre's spatial triad should be thought

of as *three-dimensional*, in that he proposes three theses that are *not* reconciled in synthesis (Schmid 2008, 33). Each of Lefebvre's spatial 'moments' (*perceived, conceived, and lived*) exists in state of relational entropy, and movements can be made between any of them. It is also possible, at times, for them to co-exist as a coherent whole or totality (in "favorable circumstances"), but generally their interrelationship tends towards collapse (Lefebvre 1991, 41-42). Therefore, while a discussion of city-cinema and the mediated city can be made from the general perspective of representational space, it is vital that the analysis takes into account its relationship to the other two spatial modes in Lefebvre's triad: representations of space and spatial practice.

The object of this chapter is to use Lefebvre's spatial triad as the guiding framework for an analysis of two of the major Berlin films of the last thirty years: *Der Himmel über Berlin* (released as *Wings of Desire* in English) and *Lola Rennt* (released as *Run Lola Run* in English). The former was produced just before Germany's reunification, while the latter was produced not long after. As a result, the two films provide contrasting insights into the formation of Berlin as a cinematic landscape, and as a virtual city. My aim here is to articulate a relationship between the promise of cinema as a technology of representation and mediation, and its role in shaping, via Lévyian transformations/virtualizations, Berlin's urban imaginary, or 'cultural texture' before and after *Die Wende*.<sup>2</sup> In particular, I would like to draw attention to the ways in which the specific visual regimes employed by each of these films structure distinctive, and at times conflicting, techniques for 'seeing' the city, and therefore virtualize it in an act of transformation. The object of this move, of tracing the life of the symbolic spaces of Berlin's city-cinema to their visible limits, is to arrive at the interstices, which at times open up between them. For Lefebvre, the liminal spaces between his three spatial modes are the areas where interventions can be made, and contradictions worked through (1974, 43). It is here, at the level of cinema's struggle to 'see' the city, where we might locate some of the gaps between the three moments in Lefebvre's spatial triad and, in doing so, catch a glimpse of the interplay between what Karen Wells has called the "constant demolition and reconstruction of urban space" (2007, 142), where the efforts of the abstract space of capital to erase historical figurations that represent the traces of East Berlin's 'cultural texture' and replace them with the cold logics of utilitarian rationality and technocracy (that are often the products of *conceived* representations of space), are

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<sup>2</sup> In German, *Die Wende* means 'the change,' or 'the turn,' and when used colloquially it refers to the moment that marks the transition from the rule of the socialist Unity Party of Germany to a parliamentary democracy and free market economy in the GDR between 1989 and 1990.

contrasted with the possibility of a more sensual experience of the city. Following Nietzsche, Lefebvre prioritized Eros (erotic knowledge) as part of a broader desire for an “Anti-Logos,” derived from the representational spaces of the city that might “foster the explosion of abstract space and the production of a space that is *other* [author’s emphasis]” (1974, 391-2). In assuming the framework provided by his spatial triad my reading of *Lola Rennt* seeks to articulate how the cinematic eye of the camera might itself generate a specifically erotic mode of seeing and, therefore, of constituting Berlin as virtual city after *Die Wende*. Tykwer’s erotic vision of the city is contrasted with the ‘objective,’ angelic visual economy employed by Wenders in *Der Himmel*.

### ***Der Himmel über Berlin: Modes of Seeing and Unseeing***

Released in 1987, just two years before the fall of the Berlin Wall, *Der Himmel über Berlin* found Wim Wenders returning to Berlin after an American sojourn where he had been frustrated by the rigidity of Hollywood’s studio apparatus. Roger Cook has argued that the filming of *Der Himmel* represented an explicit attempt on the part of Wenders’ to reject the “prefabricated” story lines that had become the dominant mode of narrative composition in mainstream American cinema, opting instead to employ an open approach to filmmaking that constantly sought for “new images and ways of seeing” (“Angels, Fiction and History” 1991, 34). With reference to Lefebvre, we might say that the director sought to refute the Logocentric logic of capital—represented here by the “the intensive negotiations and preparations during the production work [which] predetermined too rigidly what... the film would be and how the director should shoot it” (Cook, “Angels, Fiction and History” 1991, 34)—by looking to create a new visual economy which might open up a space for seeing the city (and thus, producing film) differently. As a result, *Der Himmel* is quite literally shot through with the conviction of a filmmaker seeing his homeland with “open eyes and aroused curiosity” (Cook, “Angels, Fiction and History” 1991, 34), and this is reflected in both the film’s visual style and in its thematic outlook.

The film’s opening sequence is a case in point. A close-up of a human eye opening is superimposed over an aperture in the sky (the eponymous ‘heaven’ over Berlin), followed by a tracking shot where the camera floats freely over the streets of the city, wandering in a manner that belies its physical and political divisions. This mode of approach is significant, in that its depiction of Berlin from above resembles the view of the city produced in maps and city plans. This is Berlin as it is viewed, and understood, by

the urban planners, as a cohesive territory whose borders, boundaries, landmarks, and thoroughfares can be clearly plotted in Euclidian space. In other words, it is the Berlin produced by representations of space, and understood not as a symbolic, virtual space, but rather as a form of reified Lévyian potential, a clearly delineated landscape, where changes are realized through planning, policy and design, rather than by chance or encounter. Eventually, the camera settles into a shot of the figure of Damiel, the film's angel protagonist, shown standing (with angel wings folded behind him) at the top of the damaged Gedächtniskirche [the Protestant Kaiser Wilhelm Memorial Church]. A shot/reverse-shot sequence produces a disembodied mode of vision, which depicts the angel looking down at the street below, where three children return his gaze, indicating that he is visible only to them (the nearby adults ignore him completely). This scene is followed by a cut to the interior of a passenger jet, where, after another tracking shot surveys the seated occupants, another shot/reverse-shot sequence of looks is shared between a young girl and Damiel, implying that the preceding tracking shots were from his perspective. Having established the camera's status as angelic eye, albeit one that is associated with the omnipotent view of the city planner as much as that of supernatural beings, Wenders avoids point of view cutting for the rest of the black and white portion of the film, and proceeds with lengthy takes that move with what seem like total freedom above and throughout Berlin's streets, apartments, and libraries.

But if the angels are able to penetrate Berlin's spatial and temporal divisions they are necessarily denied a place in its history, relegated to the role of mere observers, a fact that Damiel visibly struggles with until his final decision to 'fall' into mortality, a shift signalled by the addition of colour (something which is foreshadowed in shots when the angels are clearly not present). His frustration is made explicit during a shared exchange with another angel, Cassiel, that occurs after a lengthy montage during which the wandering Damiel/camera takes in a series of snippets from the lives of the city's inhabitants. The two angels report the day's observations to each other, sharing privileged insights into the lives of the Berliners who they have encountered during their wanderings. Following his report, Damiel exclaims, "Sometimes I get fed up with this spiritual existence. I don't want to always hover above. I'd rather feel a weight within casting off this boundless freedom tying me to the earth... I'd like to say, 'Now...' and 'now' and 'now.' No longer 'forever' and 'for eternity.'" In fact, what Damiel longs for here is the very power of authorship and agency that might otherwise be implied by the lack of restrictions placed upon his movements throughout the city's time and space (Cook,



“Angels, Fiction and History” 1991, 37). This is why the film’s scenes from the angelic perspective are shot in black and white, while those infrequent moments in which the angels are not clearly present are shown in colour. Likewise, when Daniel makes his decision to ‘fall’ in the latter part of the film he is also shot in colour, and Wenders resumes the use of point-of-view cutting.

This erasure of presence is compounded by the invisibility of the angels to the (adult) Berliners whose lives they observe. Cook argues that limiting the visibility of the angels to the “unthreatened and unthreatening looks” of the children shields the viewing subject (who shares Daniel’s point of view) from the “critical or even malicious looks of mature humans” (“Angels, Fiction and History” 1991, 36), but it also gestures towards the structural hierarchies inherent in the visual regimes which we employ when viewing the city. Cities reveal themselves differently to different people, and in this case the children are able to see the angels precisely because they are not fully socialized, and so have not learned to ‘unsee’ aspects of urban life as the city’s adults have. This dynamic also explains the moments in the film where characters briefly sense the presence of a nearby angel, implying a flicker of recognition in the presence of a now socially invisible other. That the city’s fraught relationship with memory is embodied by Wenders’ angels holds particular significance given that, as one review of *Der Himmel* claimed that “today Berlin... is kept as tarted up as Macy’s Christmas Window, a virtual display case of the virtues of capitalism dead centre in the Eastern Bloc” (Jaehne 1988, 19-20). One of the effects of the pre-*Wende* showcase of West Berlin was to relegate the old value systems of pre-modern Germany to the status of history, memory, and hollowed out (quite literally in the case of the bombed out Gedächtniskirche) relics, whose symbolic and ideological resonance was either to be effaced, or repackaged under the rubric of consumer culture. Thus, the unconscious ‘unseeing’ of the angels by the adults in *Der Himmel* reflects the ways in which Berliners had to adapt to the changes in Berlin’s city-space following the second world war, especially given the necessarily visual aspects of this process, which would include overlooking the persistent reminders of the city’s divisions (travelling on Berlin’s subway system often required passengers to cross the physical boundary of the other city, even if they were still travelling within their own), as well as the presence of other ‘undesirable’ aspects of urban encounter (e.g. poverty, homelessness, and racial difference). Tellingly, this process occurs at the level of mediation, in terms of what can be shown, and in depicting these processes of unseeing, Wenders implicitly gestures to the power relationships inherent within the different modes of seeing urban space. This dynamic also

has a Lefebvrian resonance in that it renders subordinate the affective (*representational* or *lived*) experience of city life to the ‘official’ *representations of space* produced by the state and the city council.

Of course, Wenders himself refuses to fully abandon the past as a potential source of hope for new beginnings, and consequently there are moments in *Der Himmel* which attempt to reconcile some of the disjunctures between images of the city’s past and present. Take for instance the scene where Homer, an elderly man who is unknowingly accompanied by Cassiel, ventures out into a vast empty space where the once lively Potsdamer Platz was formerly located. Homer struggles to recognize his surroundings because the signifiers from the city’s past, such as the Café Josti, and the tobacconists, Loese and Wolf, are absent (Mennel 2004, 45). Pausing in exhaustion near a heavily graffitied section of the Wall he declares, “this can’t be it,” and in doing so, attempts to reject the vision of abandonment and despair that his surroundings might otherwise imply. This moment almost overcomes Homer, causing him to stumble into a discarded nearby armchair where he pauses to survey the empty space that opens out around him in all directions. His anguish can be explained by Barbara Mennel’s description of the barren Potsdamer Platz seen in *Der Himmel* as “an open wound of German history,” which she argues will later be ‘filled’ by the romance between Marion and Damiel (2004, 46). Here, Homer’s utterance operates in a similar way as Damiel’s desire to be inserted into “the stream” of time, in that they both at once oppose the disavowal of the past, no matter how painful (Damiel tells Cassiel of his desire to lie, and to experience a fever), and also call for a reinsertion of history into the setting of Berlin.

The call for new beginnings is given its ultimate embodiment when Damiel finally acts upon this desire, and takes “the plunge,” into life, tying himself to the present, but also opening up the possibility for an active role in shaping the future (Cook, “Angels, Fiction and History” 1991, 45). Evoking the street-level experiences of de Certeau’s streetwalkers, Damiel tells Cassiel that “to watch is not to look down from above, but at eye level.” This statement is incredibly significant, in that it serves as a rejection of the rigorous, institutional worldview of the angels (and of representations of space), and instead privileges the view from the street, of a city as it is *perceived* and *lived* by its inhabitants, rather than as it is *conceived* from above, or from a remove. This mode of seeing is necessarily limited however, a fragmented vision that reflects the ways in which Damiel is himself a wounded remnant, rather than a fully constituted and cohesive subject. As if to emphasize this problematic, Damiel’s speech is given *within* the interstitial

no-man's land of concrete and barbed wire that separates the East from the West; in the very space that seeks to prohibit the street-level gaze from opening up new possibilities. His point made, Daniel is free to emerge into his new life by passing straight through the Wall. One shot shows Cassiel carrying him on the East side, only for the next to find him waking up into a world of colour in the West. In choosing the ultimate symbol of Berlin's time/space divisions as the site of Daniel's springboard into life—albeit one of a necessarily partial and fragmented sort—Wenders' film suggests that the Wall might also have a dual status as a kind of existential gateway. As Ward notes, "Daniel is now wholly 'bordered,' but ultimately far freer within the confines of his human perspectivism" (*Post-Wall Berlin* 2011, 125), thanks to his paradoxical transgression "beyond the defined limits and enclosures of our lives to open new places and spaces, to search for reconciling alternatives, creative syntheses, resolving hybridities" (Soja qtd. in Ward, *Post-Wall Berlin* 2011, 125). A key characteristic of the border is the invitation it poses to those who wish to pass through it, and Daniel, with his "angelic perspective" and his 'wings of desire,' embodies this transgressive relationship.

For all of *Der Himmel's* efforts to grapple with spatial expressions of the symbolic weight of Berlin's past, the film's ending cannot but leave a bitter taste. John Grech argues that Cold War Berlin was governed by two distinctive approaches to the production of time and space (2002, 123). On the one hand, the East attempted to preserve a "sense of empty, silent space" (embodied by the Wall), which it was hoped would "simultaneously capture and buffer against the traces of a competing capitalist West as well as contain and control the minds of the People" (Grech 2002, 123). On the other hand, the logic of the West "sought to quickly eradicate all traces of an authoritarian culture as well as of the gaping wounds of war," replacing them with an image of "a young, vibrant and forward looking city that embodied a feeling of freedom and movement over and above, beyond and through all walls" (Grech 2002, 123). These two spatial logics are expressed in several ways in *Der Himmel*. First, there are the angels, whose duty, in spite of their ability to move freely, is a silent one, relegated to the status of the unnoticed and unheard. The bonds of this silence are most clearly visible when Cassiel reminds Daniel of his duty to "Keep to yourself. Let things happen. Always remain serious... Do no more than look, gather, testify, verify, preserve. Remain spirit. Keep the distance. Keep the word." In short, the angels' timeless existence parallels the East's desire to present its conditions as eternal through the use of silence and suppression. Daniel's desire to break away from the stultifying conditions of his angelic existence finds its expression in his desire for Marion,

who he eventually finds waiting for him on the other side of the Wall. She is of course, young, free, and “other” (she speaks with a French accent), qualities which are further reinforced by her nomadic life as a travelling circus performer. The film’s shift to colour also foregrounds the central role of consumer culture in the West, and several of Daniel’s formative social acts are commercial transactions that serve as expressions of his newfound freedom. He buys coffee with money given to him by a generous stranger, and then wanders the city’s streets, the camera following him closely, until he comes across an antique store, where he sells his angelic armour and purchases a garish red and blue jacket, its colours a striking symbol of his passage from East to West. If anything, these exchanges should be read as an early indicator of the impending occupation of the empty spaces in the East by Western capital, rather than the promise implied in the discursive operation of Cook’s argument that Daniel and Marion’s romance might suture the wounds of history in the divided Berlin.<sup>3</sup>

But what if Berlin’s wounds were never made to close? Is there perhaps some generative potential in the empty spaces whose very existence constitutes a resistance to the notion that any vision of future must be founded upon on a relentless filling in of the traces of the past? In a paper entitled *The Voids of Berlin*, Andreas Huyssen praised Daniel Libeskind’s Jewish Museum for its ability to do just this:

As *fractured* [author’s emphasis] void it signifies history, a broken history without continuity... By leaving this in-between space void, the museum’s architecture forecloses the possibility of reharmonizing German-jewish history along the discredited models of symbiosis or assimilation. But it also rejects the opposite view that sees the Holocaust as the inevitable telos of German history. Jewish life in Germany has been fundamentally altered by the Holocaust, but it has not stopped. The void thus becomes a space that nurtures memory and reflection for Jews and for Germans. Its very presence points to an absence that can never be

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<sup>3</sup> The problematic nature of the film’s resolution also sits uneasily alongside the events of *Der Himmel’s* sequel, *In weiter Ferne, so nah!* [*Faraway, So Close!*] (1993), which stages a much more ambivalent angelic ‘fall’ for Daniel’s friend, Cassiel. In spite of its setting in post-*Wende* Berlin, the film undermines any possibility of harmonic political unity through its depiction of the fractures generated by the deterritorializing effects of capital, and the new set of borders which were subsequently established between Eastern and Western Europe.

overcome, a rupture that cannot be healed, and that certainly cannot be filled with museal stuff. (1997, 79-80)

A similar consideration of *Der Himmel* would regard it as a valuable document for the way that it not only (re)presents the condition of Berlin's liminal spaces as notable for their ability to generate a sense of absence, but also for the ways that it actively regards sites like the empty Potsdamer Platz as reminders for the city's inhabitants of their past, while simultaneously confronting them with the struggles that must be worked through in the present. This is why Homer's insistence that he is not in *his* Potsdamer Platz carries such a great emotional weight; it explicitly contrasts his affective understanding—his *lived* experience—of the square as a “lively place” full of sensorial (and sensual) possibilities (he recalls time spent in a tobacconist's shop) with the ‘official,’ *conceived*, geography that has marked a muddy, debris strewn field with the title ‘Potsdamer Platz.’

In addition to Potsdamer Platz, Marion's circus in Kreuzberg, which occupies an empty space near one of the city's most well known squatted houses, provides an alternative example of the possibilities of the void. For a brief moment, this otherwise vacant lot provides the promise of the carnival, a space beyond the strictures of the outside, where the fantastical and the everyday might converge for a brief moment, and where irrationality and unfettered creativity might flourish. It is no coincidence that Lefebvre himself favoured the festival as a site of difference where the absence of rules and limits, together with the Dionysian excesses of food, drink, play, and ridicule might (temporarily at least) negate the relentless dominance of Logos (Merrifield, “Lefebvre” 1995, 297). In *Der Himmel*, the circus provides Marion, whose youthfulness embodies the hope for a better future for both Daniel, and Berlin itself, with a safe haven from the forces gathered outside. Once the circus departs and Marion sets out alone, the size of the gap that she (and the circus) leaves behind seems overwhelming; its stillness and quiet in stark contrast to the hustle and bustle of the streets that Daniel wanders through before he arrives, a little too late.

What we have in *Der Himmel* then is a presentation of the marked tension that arises within the different ways of seeing the city. On the one hand, the angelic vision promises an unrestricted visual economy for city-cinema, albeit one that maintains a silence. On the other hand, the film also draws attention to the processes of ‘unseeing,’ which serves to elide those things that the bureaucratic spaces of the city deem unsavoury. Both of these acts are transformational in that they operate to re-cast the mediated space

of the city along different and distinct lines. In each case, there is also a staging of an incursion of the *conceived* dimension of Lefebvre's triad upon its *lived* and *perceived* counterparts. Wenders attempts to paper over the traumas which arise from this hurtful dynamic and, although this move is distracting and unsavoury, it need not detract from the possibilities that a careful reading of the film's spaces of absence and potential for carnival might proffer.

### ***Lola Rennt: Urban Erotics and Virtual Geographies***

In the preface to his essay, "The Mass Ornament," Siegfried Kracauer claimed that "the position that an epoch occupies in the historical process can be determined more strikingly from analysis of its inconspicuous surface-level expressions than from that epoch's judgements about itself" (1995, 75). This observation guided much of Kracauer's theoretical analyses of Weimer Berlin in the 1920s and early 1930s, which were driven by a desire to explore the 'surface' of the city, and the 'superficial,' whose manifestations he sought in the ephemera of modern mass culture such as film, photography, billboards, magazines and newspapers. Cinema played a particularly central role in his studies, and in his writings from 1926 on he sought to read film's surface level renderings of the world as being "socially symptomatic" *ipso facto* (Levin, in the introduction to *The Mass Ornament*, 1995, 24). In other words, our access to any sense of an unmediated 'reality' in cinema can only be made possible through an exploration of its internal contradictions. As Kracauer himself put it, "films are the mirror of the prevailing society... The more incorrectly [they] present the surface of things, the more correct they become and the more clearly they mirror the secret mechanism of society" (Kracauer 1995, 291-292). With this insight in mind, it is possible to trace the shift from Wim Wenders' Berlin, and its philosophical obsessions with national history and individual memory, to the post-*Wende* Berlin of billboards, construction sites and fast capital which is both depicted and produced within its city-cinema of the 1990s.

In the same moment that Berlin's politicians and planners rushed to reconfigure the city's landscape under the rubric of the 'New Berlin'—primarily via the extension of capital and development into the newly accessible territory of the East, as well as the former no-mans land of the middle—its filmmakers engaged in a similar "clearing-of-the-rubble project" (Ganeva 2004, 268). The vanguard for this process was the production studio X Filme Creative Pool, founded in 1994 by a group of directors, Wolfgang Becker,

Dani Levy, and Tom Tykwer, together with the producer Stefan Arndt. This group operated in clear distinction from the modernism of their predecessors in the New German Cinema (comprising Wenders, Fassbinder, Herzog and others). Where German modernists were driven by a desire for independence from (or within) the studio system and commercial imperatives, and by the thematic concern of confronting what they saw as the repression of Germany's repressed national history, "X Filme" did not view art film concerns and commercial success as being mutually exclusive. Its members were unequivocal in their desire to entertain and felt that the surest way to do so was through depictions of the Berlin of their own moment, whose spirit was perhaps best reflected with an emphasis on a younger generation of "normal people" and their attempts to negotiate the often indeterminate and fragmentary conditions of their city in the early 1990s (Ganeva 2004, 271-272, and Cormican 2007, 122). Aesthetically, this meant a shift from new German cinema's depictions of the semiotically loaded Berlin of landmarks (the Brandenburg Gate, the absent Potsdamer Platz, Alexanderplatz, the Reichstag, and, of course, the Wall) to a sliding cityscape of marginal spaces, outskirts, and construction sites. The elision of Berlin's major tourist attractions in the cinema of the "X Filme" group was accompanied by a thematic shift that, as Mila Ganeva has argued, simultaneously *dehistoricized* and *depoliticized* urban space, while also introducing an "individualism and autonomy of expression that [was] freed from most political and moral discourses" (2004, 263).

In the following discussion, I attempt to seek out the traces of the dual logics of dehistoricization and depoliticization in what is perhaps the archetypal example of the newfound character of 90s' Berlin cinema, Tom Tykwer's *Lola Rennt*. Tykwer's film is particularly notable for the self-referential way in which it negotiates the management of time and space in the city. In fact, as Ingeborg Majer-O'Sickey has noted, the film's obsession with running out of time can even be read as a reference to the conditions of its own production, which was undertaken on a meagre budget of around three million Deutschmarks (2002, 123). My reading of *Lola Rennt*'s surfaces primarily takes place at the level of the film's cinematic style, which produces a very different visual regime for seeing Berlin than that employed by Wenders in *Der Himmel*. I argue that the film produces an erotic vision of 1990s Berlin's urban space that stands in marked contrast to the angelic sight of Wenders' film. I also draw attention to Tykwer's (re)presentation of Berlin's cityscape as a virtual topography which, although clearly situated within the city's bounds, pays little heed to the features of its physical geography. The virtual Berlin of *Lola Rennt* is

therefore an anti-cartography, a space that eludes straightforward representation in Euclidean terms. This “surface exploration” of its landscape is intended to expose the manner in which the visual structuring of *Lola Rennt*’s virtualized Berlin is also reflected in the city’s self-conscious attempts to produce its own conflictual set of ‘new’ spatial logics, which, following Lefebvre, I characterize as representing the abstract space of capital (Logos), and the erotic geometries of Berlin’s architecture (Anti-Logos). Each of these positions provides a different interpretation of Berlin as a ‘virtual city,’ with the former serving to reify its geospatial co-ordinates via techniques of planning and cartography (which are themselves virtual processes), and the latter offering a way of deterritorialising Berlin’s city-scape, and render it unfamiliar via the circuit of Tykwer’s erotic vision, so that it can “[become] other,” and achieve “heterogenesis” (Lévy 1998, 16). Ultimately, my hope here is that in making these contrasting spatial logics visible via my erotic reading of Tykwer’s camerawork, both *Lola Rennt*, and the virtual landscape of the Berlin that it generates, can be repoliticized, and in a manner that its status as a vital document, or marker, of the urban transformations following German’s reunification might be recognized.

The cinematic space of *Lola Rennt* is divided along three distinct timelines, each of which trace the route taken by the eponymous Lola character as she runs through the streets of Berlin in a desperate attempt to help her boyfriend Manni, who needs to recover 100,000 Deutschmarks which he left on a subway train (only for it to be found and taken by a homeless man), and owes to a local underworld boss. Each of these narrative strands can be treated as a mutually exclusive, simultaneous alternative to the others, and each has a different outcome – in the first Lola is shot and killed in an attempt to rob a bank, in the second Manni is run over by an ambulance just as Lola reaches him (having stolen the money from her father’s bank), and in the third both characters are able to retrieve the money individually, leading to an ambivalent resolution where the couple are reunited, but with lingering questions about ongoing sustainability of their relationship left unanswered.

Connecting these three runs are Lola’s repeated efforts to negotiate the shifting landscape that is the network of Berlin’s streets and alleyways. Any spectator who is familiar with the city’s geography quickly becomes aware over the course of these repeated viewings of the physical impossibility of Lola’s route. Each run is conducted within the space of twenty minutes, but the actual distances between her apartment (located on Albrecht Strasse) and destinations like the Bolle supermarket, Kronprinzenpalast, and the City Hall of the Schöneberg, are too great for them to be achieved in real-time (Majer-



O'Sickey 2002, 126). Needless to say, the film cannot be said to take place in Berlin as an actual place. Instead, its multiple narratives unfurl in a virtual space that resembles a playing level in a video game, an assertion that is reaffirmed by the film's usage of Computer Generated Imagery (CGI), and by the supernatural and super-athletic acts which Lola performs throughout the course of the film (Majer-O'Sickey 2002, 126). The Berlin of *Lola Rennt* is an impossible geography, at least according to rationalizing and reifying terms of Logos, which dictate the form and function of representations of space. Lola's attempts to negotiate the perilous, and often chaotic, terrain of the city in her efforts to save Manni are interspersed with brief freeze-frame vignettes, each giving a modicum of insight into the lives of other characters (or 'players') who she encounters, no matter how briefly. In each case, a possible future is laid out, but these change depending on Lola's actions during the run. In this, the film is reminiscent of the "choose your own adventure" game, where players are presented with a predetermined set of options that lead to different possible game paths for them to follow. In a sense, the film rejects the logic of the linear, syntagmatic narrative here, and instead produces three different paradigmatic alternatives for both Lola, but also the viewer, to choose between. These moments serve to both isolate Lola and the other characters as individual actors, while simultaneously revealing the common ways in which they are all engaged (albeit, unconsciously) in an effort to negotiate the remaining boundaries and divisions which continued to impact upon the everyday life of Berliners in the 1990s. Furthermore, as Karin Hamm-Ehsani has observed, in following Lola on her run through Berlin's contested, or formerly *verboten* ["forbidden"] sites, the camera (and therefore the spectator) also become entangled in this process (2004, 53).

This is a strange Berlin then, in that it is at once virtualized (in the Lévyian sense), fluid, and un-bounded, but also rigid, in that its narrative logic gestures to a rigid set of predetermined outcomes. In navigating them, Lola resembles nothing more than a user negotiating a hypertext, with each scene/decision generating a new narrative pathway for her to traverse. For Lévy, the hypertext represents a "Copernican revolution," producing "a mobile and kaleidoscopic text, which presents its various facets, turns, folds and unfolds itself before the reader (1998, 57-58). *Lola Rennt's* hypertextual structure poses a question of agency to both the film's protagonist, but also to the viewer, who is left to ponder which of the three narrative strands to accept. However, as I hope to demonstrate, the degree to which Lola has agency within this framework is not necessarily clear-cut.

In one scene, we follow Lola closely as she passes over the Oberbaum bridge, a well-known former boundary site between the West and East halves of the city (Hamm-Ehsani 2004, 53), while another sequence shows her running down the Friedrichstraße (the former location of Checkpoint Charlie). For all Tykwer's efforts to distinguish himself from the cinema of his predecessor Wenders, the implications of the freedom of movement (albeit, within a syntagmatic framework) that are implied by the aforementioned sequences cannot help but suggest that the two men have a common view when it comes to a belief in cinema's ability to open up Berlin's closed, or silent, spaces. It is even tempting to compare, as Hamm-Ehsani does, *Lola Rennt* to another well known Berlin film at this juncture: Walter Ruttmann's modernist city symphony, *Berlin: Die Sinfonie der Großstadt*:

Both films emphatically express – at opposite ends of the twentieth century – those changes in the human “perceptive apparatus” that Walter Benjamin, in “The Work of Art in the Age of Mechanical Reproduction,” regarded as indicators as well as initiators of socio-historical change. Seen in this context, *Lola rennt*... continues Ruttmann's early twentieth-century avant garde exploration of the relationship between urban and cinematic space. (2004, 50-51)

While I agree that both *Der Himmel* (as Cormican has suggested) and *Berlin: Die Sinfonie* can be regarded as subtexts within *Lola Rennt*, there is more that can be said here. Specifically, the most vital connection between each of these films is an intense visual engagement with the city space of Berlin as it appeared before each director in his particular historical moment. That all three men were concerned with the question of how best to ‘view’ Berlin (and are able to comprehend the inherently *political* dimensions of this question), is a necessary by-product of the desire to film city-cinema in general, in that this practice requires a certain minimum level of access to, and freedom of movement within, the city's disparate spaces. This dynamic is made conspicuous in all three films, and not always tastefully, as when Ruttmann's gaze lingers on the unaccompanied female streetwalkers of Weimar Berlin, marking them out from the ‘good’ women who appear on the street only as the faithful companions of their bourgeoisie husbands. Nor should any of these three films be regarded as exceptional in this respect; one might, for instance, draw parallels between the marginal characters, vacant lots and variegated construction sites depicted in Andreas Kleinert's 1999 film, *Wege in die Nacht* [*Paths in the Night*], and their relationship

to either the ruin and debris of post-1945 Berlin, or make assertions about comparable visual regimes and desolate landscapes that this film shares with Wenders' Berlin of *Der Himmel*. There are plenty of intertextual connections that might be traced here, but it is crucial to note that all of the aforementioned films constitute part of a wider process of accumulation and accretion in (and of) city-cinema—which is itself but one aspect of Lindner's 'cultural texture' of the city—that helps to provide meaning and structure to Berlin as a visual landscape, as a virtual geography, as a mediated city, as a means of desire, and as a mode of seeing. Where Lévy claimed that writing was a virtualization of memory, city-cinema can therefore be understood as a virtualization of the act of seeing the city. It represents a breaking down, a fragmentation of the material landscape of urban space, and the lives of the people that constitute it. Filming the city is an *act* of deterritorialization, in that it renders it virtual, imaginary, and symbolic. However, city-cinema can also partake in a countervailing act of reterritorialization, in that it can also reify urban space by tracing, mapping, or memorializing it, as in the opening sequence of *Der Himmel*. The tension between these two tendencies is what makes city-cinema such a productive practice, and the mediated city such a fraught terrain.

It is worth recalling the work of de Certeau at this juncture, specifically his articulation of the significant difference between a panoptic experience of the city as it is seen from above (embodied by Cassiel and Damiel at the beginning of *Der Himmel*), and the viewpoint of its inhabitants at the level of the street (Damiel after his fall), who find themselves entangled in what he calls the 'threshold' of visibility (1984, 91-93). With these same passages in mind, Wendy Everret argues that the "fractured narrative" of *Lola Rennt* offers "no possibility of overview or wider perspective; the characters and spectators alike are limited to a contingent, partial and essentially imperfect view or understanding" (2005, 168). Similarly, figures such as Lola and Damiel exemplify the role of city dwellers in constituting, or (in the Lévyian sense) actualizing the city through the very act of negotiating its myriad of spaces. Desire plays a central part in this process, and this is something that Majer-O'Sickey gestures to when she proposes the following question: "What does Lola really want?" Majer-O'Sickey frames this question from a feminist perspective, arguing that it draws attention to her place in the film's representation of gender norms (2002, 127). The question of Lola as subject (or object) of desire can also be expressed in the context of her movement through the spaces of Berlin. Tykwer's tight camera work, coupled with the driving beat of the film's techno soundtrack could be read as a straightforward eroticization of her feminine body in motion. However, Cormican's

assertion that the common reading of Lola's character treats her mimetically,<sup>4</sup> which is to say that she stands in for all of the disparate Berliners we encounter during the course of the film, has significant implications here (2007, 129-130). In fact, this reading renders Lola invisible because if she represents everyone, she is in a sense also no one. This sleight-of-hand allows us to shift our desiring gaze from Lola's (feminine) body in motion through the mimetic subject and on to the 'body' of the city itself. Such a move, from the collective (mimetic) human body to the collective urban body echoes Alan Blum's provocation that "the 'we' of the city is thus not a thing but an object of desire that comes to view and recedes in conflicts at a variety of points in everyday life" (2003, 29). What Blum describes here are the processes by which 'we' are called to speak of the city and, in doing so, constitute it as a mediated space. What the city-cinema relation gestures to is that one of the primary modes of 'speaking' a city is to participate in the active role of 'seeing' it. When *Lola Rennt* is read erotically, Tykwer's camera transforms virtual Berlin into a cinematic urban body in motion. This in turn generates a mode of understanding the space of '90s Berlin that is resolutely *other* to the dominant, Logocentric 'New Berlin' of fast capitalism, sloganeering, and construction sites.

In watching any of Lola's three runs through Berlin, the spectator is exposed to the varied possibilities of the city's architecture. The clean lines and smooth curves of 1920s modernist flats recede into a landscape of exposed pipes and scaffolding, before another cut reveals the sadomasochistic façade of some neoclassical monstrosity. Gaps in the long rows of apartments offer fleeting glimpses down vaginal alleyways, and when the camera's motion eases slightly as it rounds a corner the phallic shape of a streetlight is given momentary prominence. The eroticization of the city is generated by Tykwer's fast-paced camera work, which distinguishes his Berlin from that of Wenders,' whose use of 'angelic perspective,' and extended long takes induce what Roger Cook has described as a sense of "objective distance" that only begins to unravel after Damiel's fall ("Angels, Fiction and History" 1991, 38). The penetrative gestures of Tykwer's camera necessarily eliminate any possibility of this kind of objective or contemplative experience of the city. The tension between the two visual regimes of these films reflects the contrasts between two distinctly opposed modes of understanding the city in spatial terms. Where the angelic vision is a clear analogue for the bordered and institutionalized city produced by representations of space, Tykwer's erotic camera embodies the means of desire generated

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<sup>4</sup> Note that Cormican herself does not necessarily subscribe to this view, suggesting that Lola could also be treated in more abstract terms, as "a metaphor for cinema" (2007, 130).

by the city's representational spaces. Underscored by the insistent pulsations of its techno-soundtrack, Tykwer's moving camera depicts the city in a kind of frenzied whorl of desire that seems to build and build until it coils back on itself, generating a feedback loop, or snowball effect. The further Lola plunges into the city's matrix of side-streets, bridges and alleyways, the more they appear to open up, inviting the possibility of deeper penetration. Eventually, a fragmentation occurs, with Berlin's landscape splintering into a paradigmatic network of erotic geometries that neatly parallel the rapidity and relentlessness of the construction work that followed the extension of Western capital into East Berlin and the implied the promise of an aspirational (virtual) reality for the city under the banner of the 'New Berlin.' Tellingly, Ward argues that the city's rebirth as the 'New Berlin' was characterized by a shift towards reflexive "image-events" which conspicuously attempted to transform Berlin's collective identity (*Post-Wall Berlin* 2011, 330). At the heart of the process of Berlin's self-staging was the city's Mitte ["Middle"] district, which Ward understands as "a work of art on display as reality and vice versa" (*Post-Wall Berlin* 2011, 331). To illustrate this point, Ward refers to an anecdote provided by Slavoj Žižek, who she says:

...once mistook street work for an artwork when he beheld the various brightly colored utilities pipes exposed on and above Berlin streets and thought they were 'another one of those postmodern art events, the aim of which was... to make visible the belly, the hidden inner machinery of the city...' conversely, Žižek recounts how, during a crane-show staged at Potsdamer Platz, some passers-by misunderstood the spectacle as cranes actually at work. (ibid)

The lurid pink and orange utility pipes, which so bemused Žižek, are frequently made visible during the course of *Lola Rennt*, and in one scene are so prominent that they span the width of an entire street like a highway flyover. If these pipes have any purpose beyond their base utility, it can perhaps be located in their status as signifiers of urban change, which implies a reverse indexicality for the 'New Berlin,' marking out sections of city space with the impending promise of transformation. In a sense, they invert Lévy's virtual equation; they are an actualization that implies an imminent possible (the finished building), but also function as traces of the much more tenuous virtual reality that resides in the 'New Berlin's' promise of change, investment, growth and immanent wealth. Their playful, almost childish, colour schemes only serve to exacerbate this effect, particularly

when they are regarded in contrast to the stereotype of former East Berlin's monochromatic colour schemes, and by extension, its limited cultural opportunities.

The triple repetition that takes place across the film's three runs extenuates the erotic potential of Berlin as a virtual landscape. At the end of each run, Lola and Manni are caught sharing a series of red-lit conversations in a bed, where they discuss the troubles in their relationship and philosophize idly about human nature. Both characters appear to be undressed, and in state of post-coitus that suggests an act of lovemaking has just taken place. The implication is that these discussions precede the film's narrative and serve as framing devices for it, but given the placement of these sequences it is also possible to connect them more explicitly with the actions that precede them, generating a double logic in which Tykwer's cameras can also be said to have recorded a kind of love act, entangling Manni and Lola, but also the camera, the spectator, and of course, the city of Berlin as well.

The erotic effects Tykwer's use of tripartite narrative structure are even more strongly felt in tension that is at once created and released during the numerous car crashes (and near misses) that occur throughout the film. In particular, there is a sequence towards the end of Lola's first run where she finds herself in the slipstream of an ambulance, which narrowly avoids a collision with a lengthy pane of glass being carried across an open street by a group of construction workers. In her second run, the ambulance's driver is distracted by Lola's attempts to request for a lift, and as a result his vehicle bursts through the glass, spraying minute shards across the street in what is effectively a slow motion ejaculation. Of course, the thematic overtones that the rupture of this transparent barrier implies should not be ignored, but its erotic dimension is also clearly palpable. The lengthy pane of glass is an obvious metonym for the Wall and, in watching it shatter, Tykwer's camera not only proposes to break down the old barriers, but in doing so also insists on a new fetishization of the city in motion, captured as it is in the midst of a process of intensive transformation. What is so striking about *Lola Rennt* as a moment of post-*Wende* exuberance is its peculiar reliance upon the simultaneous return of an object of disavowal (the Wall) which itself stands in for the memory of a divided Berlin. It is tempting to interpret the scene in which the ambulance passes through the glass using Hegelian dialectics, with the freedom of passage (embodied by Lola's run) proposed by the 'New Berlin' being briefly halted in a moment of anti-thesis—the return of the memory of the Wall, serving as a reminder of past traumas, while also suggesting the imposition of a new set of boundaries and limits—before a synthesis is achieved when

the van passes through the glass, shattering it.<sup>5</sup> The implication here being that post-*Wende*, Berliners not only have the freedom to confront the return of the traumatic memory of division, but in doing so they initiate the healing process. And yet, this reading elides the significance of the shards of glass that the van leaves in its wake. Together, they persist as jagged reminders of the messiness of that excessive trauma, posing a challenge to those who would prefer to simply sweep away undesirable memories of the past. In fact, the persistence of *Lola Rennt* as filmic text bears witness to its own status as a lingering reminder that the rapid transformation of space in the 'New Berlin' was not, and could never have been, absolute. In this sense, the film can be read as occupying a position at the interstices of space as it is lived and conceived, in that it is at once a display of an attempted 'becoming' of Berlin as new major European city (and cultural capital), while simultaneously providing an alternative (erotic) view of how such a space might be understood.

### **Re-Historicizing and Re-Politicizing the 'New Berlin'**

Having expounded on the effects of *Lola Rennt*'s eroticization of Berlin's landscape I would now like to return to Ganeva's dual theses that Tom Tykwer's film serves to dehistoricize and depoliticize Berlin's urban space. This argument is based on two basic assertions: the first is that Tykwer's film avoids the city's more well known landmarks, which amounts to a kind of evasion of the visual traces of the city's history, an effect which is further exacerbated by the film's video game ontology; the second emphasizes the film's avoidance of any political context or narrative. These claims are commensurate with what Mark Fisher has termed 'capitalist realism,' an ontological condition under which capitalism at once "subsumes and consumes all of previous history" while simultaneously denying the possibility of any reference to a horizon that extends beyond its own material conditions (2009, 4). Fisher's work, together with that of Fredric Jameson (who the former cites as a major influence), can also be used make sense of Cormican and Hamm-Ehsani's theses that *Lola Rennt* is a pastiche of Wenders (the former) and Ruttmann (the latter). In his well known theses on postmodernism, Jameson has argued that pastiche is one of the dominant modes of expression under late capitalism and that the processes of recycling its older cultural products is another way of making its conditions seem eternal (1991, 25). Of course, as both Fisher and Jameson have pointed

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<sup>5</sup> Žižek claims that the process of synthesis is resolved through 'Hegelian shitting' (1989, xii-xv).

out, the very act of obscuring history or politics is an inherently political gesture. However, although *Lola Rennt*'s Berlin is clearly a virtual space, we do not have to understand it as necessarily existing outside of history. On the contrary, the film's entire visual economy is engaged in recording the historical process of *change* from one paradigm (the Cold War) to another, the 'New Berlin,' which, following Fisher, we might characterize as a distinctively Germanic form of capitalist realism. Likewise, the film's non-engagement with the political fall-out post-*Wende* only serves to underscore the lack of economic and political agency afforded to the younger characters within the 'New Berlin.' If anything, had *Lola Rennt* employed a more explicitly anti-capitalist narrative it might, paradoxically, have engendered an even stronger sense of capitalist-realism. Writing on Pixar's *Wall-E*, Fisher argues that "the film performs our anti-capitalism for us, allowing us to continue to consume with impunity. The role of capitalist ideology is not to make an explicit case for something in the way that propaganda does, but to conceal the fact that the operations of capital do not depend on any sort of subjectively assumed belief" (2009, 12-13). Where *Lola Rennt* is able to avoid this anamorphic state of affairs is at the level of the context within which its narrative plays out. The film's plot only makes sense because we understand that Manni has turned to petty crime, presumably as a result of unfavourable work opportunities, while Lola is herself unemployed, and it is against this background that Tykwer's camera is able to obliquely draw attention to the challenging material conditions faced by young Berliners. Hamm-Ehsani neatly summarizes this condition when she claims that:

The film suggests that happiness and personal fulfilment outside the dominating money economy is hardly possible anymore, with even Lola's and Manni's relationship... bearing witness, as their bedroom conversation indicates, to the ultimate loneliness of the individual. By showing their future open-ended in the context of greed, crime, violence, and unrelenting poverty, the film reminds us of the dark side of the recent transition to a free Western political order. (2004, 63)

Hamm-Ehsani is right to be sceptical about the film's ostensibly happy ending, but the overwhelming backdrop of struggle, poverty and violence that she describes here should not be treated as the unfortunate consequence of the 'New Berlin,' but rather recognized as the inevitable consequence of the colonization of the city by the relentless deterritorializing and reterritorializing forces of late-capital. Even more precisely, I would



argue that *Lola Rennt* is engaged in a depiction of the inherent tensions between representations of space (the products of bureaucracy & technocracy) and the *lived* (representational) experience of the city, embodied (and enlivened) by the erotic vision of Tykwer's camerawork. The elision of the effects of this struggle, the total symbolic dominance of capitalism as 'the only game in town' is what capitalist realism is all about. Nothing embodies the normalizing of this dynamic better than the figure of the bedraggled homeless man (whose theft of Manni's bag of drug money is the act that drives the film's narrative), whose existence as part of everyday life in Berlin is utterly naturalized by his ability to disappear, seemingly untraceable, into its virtual geography. What an erotic reading of *Lola Rennt* offers us is the potential to understand the film's sliding land/time-scapes in a way that does more than simply evade the clutching grasp of history, which therefore testifies to the ongoing efficacy of Berlin as a virtual city. Far from producing the mediated Berlin as a timeless capitalist free-zone, Tykwer's erotic camera—and its prevailing gaze upon the moving body of the city—demand that the city's changing ontological status be *marked*. This is why it is notable that Tykwer's camera brings the homeless man back into the film to play a role in its denouement, with Manni confronting him at gunpoint. His filmic return parallels that of the Wall, a telling reminder that the less desirable signs of Berlin's recent transformation should not be so easily dismissed.

Lefebvre argues that a prevailing ideology cannot persist without a space that might at once describe and cultivate it. By way of example he links the religious ideology of Judeo-Christianity with the "church, confessional, altar, sanctuary, [and] tabernacle," claiming that the establishment of these spaces "guarantee that it endures" (1974, 44). A similar relationship can be traced between the seemingly vibrant, variegated, spaces of capital depicted (and remembered), first in *Der Himmel*, and then shown expanding across the city in *Lola Rennt*—it is telling that Tykwer sets his major action set-pieces in a supermarket, a casino and a bank. Likewise, the German relationship with the memory of the spaces of its past, and their accompanying ideologies and everyday practices, is worked through in *Der Himmel's* depictions of Potsdamer Platz, the Wall, and the Gedächtniskirche. The shift of visual emphasis from these landmarks to construction sites in *Lola Rennt* foregrounds a concurrent set of changes in the logic of spatial production, and in the city's visual economies. The engine behind these changes is to be found in the desire of councillors, planners and bureaucrats to locate a new set of spatial meanings that coalesce under the banner of the 'New Berlin.' *Lola Rennt* draws attention to some of their

effects, but an investigation into the representations of space made at the level of the city's urban planning is required to fully appreciate them. The next chapter of this thesis takes up this task, and does so via an exploration of the 'New Berlin' as it is *conceived*, as well as of the interrelationships between its representations of space and their recirculation in the city's self-staging exhibitions, and place-marketing.

## Chapter Three

### Of Angels and Architects: Paradoxes of Conception and Production in the ‘New Berlin’

In the previous chapter I rejected Mila Ganeva's thesis that *Lola Rennt* dehistoricizes and depoliticizes 1990s Berlin. Instead, I proposed that the film actually draws attention to a change in the city's space, a notion that is encapsulated in the term *Die Wende*. Tykwer's *Lola Rennt* is significant because it functions as a document of a particular 'moment' in the history of Berlin, capturing the city's reification by the objective expression of representations of space that make up its virtual geography in the film: a collection of building sites, road-works, banks, supermarkets and casinos. Implicit in Ganeva's thesis is the notion that *Lola Rennt* functions as a piece of capitalist realism, presenting the 'New Berlin's' conditions as Francis Fukuyama's 'end of history,' a teleological terminus which in turn serves to obscure its platial ontology, just as the fetishization of the commodity serves to hide the traces of the processes and relations of its production. What this points to is the tension between the reification of Berlin the 'virtual city,' produced in its representations of space, with cinema's virtualization of the city as representational, or mediated space. The source of Ganeva's confusion is her conflating of the project of the 'New Berlin' with the visual economy of the film *Lola Rennt* and, in doing so, she overlooks the possibility of its representational space to present Berlin's citizens with any alternative. What makes *Lola Rennt*, and perhaps to an even greater extent *Berlin Babylon*, the film which is my object of analysis in this chapter, such vital expressions and constituents of the 'cultural texture' of Berlin is that while the former draws attention to the platial congealing of space in its depiction of the city's virtual geography undergoing an act of transformation, the latter is able to go further, and emphasizes how the symbolic fetishization of place in representations of space serves to obscure the ontological status of space as a social process.

So what is the 'New Berlin'? Is it a place? A spatial process? Or mere technocratic dictum? For Janet Ward, this term refers first and foremost to a motto, '*Das Neue Berlin*,' which began as a sign but quickly became a "product in and of itself" whose character was expressed through a series of boosterist projects that at once extended beyond their own virtuality and, in doing so, sought to render themselves into being (*Post-Wall Berlin* 2011, 331). Here, the 'New Berlin' operates as a self-staging phenomenon, an auto-

transformative engine rapidly shifting between conflicting modalities of past and present. In short, the ‘New Berlin’ is itself a type of virtual city. The intense teleological desire for becoming in the ‘New Berlin’ is clearly foregrounded in Hubertus Siegert’s *Berlin Babylon*, a remarkable film that presents an image of 1990s Berlin as a city undergoing a dramatic and extended process of discursive, representational, and material reconstruction. Part documentary, part city-symphony, *Berlin Babylon*’s narrative revolves around its interlude, a voice-over rendition (or repetition) of Walter Benjamin’s ‘Angel of History’:

*His countenance faces the past  
Where we can see a chain of events he sees a single catastrophe.  
Rubble piles up relentlessly.  
Layers of it are hurled at his feet.  
He longs to linger,  
To wake the dead and reconstruct the rubble.  
But a storm has brewed in paradise.  
The tempest has unfurled its wings  
It is so strong he cannot lower them again.  
The storm drives him pell-mell into the future.  
He turns his back on what’s to come.  
Meanwhile the pile of rubble grows sky high before his eyes.  
The phenomenon that we call progress is this mighty storm.*

William J.V. Neill (2005, 339) argues that the evocation of Benjamin’s angel, looking backwards into the accretions of rubble and decay from the past, while being blown relentlessly into the future, neatly parallels *Berlin Babylon*’s depiction of the rebuilding of Berlin: a city at once deeply aware of the destruction and death which litter its memories of the twentieth century, but also desperate to seize the opportunity to escape that same history and begin from the beginning again. This drive can also be identified in the discursive emphasis on the desire to ‘become’ in the ‘New Berlin,’ characterized by Ward as a “wished-for transformation of collective identity on behalf of all Germans” (*Post-Wall Berlin* 2011, 330). Here, the city finds itself caught within an existential dilemma: how to think the ‘new’ in a space so intensely haunted by the persistent memory of the old?

This chapter is an examination of the paradoxes inherent in the conception, and subsequent construction, of the ‘New Berlin’ as virtual city that are depicted in *Berlin*

*Babylon*. Siegert's film is compared with its predecessor, Walter Ruttmann's *Berlin: Die Sinfonie der Großstadt* in order to draw attention to the ways in which, following Lefebvre, the (social) space of the city is produced, and subsequently reified as place. Drawing on Lefebvre's spatial triad, it argues that while the 'New Berlin' exists as a space—which is to say that it functions as a distinctive process—its identity as place is much more uncertain. As a space, it is dominated by the intersection of the discourses of planning and theory that coalesced under the emblem of 'critical reconstruction': the guiding principle for urban planning post-*Wende*. The 'New Berlin's' lack of a clear sense of place is expressed with reference to the work of Marc Augé, which makes a theoretical distinction between what he terms places and 'non-places.' Where *Berlin: Die Sinfonie* draws attention to the parallel processes of conspicuous production and consumption, it is argued that in *Berlin Babylon* it is the city itself that is being conspicuously produced, and—under the slogan 'New Berlin'—advertised and consumed. As a result, I claim that the 'New Berlin' exemplifies what Pierre Lévy refers to as the 'reification' and 'institutionalization' of virtual entities by their possible counterparts. As virtual city, the 'New Berlin's' ascribed promise to ameliorate past wounds, and bring about economic prosperity, is never properly realized. The city remains chained to the memories of its past, extending a strange circuit into the city's social space, in which Berlin remains caught in a process of becoming whose arrival is indefinitely postponed. In this, the planning of the 'New Berlin' is framed as a form of Lévyian potential, in that it promises a set outcome—economic prosperity achieved via urban renewal—albeit one that is never properly realized.

Instead, the 'New Berlin' functions as a virtual entity in the most negative sense of the term. Far from representing a modernist vision for reunified Berlin, the 'New Berlin' represents a dogmatic return to the city's nineteenth century street plan and Prussian architectural style, combined with a concurrent obfuscation, and even erasure, of the undesirable memories of the GDR. The desire to escape one undesirable past thus leads to a search for, and an attempted return to, the 'safe' memories of another. In this sense, the 'New Berlin' functions as a specifically Germanic form of capitalist realism, concealing the horizon of any possible future beyond its own distinctive conception of the city's imaginary, as well as obscuring the ongoing persistence of the possible utopias that still reside in the remembrance of its historical antecedents in the GDR and in Weimar Berlin.

## Paradoxes of the New

The immediate post-*Wende* period was characterized by a seemingly endless succession of animated debates about the possible shape and character of the reunified Berlin and the newly accessible city centre in particular. Although these debates necessarily entailed the involvement of politicians, bureaucrats, developers and urban planners, there was a feeling that the sovereignty of ‘the people’ also needed to be acknowledged, if not accommodated (Weszkalnys 2010, 33). As Giza Weszkalnys notes, the efforts towards a public inclusivity for the shaping of the city’s future have taken numerous forms, such as the Stadtforum [“City Forum”] which began in 1991 and sought to initiate open discussions on issues of urban development (ibid). Then there were the numerous planning and design competitions for sites, monuments and new developments, which have at times elicited public participation, as well as a plethora of planning exhibitions, bus tours, and government open days (ibid). But perhaps the most significant of the efforts to engage Berlin’s citizens was the marketing campaign that sought to recast the city’s *Baustellen* [“building sites”] as *Schaustellen* [“show sites”], which treated unfinished construction efforts as *the* major cultural events in the city during the 1990s (ibid). The city became a stage, where the continual performance of construction and reconstruction (or birth and rebirth) could be experienced by interested residents and eager tourists alike.

Following *Die Wende*, it was assumed that the city would experience a surge in population, with ‘expert’ predictions anticipating the arrival of up to 1.4 million new citizens (Häußermann and Siebel; Lampugnani and Mönninger cited in Molnar 2010, 281). Restored to its former status as German capital, a booming economy driven by the demand for new infrastructure seemed inevitable and, as a result, it was expected that Berlin would swiftly complete a return to prominence as a major European centre that could rival the likes of Paris and London (Molnar 2010, 281-282). For Karen Till, the work of city officials, planners, marketers and developers also played a central role in fuelling these expectations through the staging of “virtual reality shows, live displays at construction sites, and exhibitions of the hundreds of architectural models and sketches submitted for different renovation and construction competitions” (2005, 31). These opportunities for construction site spectatorship and civic engagement also played a role

in structuring the perceptual relationship of Berlin's citizens to its new (or renewed) urban spaces (Weszkalnys 2010, 34).<sup>6</sup>

However, as Weszkalnys and Ward both note, these representational reimaginations were not always as successful or participatory as they may have first appeared. In particular, critics have been vocal about the exclusion of East Germans, women and ethnic minorities from planning discussions and precepts (Weszkalnys 2010, 35). These tensions are frequently evident in *Berlin Babylon*, which begins with Axel Schultes, architect of Berlin's new Federal Chancellery building, describing the country as being in "a state of anxiety." Driving much of this anxiety are deliberations over the vision laid out in the inner-city planning and design concept known as *Planwerk Innenstadt*, which was established in 1999 and codified a set of standards that inner-city Berlin's boroughs were expected to conform to (Neill 2005, 340). The main proponent of the *Planwerk* in *Berlin Babylon* is Hans Stimman, who was then Berlin's building director and wielded an enormous amount of influence over the eventual shape of the inner-city. In the film, Stimman outlines the main objectives of the *Planwerk*: a "[restoration of] the old ground plan," "an upgrading of East German modernism," and a merging of existing buildings "with historical sites." As Brian Ladd notes, critical reconstruction "reaches back beyond world wars, dictatorships, and modern urban experiments and finds a Berlin identity in the decades before 1914" (1997, 109). This emphasis on pre-1914 planning and design, which included a maximum height limit (five stories for old buildings, seven for new ones) and a narrowing of inner-city roads, lead to an almost total exclusion of the legacy of Berlin's modernist architectural tradition.

This elision was perhaps most keenly felt in the former GDR, which is made acutely evident during a scene in *Berlin Babylon* where Stimman is shown arguing with a leftist politician, Thomas Flierl, who outlines his desire for reconstruction efforts in Berlin to build on the modernist ideals of the past. Ironically, Stimman claims that "any attempt to add a chapter to the history of East Germany is out of step with the times" and accuses the Councillor of "[fretting] over East German modernism more than quality of living." Given that Stimman was advocating a return to even older traditions it seems strange that he attempted to dismiss the modernism of East Berlin on the grounds of it being out of

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<sup>6</sup> Perhaps the most significant of these projects was the Potsdamer Platz Info-Box, which ran from 1995-2001, and sought to provide a pedagogic link between the ongoing processes of planning, design, and construction with the vision of the imminent 'New Berlin.' In a sense, the Info-Box operated as a placeholder, providing a virtual window into the city's potential future, while simultaneously attempting to fill the empty space of the bombed out vista that was Potsdamer Platz before *Die Wende*, and whose absence Homer mourned with such poignancy in *Der Himmel*.

date. However, as Brian Ladd has shown, conventional wisdom in Berlin's architectural circles of the time viewed the Bauhaus school of the 1920s as the point of genesis for the inferior (usually aesthetically so) quality of the buildings that followed, particularly in the 1960s (1997, 109-110). Even more crucially, planners and architects in the 'New Berlin' were able to articulate a discursive link between 1920s modernism and subsequent practices that ignored the city's inherited urban fabric (ibid).<sup>7</sup> As a result, the perceived failures of the wildly divergent visions of both post-war regimes were dismissed along with those of the Third Reich period, during which Hitler's chief architect, Albert Speer, sought to curb the excesses of the modernity of the Weimar period and transform Berlin into a grandiose Germania, replete with wide boulevards and massive, hyper-classicist buildings inspired by the Rome of the Caesars. Together, these three 'Berlins' combined to form the problem of Berlin as "destroyed city," whose solution necessitated a restoration of the "links to the city a century ago" (Ladd 1997, 110). The motivation behind this shift was to return Berlin to its rightful place as major European centre, and as capital of the nation, and so, as Virag Molnar argues, the ideal of Berlin as 'European City' quickly achieved hegemonic status as the paradigmatic assumption underpinning the project of critical reconstruction (2010, 302).

Perhaps the most fiercely debated example of the tensions between the urge to restore the city's pre-modern landscape and the persistence of the memories of the twentieth century was held over the site of the GDR's Palast der Republik ["Palace of the Republic"]. Built on the bombed out ruins of the Prussian Stadtschloß ["City Palace"], Der Palast had been the seat of the GDR government, but was also a multi-functional cultural centre and held a prominent place in the memories of many Ossies ["East Berliners"]. Constructed between 1973 and 1976, it was a large modernist rectangle, clad in reflective glass and white marble. Lacking the bombastic monumentalism of much Stalinist architecture, der Palast was primarily a public place, and a decentralized and unhierarchical one at that (Ladd 1997, 62). Combining the parliamentary auditorium with an assembly hall, concert venues, restaurants, cafés and a bowling alley, it was an unusual but generally well liked building (Ladd 1997, 59). However, just prior to reunification an official inspection declared that der Palast was contaminated with asbestos, and the government promptly ordered its closure. In 1993 it was decided that the building would

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<sup>7</sup> Incidentally, Jameson's attempt to interrogate the assumption that high modernism was responsible for destroying the fabric of the traditional city was perhaps the starting point from which he began to formulate his seminal conception of postmodernism in *Postmodernism, or, The Cultural Logic of Late Capitalism* (see Jameson 1991, 2).



be demolished—although the demolition itself was not completed until 2008—with plans made for its eventual replacement by a reconstructed Stadtschloß. These plans were met with fierce resistance, particularly from Ossies who felt an attachment to der Palast and viewed the campaign to rebuild the old Prussian palace as an implicit denial of their twentieth-century history and experiences (Ladd 1997, 62).

*Berlin Babylon* visits der Palast prior to its demolition, where an unnamed architect derides it as an “eyesore” whose “third class architecture” is not worth maintaining for purely “sentimental reasons.” These statements demonstrate what Ladd has described as the hopeless intertwining of a variety of issues around memory in 1990s Berlin, including architectural aesthetics, identity, memorialization, and historical justice (1997, 60). Even the seemingly incontrovertible fact of der Palast’s contamination by asbestos was disputed by the supporters of the building, who pointed out that its construction followed procedures which had been imported from the West, and noted that the purported levels of contamination were no worse than those detected in West Berlin’s convention centre, which remained in use (Ladd 1997, 63). Complicating this series of events further was the question of what function the rebuilt Stadtschloß would actually perform. At present, it seems likely that only three of the four Prussian-era façades of the building will be rebuilt, while the interior will be a postmodern space whose actual use continues to be debated.<sup>8</sup> The indeterminate nature of the building’s actual purpose beyond its symbolism points to the increasing tendency of architecture’s role as icon, where the modernist dictum of form being determined by function is reversed. Jean Baudrillard once noted advertising’s tendency to absorb all original cultural forms, which he argued was predicated on its own lack of depth (1994, 87). Baudrillard claimed that this was “the lowest form of energy of the sign” (ibid), and the ‘new’ Stadtschloß, which comes into being as a symbolic gesture intent on exhausting the meaning attached to der Palast, exemplifies this tendency. In postmodern architecture, all that matters is a building’s capacity to signify:

...the Modernism of the icon... a Modernism without the politics, without the utopianism, or without any conception of the polis; a Modernism that conceals rather than reveals its functions; Modernism as a shell. (Hatherly 2010, xxiv)

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<sup>8</sup> The current plan is for it to house a pedagogical cultural-historical ‘Humboldtforum,’ with construction scheduled to begin in 2014, but this eventuality is far from certain.

Owen Hatherley coined the term ‘pseudomodernism’ to describe the above tendencies in his critique of the architecture of Britain’s New Labour, and identifies its vanguard as the former ‘deconstructionist’ architects such as Frank Gehry, Zaha Hadid, Rem Koolhaas, and Daniel Libeskind. The latter two played prominent roles in the architecture of the ‘New Berlin,’ with an emphasis on including ‘voids’ in their designs, with Libeskind’s Jewish Museum perhaps the most well known example.<sup>9</sup> While a ‘new’ Stadtschloß would not be a pseudomodernist building (it does not recycle the aesthetics of modernism), it would conform to many of the other tendencies Hatherley outlines, particularly in its use of the Prussian façade as a shell which conceals the building’s function, and also in the way in that its reconstruction is intended to symbolize a healing of past wounds (Ladd 1997, 65). In the critical reconstruction of the ‘New Berlin,’ architecture invariably tends towards postmodern pastiche, and in the extreme case of the Stadtschloß, as the copy of an original (building) that no longer exists. As Karsten Klingbeil, a retired construction manager, points out in *Berlin Babylon*, the contents of the interior of the ‘new’ Stadtschloß do not matter. At present, a 28 meter high ‘Humboldt-box,’ which mimics the exterior of the Stadtschloß, and whose interior contains information about the planned reconstruction, occupies the space reserved for the ‘new’ Stadtschloß. This bizarre placeholder is a Baudrillardian simulacrum, a copy of a copy (that does not yet exist) of an original that no longer exists. When finished, the rebuilt Stadtschloß would be a ‘third order’ simulacrum (Baudrillard 1994, 6-7), whose external appearance would conceal not only its interior, but would also mask the space of absence left by both der Palast, and the original Stadtschloß as well.

Even more telling is Ladd’s observation that the campaign to rebuild the Stadtschloß was driven not so much by a nostalgic desire for the absent Prussian building, but because of a lack of faith in modern (if not modernist) architecture to provide a replacement for the GDR’s Palast that would not be an embarrassment (1997, 64). Alan Blum adopts a similar position in his assessment of the struggles over Berlin’s civic identity, noting that the “building initiatives in Berlin correspond to the reconstruction of the city as the new capital of Germany, rebuilding what was destroyed in Berlin is correlatively the building of a new centre of the nation” (2003, 242). This sentiment seems crucial to understanding the logic behind critical reconstruction, and points to a lack of

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<sup>9</sup> The architect who Hatherley cites as the source of London’s ‘paradigmatic’ pseudomodernist buildings, Norman Foster, also played a major role in the architecture of the ‘New Berlin,’ providing designs for a number of developments in Potsdamer Platz, as well as overseeing the reconstruction of the Reichstag, the home of the German Parliament.

faith on the part of planners and politicians in the ability of Berliners to attempt to think the new. In fact, such a paradoxical relationship to the new calls into question the very discursive framework underpinning the entire project of the 'New Berlin'; for how can the city truly be reborn or transformed if the 'work' of the new is actually a retreat towards pre-1914 aesthetics and planning, rather than providing a vision of the future that seeks to actively engage with the contemporary problems of the city and attempt to resolve them for the better?

In *Capitalist Realism*, Mark Fisher argues that an inability to produce new memories is analogous to a 'glitch' in the postmodern condition, and specifically its relationship to new forms, which "[loom] up as hostile, fleeting, un-navigable, the sufferer is drawn back to the security of the old. The *inability to make new memories*: a succinct formulation of the postmodern impasse" (2009, 60). Siegert's conspicuous evocation of the angel of history—whose forward movement via the 'storm of progress' can only be achieved while looking backwards into the past—in *Berlin Babylon* suggests a similarly fraught relationship to the production of the new in a city so intensely saturated by the traces of traumas past. Interviewed on the subject of *Berlin Babylon*, Siegert goes one step further, inverting this paradox with the suggestion that the process of renovating old buildings might also serve to strip them of their capacity to retain meaning at any intrinsic level: "Everything that is scraggy, grey or ugly—qualities which can certainly have gravitas and dignity—gets torn down, built upon, or destroyed, until the city can no longer function as a repository of memory" (qtd. in Hurley 2011, 13). What *Berlin Babylon* reveals to us then is the exhibition of Berlin's deeply conflicted relationship to the task of memory making. If critical reconstruction both concedes the possibility of tackling the new and suppresses the capacity of the remnants of the past to continue to act as stores of memory, then the promise of the 'New Berlin' as a project must also be thrown into question.

### **Fear and Loathing in the 'New Berlin'**

Taking this problematic into account, it is therefore worth examining the aspects of the 'New Berlin' which did purport to think, and subsequently build, the 'new,' particularly given that not all aspects of planning and design in the 'New Berlin' were subject to the restrictions imposed under critical reconstruction. As Siegert's film shows, two sites in particular were to receive unique privileges under the *Planwerk*: the central squares of Potsdamer Platz and Alexanderplatz. These squares had contrasting experiences of the

twentieth century, with the former divided in two and physically desolate as a space of absence between East and West, while the latter became an open pedestrian zone under the administration of the GDR and received a high profile due to the nearby presence of the iconic Fernsehturm [“TV Tower”], the tallest structure in Germany. In *Berlin Babylon*, Stimman explains that each square was to be exempt from the *Planwerk*’s height restrictions, and would instead be filled with dense high-rise developments that would transform them into dual “focal points” which would “elevate [their] potential” as symbols of the ‘New Berlin.’ However, it is important to note that the dogma of critical reconstruction still held a great deal of sway over other aspects of planning even here—some of the design guidelines for Potsdamer Platz demanded that its architecture be built in the spirit of “Prussian Enlightenment” and of “Prussian classicism” (Michael Mönninger qtd. in Molnar 2010, 295), for instance. In the end, the design of Potsdamer Platz consists of a mix of publically funded buildings and developments built in accordance with the edicts of critical reconstruction, while other areas bankrolled by private or public-private partnerships permitted their developers greater leeway, and consequently tended to result in the construction of ‘Americanized’ corporate architecture (Molnar 2010, 300).

The second half of *Berlin Babylon* traces the redevelopment of Potsdamer Platz and pays particular attention to the design and construction of its centrepiece, Helmut Jahn’s controversial Sony Centre. Potsdamer Platz is introduced via a remarkable aerial tracking shot, culminating with the camera spinning from on high as it looks straight down at the vast building site. Having approached the site from above, the next scene follows the progress of underwater construction at the same location, before jumping forward in time by three months to follow the work as it travels up the immense structure of the Sony Centre. Brilliantly underscoring the continual building and demolition is the film’s industrial soundtrack, provided by the aptly named band, Einstürzende Neubauten [“Collapsing New Constructions”]. Equal parts elegy and sonic entropy, it is often difficult to distinguish between the diegetic sounds of the Potsdamer Platz building site and the skilfully mixed clanging and dissonance of Einstürzende Neubauten’s guitars and drum machines (Hurley 2011, 17-18). For Ward, this “machinic-organic metaphor” clearly links *Berlin Babylon* with Ruttmann’s *Berlin: Die Sinfonie* (*Post-Wall Berlin* 2011, 308). In his film, Ruttmann devotes a lengthy montage sequence in its first act to Berlin’s industry comprised of a series of fast cuts showing the operation of factory machinery, metal cutting and smoke pumping out of the city’s vast array of chimneys and outlets. In lieu of

any diegetic sonic elements (the film is silent) Edmund Meisel's original score provides a percussion heavy accompaniment that seemingly brings to life the various interlocking machines, rolling belts and spinning gears. It all amounts to an almost overwhelmingly impressive showcase of the city's industrial prowess, with all manner of consumer goods rolling, twisting and spinning across the screen in a blur of collage-cut-motion. There are fabrics, metal parts, light-bulbs, milk-bottles and bread loaves, all seemingly rendered from a shared, interchangeable, array of mechanical movements.

There is a representational link in *Berlin: Sinfonie* between the auto-mechanical/industrial complex, the city, and the commodity as fetish object, so it is telling that the film's showcasing of the processes of mass-production occurs prior to the proper arrival of the collective body of people in the city. This remarkable display of the speed and scale of industry sets the scene for what is to follow over the course of the film's subsequent acts, namely the conspicuous consumption of the very same goods that we have just seen being produced. In a sense, Ruttmann's city still feels like a container within the bounds of which the everyday dramas of collective existence, dominated as they are by the dual processes of consumption and production, can take place. Contrast this condition with that of *Berlin Babylon*, which certainly shares the same emphasis on processes of production and consumption, but is distinguished by the precise nature of what is being produced, and subsequently, consumed. By 1990, a significant proportion of major industry had left Berlin for other manufacturing centres such as Dortmund, Bremen and Hamburg, and yet a form of conspicuous, marketable production returned after *Die Wende*: that of the city itself (Colomb 2012, 228-229). *Berlin Babylon* is testament to this and at one level it is itself an extended piece of place marketing, yet another in a long line of (virtual) exhibitions emphasizing the speed and magnitude of Berlin's imminent becoming. Here, the 'New Berlin' represents a virtual city in the most negative sense, in that it is an illusory city, a mirage that promises much, but endlessly defers the delivery of its promise and instead finds solace in the restoration of past glories.

It is worth returning to Lefebvre's critique of the notion that space be understood as container here, in that it draws attention to the dual ontology of space as both *place* and *process*. In other words, the subject of Siegert's film is not merely the city as a distinctive, or privileged place, but also the very process by which the production of the city takes place. *Berlin Babylon* draws attention to the notion of the space of Berlin as being what Lefebvre, building on the work of Marx, termed a 'concrete abstraction': "a social abstraction," that "concretizes and realizes itself socially, in the social practice" (qtd. in Stanek 2011, 68). As

a mediated city, the production of space in Berlin is both abstract (as process), but also concrete, because of the powers imbued upon it by social action. It also exemplifies Lefebvre's assertion that cities are increasingly becoming *products* in and of themselves (1974, 75). Central to this development is an emphasis on what he refers to as the 'visual character' of urban spaces:

They are made with the visible in mind: the visibility of people and things, of spaces and of whatever is contained by them. The predominance of visualization... serves to conceal repetitiveness. People *look*, and take sight, take seeing, for life itself. We build on the basis of papers and plans. We buy on the basis of images. Sight and seeing, which in the Western tradition once epitomized intelligibility, have turned into a trap: the means whereby, in social space, diversity may be simulated and a travesty of enlightenment and intelligibility ensconced under the sign of transparency. (1991, 75-76)

This remarkable passage illuminates the desire for self-staging in the 'New Berlin,' for if the city is to be marketed it must first be made visible to its potential clientele as a mediated space. This observation also explains critical reconstruction's constant emphasis on neo-classical aesthetics. This return is predicated on a desire to evoke a sense of 'tradition,' embodied in the notion of Berlin as 'European City' (Molnar 2010, 294). Hatherley notes that much pseudomodernist architecture seeks to reduce buildings to the status of 'logos' or 'icons' which can be rapidly consumed, perhaps from a passing car or while shopping (2010, xxviii-xxix), and the products of critical reconstruction are no different in this regard. In the 'New Berlin,' function is a distant second to an implosion of architecture as form and sign.

Grasping the significance of this shift from the economy of goods to the economy of place is crucial and is representative of a general trend in major European cities over the last twenty years. Ward highlights the significance of the American influence in this regard, particularly at the level of architectural practice. She argues that the populism, hyper-commodification, and intensive urban agglomeration of Las Vegas have had a pervasive reach, to the point where they provided the "very engine of rebuilding [in Berlin]" (*Post-Wall Berlin* 2011, 298-299). As if being a source of inspiration was not enough, America provided much of the capital also; around one-third of the new developments in Berlin were backed by US finance (Ward, *Post-Wall Berlin* 2011, 300).

Much of this money was funnelled into Potsdamer Platz, the part of Berlin which, with its large indoor shopping malls and vast glass arcades, unsurprisingly resembles Las Vegas the most (Ward, *Post-Wall Berlin* 2011, 299-301). In fact, the possibility of Potsdamer Platz becoming a simulacral space was there even before the construction of its most 'iconic' building, Helmut Jahn's Sony Centre, was complete. During a tour of its growing innards, Siegert's camera captures one architect reflecting on the building's lack of an identity. "It will take time to become real, it is too new," he says. This seemingly offhand remark gestures to a major issue for Potsdamer Platz as the flagship for the 'New Berlin' project, in that it implies the possibility that the square might not ever attain or regain its identity, might not ever become a place—rather than a dictum, a slogan, or a manifesto.

### **Places and Non-Places**

In his work on the spaces of 'supermodernity,' Marc Augé formulates the concept of 'non-place.' The paradigmatic non-places are the zones of transit and timelessness, the supermarkets, airports, motorways and resort communities of late capitalism. The essential character of these spaces is their lack of temporal or spatial substance, which Augé argues are necessary determinants of platial ontology:

If place can be defined as relational, historical and concerned with identity, then a space which cannot be defined as relational, or historical, or concerned with identity will be a non-place. (1995, 63)

Similarly, Yi-Fu Tuan argues that space is transformed into place as a result of its accumulation of definition and meaning, achieved via lived experience (1977, 136). Ward points out that although the hegemonic position of critical reconstruction was partly achieved as a result of its ability to frame itself in opposition to the American urban tradition (which itself has a tendency to produce non-places), German cities have nonetheless experienced a general trend towards an increasing Americanisation. Much of this has occurred in Berlin, where, for instance, half of its 465 shopping centres opened between 1990 and 1997 (*Post-Wall Berlin* 2011, 300). There has also been a marked increase in the selling of the city's publicly owned buildings and sites to privately owned investment groups post-*Wende*. In fact, this shift played a significant role in driving the city's initial property boom, but has also contributed to its subsequent collapse, and today

there are still significant numbers of inner-city office spaces and upmarket apartment buildings that remain unoccupied (ibid). As with Hatherley's 'pseudomodernism,' Augé's theory of the non-place has resonance with the buildings constructed under the dictum of critical reconstruction, as well as with the city's plethora of *Baustellen*, which, as Panu Lehtovouri points out, are non-spaces par excellence, in that they are intensely transitory, homologous, and atemporal (2010, 86). What is so strange about critical-reconstruction is that at the level of discourse its project desperately wishes to produce a sense of place that ascribes to each of Augé's criteria: historicity, sociality and identity. And yet, in its desire to harness the 'storm of progress' in the name of returning Berlin to its identity as 'European City,' critical reconstruction ends up effacing its platial ontology.

Place achieves concrete reality when our experience of it is total, that is, through all the senses as well as with the active and reflective mind... place may [also] lack the weight of reality because we know it only from the outside—through the eyes as tourists, and from reading about it in a guidebook. (Tuan 1977, 18)

This is the kind of place the 'New Berlin,' becomes in *Berlin Babylon*, one shaped with the gaze from the outside in mind. Take for instance its neo-Prussian façades and their fraught relationship to history and memory. Although they attempt to evoke a sense of tradition, there is something uncanny about the disjuncture between the new, postmodern interiors of these buildings and their classical exteriors. A kind of affective and temporal flattening occurs, where their attempt at evoking a vaguely defined sense of 'tradition' renders pre-1914 Berlin as the city's ideal, enduring moment. This tendency, coupled with the symbolic (and material) violence levelled at the buildings built by the GDR (to say nothing of the architecture of the Nazi period) gives the 'moment' of the 'New Berlin' a feeling of ahistoricity, of being a time out of joint. It also suppresses Berlin's multiplicity: Weimar Berlin, Nazi Berlin, Cold-War Berlin, the narratives of each of these cities are obscured in favour of a singular, hegemonic, simulacrum. Likewise, the singular pursuit of this universal Berlin crowds out the voices and the participation of many of its citizens. For all the emphasis on competitions, forums and exhibitions, a select group of architects, planners and politicians led by Stimmann were quick to assume the hegemonic position as drivers of change in the 'New Berlin.' The alternative viewpoints of their East-German counterparts were generally ignored or discounted, and it should come as no surprise that the new (frequently private) spaces in Potsdamer Platz appeal more to tourists than the



city's own residents. This hegemony is most keenly felt in the numerous scenes in *Berlin Babylon* where Sievert captures architects and planners debating and experimenting with immense models of the Potsdamer Platz and other parts of the inner-city. As three-dimensional representations of space, Sievert's depiction of these models have a powerful resonance when considered alongside both the opening sequence of *Der Himmel*, but also with the exhilarating aerial photography that Sievert employs to film the construction of Potsdamer Platz. For Wenders, these unmoored camera movements at least held a certain poignancy given the divided nature of his Berlin, but in *Berlin Babylon* there is an uncomfortable triumphalism on display, both in the absolute authority and single-mindedness exhibited by Stimman and his colleagues throughout the film, as well as in sheer panoptic omnipotence exuded by the top down camera-work that is used to shoot the 'new' Potsdamer Platz.

Finally, there is the issue of the 'New Berlin's' identity to consider. The work of Janet Ward is particularly illuminating in this regard, as she has clearly demonstrated how the city's dream of attaining the status as transcendent global-European city has historically informed its tradition of "creating a virtual metropolis as a substitute for perceived deficiencies, past and present" (*Post-Wall Berlin* 2011, 329). For Ward, the surge of self-staging in the 'New Berlin' marks the apotheosis of this virtualizing process: "The motto *Das Neue Berlin* morphed in the hands of the city marketing company Partner für Berlin (now: Berlin Partner) into a product in and of itself" (*Post-Wall Berlin* 2011, 330). In order to make sense of the significance of this shift we must return to the discussion of the congruences between Lefebvre's production of space and Marx's commodity fetishism held in Chapter One. There, I outlined how the processes of spatial production are obscured by the ontological 'moment' of place in a manner that parallels the congealing of labour in the commodity as 'thing' and the subsequent elision of this significance that occurs in the valorisation of exchange value. By reducing the place of 1990s Berlin to an advertising slogan, and ultimately a product in and of itself, *Berlin Babylon* clearly depicts how Berlin is in the business of selling Berlin. But rather than imagine (and sell) Berlin in all its multiplicity and heterogeneity, the 'New Berlin' is homogenous, reactionary, and exclusive in its rejection of other Berlins. In seeking to literally embed the reality of this myth into the very fabric of the city, critical reconstruction transforms the virtual substance of Berlin's urban imaginary into a carefully prescribed form.

In *Becoming Virtual*, Lévy describes the movement from a set of virtual problematics to an insistent amalgamation of predetermined possibles. The nature of this transformation is characterized by reification and institutionalization which “envelops, degrades, fixes, and feeds off” virtuality (Lévy 1998, 178-179). This is precisely the nature of the transformation that occurs in the ‘New Berlin,’ in that it entails a reification that occurs at the level of place itself. Reification implies a breaking down and a subsequent building up, and in the ‘New Berlin’ the notion of Berlin as a place that is constituted by an ongoing chain of social, cultural, historical and political forces is lost. Instead, Berlin is deemed a universal entity, or as one of the city’s most prominent place-marketing slogans, “be Berlin,” insisted, a ‘state of mind.’ The sense of Berlin as a ‘moment’ in time, or in Lévyian terms, as an *event*, that *Die Wende* implies is lost in the ‘New Berlin.’

If we consider the virtual qualities of the representational space of the mediated city, particularly as embodied by Rolf Lindner’s notion of ‘cultural texture,’ we can bring Lévy and Lefebvre into productive dialogue here. What happens when one moves from the virtual to the potential is a closing down of possibilities. The potential, though latent, always carries a particular final form that is an intrinsic part of its aspect: it has a telos. This notion of transformation can be applied to the interaction between representational space and representations of space, particularly when the latter is underpinned by a particular understanding of the former. This is precisely what has occurred in the ‘New Berlin,’ where a particular set of cultural, social and political notions about what the city of Berlin should *represent*—the essential/‘universal’ spirit that is presumed to exist in a return to its nineteenth century imaginary—and are reified as a specific, teleological plan for what Berlin should *become*—the drive for its restoration as major European (and, by extension, global) centre. Paradoxically, this is accompanied by an emphasis on newness, embodied at a discursive level in the name ‘New Berlin,’ but also on the emphasis of Berlin as a virtual city that was evident in many of the place marketing schemes described by Ward in *Post-Wall Berlin* (2011). Graham’s dual narratives of “the dazzling light” and “anything-anywhere-anytime” are both at play here, with the transformative promise of new media technologies combined with a move towards un-bordering that is evident at the level of the city (the return to the nineteenth century street plan), but also in the efforts to (re)position the city as a central node in the global information economy, and as a privileged gateway between East and West.

## Symbolic Economy, Simulacral City

In summary, this chapter has outlined the operation of the 'New Berlin' as a spatial process unfolding in the mediated space of *Berlin Babylon*. As a mode of spatial production, it denies any sense of place that extends beyond a limited set of parameters (those of the 'European City' paradigm) for its inhabitants. It has also been read, following Ward, as a kind of 'virtual city,' albeit one whose realization is continually deferred in a ceaseless circuit of expectancy and becoming. In this, the 'New Berlin' operates as symbolic economy, a series of self-staging exercises that have led to a conspicuous commoditization of the city itself, which takes place at both the level of the city's place marketing, as well as in the simulacral architecture of the 'New Berlin.' The immediate consequences of these processes have been quite severe for the city's inhabitants because they lead to a disjunction between the notions of what the city was expected to become and its material and economic realities.<sup>10</sup> In a bizarre turn of affairs, the city's dire economic situation would eventually be spun into a positive selling point by the city's cadre of place marketers, a gesture that only serves to re-emphasize Berlin's increasingly simulacral nature. The catalyst was an offhand remark by the city's mayor, Klaus Wowereit, who, in 2004, responded to a question in an interview with the remark that Berlin was "poor, but sexy" (qtd. in Ward, *Post-Wall Berlin* 2011, 118). This state-sanctioned acknowledgment of the failure of the 'New Berlin' to improve the financial conditions of its citizens was used as a new form of place marketing, emphasizing the bohemian lifestyle of its 'creative class' in an attempt to sell more apartment spaces. Under these circumstances it is worth reiterating the ongoing salience of the 'virtual city' as a theoretical framework for making sense of the relationship between urban space and its representations and mediatizations, and it is with this backdrop firmly in mind that I will begin my discussion of augmented space in Chapter Four. As I will demonstrate, augmented space can be understood as the cultural product of Berlin's so called 'creative class,' and given its promise to provide a radically new form of spatial practice, it holds a privileged place in the city's urban imaginary.

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<sup>10</sup> One of the assumptions made as part of the 'New Berlin' project was the anticipation of an influx of people moving to the city. Today we can acknowledge that an immigration on this scale never occurred. On the contrary, Berlin was losing up to 20,000 residents (a significant proportion of them Ossies) a year in the late 1990s. The city's population has only recently beginning to stabilize at around 3.4 million inhabitants (Ward 2004, 245). Not that this had any impact on the boosterist intentions of its politicians and developers because, in line with the expectations generated under the 'New Berlin' project, the city massively overinvested in both residential and private property. As a result of the generous tax breaks and private-partnerships, which encouraged these investments, the city is now more than 62 billion euros in debt.

## Chapter Four

### **“Poor, but Sexy”: Absence and Augmentation after the ‘New Berlin’**

The previous two chapters of this thesis have traced the production and representation of space in the ‘New Berlin’ in ways that drew upon the notion of the ‘virtual city.’ Critical reconstruction’s idealization of nineteenth-century Berlin foregrounds the ensuing turn towards self-staging theatrics, which themselves sought to exhibit, and consequently bring about, the city’s return to prominence as a major European centre and, in doing so, secure its place as a significant nodal point in the global information economy. Developments in new media technologies have also played a role in the city’s would-be becoming.

Beginning with the adoption and subsequent ubiquity of cellphones, wireless hotspots and flatscreen displays, and culminating in the nascent development of augmented reality technologies, Manovich’s “The Poetics of Augmented Space” is in many respects an appropriate manifesto for this particular moment in Berlin’s history. Today, Berlin is something of a hotbed for a variety of AR projects, and was also the host of Europe’s first Augmented Reality Business conference in April 2010. The object of this chapter is to trace the emergence of augmented space in Berlin in the period following the economic depression that was synonymous with the advent of the ‘New Berlin’ into a period of relative growth and development fuelled by the city’s tourism industry from around 2005.

Central to my analysis is Manovich’s claim that augmented space should necessarily be understood as a distinctively new form of *spatial practice*. If Manovich’s understanding of spatial practice is comparable to that of Lefebvre, and augmented space is understood to be ‘taking hold’ in Berlin, my task is to make sense of the significance of augmented space as part of the city’s shift towards what Janet Ward has described as a “media economy.” If, as I proposed in the previous chapter, the primary commodity produced in Berlin is now Berlin itself, what changes might a shift from Berlin’s conspicuous self-staging in accordance with the discourses of virtual space towards those of augmented space bring about?

The early 2000s saw an increasing emphasis upon the development of the ‘creative industries’ in Berlin’s public policy and place marketing. At the time the city was massively in debt (40 billion Euros in 2001) and had also been wracked by revelations of a banking scandal involving false transactions and a spate of corruption cases which implicated

several of the city's bank managers and elected politicians (Colomb 2012, 224). The city's new mayor, Klaus Wowereit (elected in 2001) viewed the active support of cultural industries as a way of tempting fresh investment into the city without necessitating the release of public funds on a large scale. The 1990s had seen an emphasis on the promotion of cultural consumption, with place-marketing campaigns emphasizing Berlin's historic sites, cultural infrastructure (opera houses, theatres, museums, etc.) and revamped inner-city as desirable tourist drawcards. This emphasis on cultural consumption is at the heart of the transformation from a Berlin as a site of production to the production of Berlin itself as a cultural commodity. However, under the Wowereit administration, there was a gradual turn towards producing (and promoting) desirable conditions for the so-called knowledge and culture classes. In this, Berlin fits within a broader trend in major post-industrial cities towards fostering 'creativity' on a global scale. Urban policy-makers have been some of the key drivers of this shift, but it is also worth highlighting the influence of the analysis and policy frameworks proposed by academics such as Charles Landry and Richard Florida. In the case of the latter's work, economic growth in an urban environment is increasingly being driven by a 'creative class,' who are said to be responsible for generating the cornerstone ideas, technologies and media content that can subsequently be converted into capital via uptake within the knowledge-based sectors of any given city's economy, in fields such as education, design, marketing, science, architecture and information technology (Colomb 2012, 230). The imperative for policy-makers then was to produce a suitably attractive cultural environment within city-centres in order to compete for the talents of the creative class, who are deemed to be highly mobile and sufficiently well-off as to be able to pick and chose where they live and work. There is a passage in Manovich's "The Poetics of Augmented Space" which has a powerful resonance with this shift:

In a high-tech society, cultural institutions usually follow the technology industry. A new technology is developed for military, business, or consumer use, and after a while cultural institutions notice that some artists are experimenting with that technology and so they start to incorporate it in their programming... Can this situation be reversed? Can cultural institutions play an active, even a leading, role acting as laboratories where alternative futures are tested? Augmented space – which is slowly becoming a reality – is one opportunity for these institutions to take a more active role. (2005, 29)

Here, Manovich proposes a similar thesis to that which is common in Florida's work, one that in effect reverses the classical Marxist base-superstructure framework, in that it suggests that in an information economy, structural developments and economic growth necessarily follow innovation and development at the level of culture. Under this paradigm, augmented space is seen as offering the possibility of developing new modes of interaction between the 'physical space' of the city and its 'dataspace' that might bring about a shift in the logic of cultural production. What Manovich is calling for here is a privileging of augmented space as a potentially transformative mode of cultural production. For Manovich, this shift is exciting precisely because it enables architects and artists to "take the next logical step to consider the 'invisible' space of electronic data flows as *substance* rather than just as void" (2005, 28). In other words, by making Castells' 'invisible' space of flows discernable, Manovichian augmented space renders the immaterial material, or invisible visible, while simultaneously drawing attention to the possibility of predominantly material spatial practices such as architecture becoming increasingly immaterial.

Combining these insights allows for a different perspective on the 'augmented city' thesis than the one outlined in Chapter One. If the 'virtual city' envisioned and enacted within the discourse of the 'New Berlin' necessarily entails a valorisation of cultural consumption, with the transformation of the city into its own product as "media city" functioning as the most extreme example of this logic, then it follows that speaking of an 'augmented city' necessarily foregrounds a comparable shift towards cultural production, where individuals (rather than places) become its most significant makers/markers/marketers. Using three specific examples of different uses, or applications, of augmented reality in Berlin, *The Witness*, *Berlin Wall 3D*, and *The Berg*, this chapter examines the implications of this shift in emphasis for Berlin's citizens. Contra-Manovich, I argue that while augmented space does offer some intriguing possibilities for understanding and engaging in transformational spatial practices, its actual uses in Berlin to date have tended towards sustaining a paradox identified by Claire Colomb: in attempting to extract and enhance Berlin's symbolic value, the strategies of place marketing and tourism promotion employed to push the 'visual urban frontier' (2012, 244) through acts of branding that draw attention to the city's subcultural movements and creative activities actually threaten the sustainability of the very conditions which are necessary for producing cultural experimentation and expression in the first place.

In particular, I want to draw attention to how contemporary uses of augmented space tend more towards ‘filling’ a particular space (or void) at a symbolic level, rather than actively engaging or reshaping it in the dynamic fashion that Manovich himself calls for. Furthermore, I claim that the significance of the development of augmented space in Berlin frequently resides not so much in the actual spatial practices that are entailed in the use of these applications, but rather in what they tend to represent when they are referred to second-hand, in other media, as part of Berlin’s media economy. The majority of users who encounter the examples I will be discussing tend to do so not via smart-phones in Berlin itself, but through other forms of media (online, in print media, or on television), so for them, the experience of augmented space in Berlin occurs at a remove, and is registered primarily at a symbolic (representational) level, rather than through more active forms of engagement that Manovich refers to as constituting augmented space as spatial practice, and that could be translated into Lefebvrian *conceptions* of urban space.

My critique here is therefore primarily comprised of textual and discursive analyses of the accumulated mediations and representations that have been generated around my case studies. In each of these examples, the ascribed promise of augmentation as a distinctively new technocultural-spatial formation parallels both the promise of Berlin’s city-cinema pre and post *Wende*, as well as the promise of the new inherent in the discursive formation of the ‘New Berlin.’ In this respect, the ‘augmented city,’ as it manifests in Berlin, operates as a virtual entity, and an extension of Berlin as mediated and virtual city.

### ***The Witness: Augmented Filmmaking in the ‘Outernet’***

In 2011, the German branch of NBC Universal relaunched its action and suspense TV channel, 13<sup>th</sup> Street, with a trailer for a ‘revolutionary’ new film called *The Witness* (Starr 2011). Marketed as “the first movie in the outernet” (ibid), this trailer was released via social media and received widespread coverage on technology blogs, including a featured post on cyberpunk author Bruce Sterling’s “Beyond the Beyond” blog for *Wired* magazine. The fairly conventional trailer presents a challenge for the revamped channel, to: “get the audience engaged in the genre of thriller and crime like never before.” Posing *The Witness* as the solution, it explains how viewers from across Germany can apply through 13<sup>th</sup> Street’s website to participate in “an interactive mix of movie and live game” in which the objective is to rescue a Russian sex-worker called Nadia from the mafia. The ‘film’ was to be experienced as a one-off “exclusive event” (it was held on the 11<sup>th</sup> of April in 2011) by

six participants, in snippets of video accessed using an iPhone based augmented reality application developed specifically for the film. Other participants, along with actors from the film, can make appearances in the narrative, and the video suggests that decisions made by the players (“collecting evidence and data”) will, as in a ‘choose your own adventure’ style game, affect the outcome of the film, perhaps even resulting in their own ‘death,’ and therefore the end of their participation in the narrative.

The film’s tagline, “the first movie in the outernet,” is highly suggestive, as it frames itself in opposition to the implied interiority of the Internet. It promises to at once bring the virtual ‘out,’ while simultaneously implying that the ‘real’ is itself a kind of *cybernet* that can be colonized by users. The promotional material that accompanies the trailer for *The Witness* includes an image of a darkened map of Berlin (see Appendix A), which traces the film/game route that the participants are intended to follow, as well as a series of accompanying film stills superimposed over key destinations on the map. This image implies a connection between maps themselves as augmentations of space, but also of augmented reality’s own alterations of the relationship between map and territory. In *Becoming Virtual*, Pierre Lévy proposes the existence of different *orders* of virtuality, suggesting that, for example, where writing represents a virtualization of memory, the digitization of a text represents a potentialization (1998, 50-52). Augmented reality’s relationship to the city is perhaps analogous here, with mapmaking representing a virtualization of city-space, and a piece of augmented reality software like *Google Maps* digitizing the virtual space of the map, and therefore transforming it into a potentialized matrix of hypertexts. Participants in *The Witness* are able to actualize not only the city, via the act of streetwalking, but also navigate the hyper-map of both the GPS grid and the film/game narrative. However, as in the ‘choose your own adventure’ game genre, the options available to players of *The Witness* are necessarily limited, in that they are only ever permitted to select from a narrow range of ‘possible’ options provided by the game. This inherent limitation of the game space is foregrounded in the trailer, when a player enters a room and sees a large sticker bearing the game’s logo on the concrete floor below him. The sticker acts as a marker of place, telling the player that he has reached one of the predetermined possible next destinations (the next page or screen, as it were), and has therefore succeeded in moving the game’s narrative forward. In a sense then, the game-space of *The Witness* functions as an inversion of the virtual geography of Berlin seen in *Lola Rennt*. There, the film’s space was notable for its unmappability, its virtualization of the city into a space that eluded easy signification. In *The Witness*, the territory of Berlin is



itself occluded on the map, and is rendered insignificant. Urban landmarks are important not for their place in the city, but for their function as nodal points within the narrative matrix of the game. The map does not just precede the territory in *The Witness*; rather, it effaces it entirely, transforming the city from a virtual space into a ‘dataspace’ matrix consisting of a finite number of predetermined possibles which the players are required to choose between. In this, the game coheres to the Logocentric organizing principles of the abstract space of capital and reflects the non-spatializing tendencies of the ‘New Berlin’ in that it de-emphasizes the significance of Berlin as a historical, relational, and experiential *place*. Tellingly, *The Witness* was available only to a handful of participants, as more players would have necessitated a greater number of possible routes for the larger pool of players to negotiate, a decision which would have exponentially increased the complexity, and therefore production cost, of the game’s narrative space. As a result, the game/film was far less accessible in its ‘playable’ form than in its virtual counterpart, the film’s *YouTube* trailer, which, at the time of writing, has been viewed over sixty-eight thousand times (von Matt 2011).

Given that the film’s existence is inextricably linked to its conception as a promotional tool for 13<sup>th</sup> Street, its trailer is therefore more significant than the film itself as text in Berlin’s media economy. No reviews or accounts of the actual film event itself exist online, but the trailer continues to generate web-based discussion about the possibilities that augmented space offers to filmmakers. Still, the trailer for *The Witness* presents Berlin as a dynamic augmented space, promising its participants a certain degree of autonomy, both via their decisions and interactions with actors and other participants. Rather than being framed as passive movie-watchers, this sense of agency recasts the participants in *The Witness* as active ‘players’ in the film’s gameworld, and as co-constituents of its narrative space. This shift, towards the role of the consumer as a concurrent producer of content is known as ‘prosumption,’ a term coined by the futurologist Alvin Toffler in his book, *The Third Wave*, published in 1980 (Comor 2011, 310). For Toffler, the act of becoming a ‘prosumer’ was a liberatory gesture that would overcome the alienation of consumption by opening up new avenues of creativity and self-sufficiency (ibid). The trailer for *The Witness* insists that “viewers cannot witness the action passively, they have to collect evidence and data and communicate with their opponents.” This participatory imperative partly explains Manovich’s insistence that augmented space represents a spatial practice, as the paradigm requires a certain minimum level of participation: being physically present in order to access coordinates within a

dataspace. Although not explicitly a piece of place marketing, the way in which augmented space requires this physical presence to access geo-specific data necessarily anchors *The Witness* as game-film to a series of inner-city locations in Berlin. However, as a virtual text, the trailer suffers from no such restrictions. It is able to at once highlight the possibilities for individuals to take an active role in being part of the game's culture—the trailer ends with an appeal to “apply to play” —while also presenting its own depiction of a particular virtual Berlin as the dystopian cyberpunk city of its clichéd narrative, populated by Russian Mafiosos, hackers, and data-smugglers. In this sense, the trailer expands the possibilities of Berlin as media city, fuelling the production of its symbolic economy.

As in *Lola Rennt*, there is a total absence of any of the traditional markers of Berlin, such as the TV Tower, or the Brandenburg Gate, in the trailer for *The Witness*. Instead, we see a young white man dressed snugly in a coat, scarf, and hat, attempting to navigate a claustrophobic landscape of archetypal non places: tawdry hotel rooms, underground parking lots, seedy bars, and shuttered apartments. In fact, without prior knowledge, there is not a single clue within the trailer to suggest its location aside from a reference to Berlin in the voiceover, and the film could conceivably take place in an equivalent set of non-places in any major city around the world. In this sense, *The Witness* fits neatly within a trend observed by Colomb concerning the advertising drives of Berlin's place-marketing campaigns, which, post-2000, have been placing less and less visual emphasis on the city's built environment generally (2012, 265). Instead, she argues, the focus has “tended to be on people (often construed as ‘creative’), while the city has often been pushed to the background as a stage set for their activities” (ibid). The placeless setting of *The Witness*, and the casting of a chic young ‘creative’ to stand in for the target audience are paradigmatic in every sense here. Even the screen of cinema itself is taken out into the city in augmented space, a movement that reflects the flexibility and mobility associated with the neoliberal subjectivity that constitutes the ‘creative class’ (Kanna 2010, 102-13). For an experience that promises user participation, it is also significant that the few narrative elements that do crop up in the trailer for *The Witness* are also incredibly banal and generic. The participants are given the task of uncovering the fate of a kidnapped hostage, and in doing so locate some stolen or misplaced, but undefined, ‘data.’ Even special effects are reduced to a minimum in the trailer, presumably so as not to distract from the novelty of the film's use of augmented reality. Still, one might hope that such a ‘revolutionary’ text might offer something radical at the level of content (rather than form), but with the trailer for *The Witness*, the medium is quite explicitly the message. The trailer for *The*

*Witness* is therefore an exercise in highlighting the *promise* of augmented space within the context of genre television, which makes the positioning of viewer as player and detective appropriate when one considers the commercial imperatives of the channel. In this, *The Witness* functions similarly to a phenomenon that Leon Gurevitch has termed the “cinemas of transactions.” For Gurevitch, the advent of digital effects and animation in audio-visual culture has produced a system of “textual, technological, aesthetic, and economic developments whereby computer-generated attractions and promotional practices span many media forms,” whose cumulative effect is a continuation of a relationship initiated at the dawn of cinema’s history (2010, 367). The initial relationship, described by Tom Gunning as the ‘cinema of attractions,’ emphasized the sense of technical wonder generated by early cinematic attractions, exemplified by Steven Bottomore’s ‘train effect’:

A spectacle of overwhelming realism in which spectators from screenings around the world were reported to have run hysterically from the cinemas in an effort to avoid the apparently deadly approaching onscreen train... At this moment of early cinema as an attraction, Bottomore argues that screenings were simultaneously entertainment and self-fulfilling forms of publicity for the cinematic apparatus and event. (Gurevitch 2010, 371)

For Gurevitch, the modern the role of the cinematic trailer in emphasizing the ‘spectatorial pleasure’ one experiences in contemporary cinema’s CGI (computer-generated imagery) set-pieces is in many ways an extension, or continuation, of this tradition. The nature of CGI effects is paradoxical, in that while they ostensibly strive for total realism, or total immersion, they also continuously and conspicuously draw attention to their own ontological status as cinematic illusions (Bolter and Grusin 1999, 5-7). Invoking Bolter and Grusin’s dual logics of remediation, immediacy and hypermediacy, CGI makes the unreal appear real, while drawing attention to its own artifice at the same time. This tendency makes CGI effects ideal for use in promotional material, and, as Gurevitch notes, they are not only used in film trailers, but are frequently also used in other industries (architecture, car manufacturing, aeronautics, etc.) as a way of promoting a project to potential investors without incurring the cost of producing expensive prototypes (2010, 381). This culture extends beyond the realm of cinema and advertising, and Gurevitch draws special attention to *YouTube* as an ideal platform for the “cinemas of

transactions,” noting that the viewing audience for content on the site drops in direct proportion to the length of clips on offer (2010, 382-383). It is no coincidence then that the trailer for *The Witness* feels so suited to the medium of *YouTube*, nor that the promotional campaign was orchestrated with the intention of display on social media in mind. There are numerous moments in the trailer where the participants are shown holding up their smartphones to see the next scene in the film, before the camera cuts into the film itself, leaving the extra layer of mediation beyond, while clearly delineating the presence of said medium. As a cinema of (augmented) transactions, *The Witness* is therefore an uncanny continuation of Berlin’s tradition of self-staging theatrics: an act of reflexive attention seeking that fuels the production of Berlin’s media economy.

### ***Berlin Wall 3D: The Return of the Repressed***

If you’re not seeing data, you’re not seeing. (Chen 2009)

This axiom appeared as the title of a speculative *Wired* magazine article documenting the development of augmented reality in 2009. Written in a moment when augmented reality technology was relatively novel, it functions less as a journalistic statement of fact, or as a taxonomy of the state of augmented reality in 2009, and more as a moment of prophecy and expectation. In this, it represents a contemporary variation on Bolter and Grusin’s ‘theology of cyberspace,’ but instead of insisting on a transformation of the material into the immaterial, the article’s author, Brian Chen, implicitly privileges augmentation’s ability to generate a more ‘authentic’ vision of the material aspects of urban space. Berlin experienced a similar moment of revelatory expectancy in 2010, with the development and promotion of an application designed for *Layar* (an AR browser for smartphones) called *The Berlin Wall 3D*, described by *Spiegel Online* as a moment of “Science Fiction [becoming] reality” (“Science Fiction” 2010). The application reproduces an image of the Berlin Wall in the exact geo-spatial co-ordinates where the original previously stood (see Appendix B). It proclaims that the application’s developer, Marc Gardeya, “is possibly the only person in the world whose life has been more affected by the resurrection of the Berlin Wall than its fall... In fact, the resurrected Berlin Wall is something of a business card for him. When he explains his work to people he often does so by pulling his mobile phone out of the pocket of his jeans” (ibid). Gardeya’s own press release for *Berlin Wall 3D* is only slightly less exuberant, informing its readers that “The Berlin Wall 3D puts history into its

location context and encourages the interaction [sic] with that specific historic site” (2010). Sceptical as we should be of the self-aggrandizement that accompanies much of the rhetoric around new media technologies, an application like *Berlin Wall 3D* does raise questions about the relationship between augmented space, spatial practice—as outlined by both Manovich and Lefebvre—and the visual economy of the city. Further complicating matters is the intersection of augmented space as practice, and augmented space as signifier of technological progress and promise. In the case of *The Witness*, it is much easier to be sceptical of its ambitions towards offering a radically new configuration of the former, particularly because of its extreme exclusivity, but with *Berlin Wall 3D* this is not so straightforward. Nor does the application avoid or elide the city’s past as *The Witness* does; instead, by staging the return of the Berlin Wall it actively engages in the process of memory making in a manner that recalls the ongoing efforts to recreate the Stadtschloß in the ‘New Berlin.’

So how does *Berlin Wall 3D* operate in terms of visual economy? Implicit in this question is the need to generate an understanding of the distinctive ways in which augmented space applications ‘see’ Berlin. A 3-minute segment from the Abendschau news service introduces us to Gardeya, a white man in his mid-thirties, dressed casually in jeans, coloured sneakers and chequered shirt (Hoppala Agency 2010).<sup>11</sup> Holding up an iPhone, we are given a (heavily pixelated) glimpse of an image of the Wall superimposed over the Brandenburg gate. One of the most immediately noticeable aspects of this digital Wall is its cleanliness. Evidently, Gardeya has not constructed a perfect replica of the Wall at every point of its length. Rather, it takes the form of a repeated segment, completely plain; albeit with a few signs of pixelated wear. This Wall is sterile, devoid of the graffiti for which the original Wall once gained fame as a favoured site for political slogans, messages to loved ones, and radical street art. The only possibility for interaction it affords viewers is to shift perspective, to change their position in relationship to it. Speaking in filmic terms, this grants the user power to change the perspective of the smartphone/camera, seemingly affording the user directorial status. However, beyond the Wall there is nothing else to see, as *Berlin Wall 3D* is not integrated into a wider ‘dataspace,’ so this directorial licence is instead limited to a finite set of possible vantage points from which to view the Wall. *Berlin Wall 3D* overlays anything that lies behind it, unless the building or structure behind it is high enough, in which case it only partially

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<sup>11</sup> Note that here I am reliant upon the images provided by Gardeya on his website, and an accompanying video from the German public television station RBB.

obscures it. It also occasionally features watchtowers, but whether these are randomly generated, or reflect the position of actually existing watchtowers during the Cold-War years is unclear in both the news broadcast, and on Gardeya's site. Other than these towers, there are no visual referents which mark out what the Wall was like, no signs of activity, of repair (or disrepair), of guards, or of checkpoints. It stands as a monolithic entity, whose primary salience is therefore registered in the way that it functions as a marker of the Wall's absence, in that it says: "the Wall *was* here." Its contributions to Berlin's urban imaginary are relatively limited on the basis of what Manovich would call its 'poetics.' As a marker it becomes a representation of space, a digital cartography of the absent Berlin Wall. Given the limited possibilities for interaction, it is unlikely to initiate much in the way of spatial practice beyond Gardeya's labour in coding its software. In producing it, Gardeya virtualizes the Wall, deterritorializing it into a new space – the space of flows. In accessing it, users of *Berlin Wall 3D* are engaging in an act of actualization, the responses of the various users shown in the TV segment – a group of young teens, Gardeya himself, and an elderly man are all depicted looking at the Wall on an iPhone – are generally positive, but their excitement seems to be largely in response to the promise of the technology, rather than because of anything remarkable from a purely visual perspective. The screen on a mobile phone is small, and relatively poor in terms of quality and resolution when compared with, for instance, the screen of a laptop or television, let alone that of a cinema screen.

Still, there should be something significant in seeing the Wall return, something uncanny about the re-emergence of such a symbolically fecund object upon the city's visual landscape. However, the impact that the return of the Wall evokes is somewhat dampened by its persistence in the minds of Berliners (and Ossies in particular) who did not immediately reap the purported social and economic benefits of reunification, and by their experiences of a succession of prior returns in Berlin's symbolic economies. As Colomb notes, the 2000s have been increasingly characterized by a tendency towards a "more explicit integration of remnants and memorials from periods of Berlin's history" in the city's tourism marketing (2012, 250). As well as the steady development of a 'memory district,' including the Jewish Museum (which opened in 2001), the Memorial for the Murdered Jews of Europe (inaugurated in May 2006), and the Topography of Terror,<sup>12</sup>

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<sup>12</sup> Ward argues that the phenomenon of urban memorialization is not limited to Germany: "we are living in an overly musealized age, where the artifacts or monuments are increasingly needed to convince us of the existence of a non-digital real... The case of post-Wall Germany's 'relentless monument mania ... commemorating ... the one world of organized destruction and genocide,' to use Andreas Huyssen's words

which was renovated in 2010, in inner-Berlin, the Wall has become increasingly visible in the urban landscape. Where the 1990s saw the destruction and removal of as many signs of division as possible, there has been a steady accretion of its traces in the 2000s. Plaques, bike-trails, memorial sites, and exhibitions all dedicated to memorializing the Wall in one way or another have all sprung up at various places along the former GDR border (Colomb 2012, 253). In parallel, a number of virtual portals promising access to the Wall have been set up, including the official ‘Mauer’ page at [www.berlin.de](http://www.berlin.de), as well as in an exhibition on the web-based 3D virtual world program *Second Life*, and even in a pair of video games; *The Berlin Wall*, released as an arcade game in 1991, and *1378 (km)*, a computer-based first-person shooter where the player takes the role of a border guard who must shoot refugees attempting to escape the GDR, released to a public outrage in 2010 on the twentieth anniversary of German reunification (“German Cold War” 2010). Finally, there are the Wall’s frequent appearances in post-millennial city cinema, in films such as *Hedwig and the Angry Inch* (2001), *Herr Lehmann* (2003), *Die Stille nach dem Schuß* [“The Silence After the Shot”] (2000), *Der Tunnel* [“The Tunnel”], (2001), *Good Bye, Lenin!* (2003), and *Das Leben der Anderen* [“The Lives of Others”] (2006).

Of all these films, Wolfgang Becker’s *Good Bye, Lenin!* is probably the one which most conspicuously engages with the return of the Wall on a thematic level. Its plot revolves around the efforts of a brother and sister to conceal the fact of German reunification from their mother, a strict socialist who has just awoken from a coma which she entered just prior to the dramatic events of 1989. In a sense, the film reverses the processes of unseeing established in *Der Himmel*. Where the obscuring of the angels from the city’s inhabitants can be read metaphorically as a disavowal of the social effects of Berlin’s division, the characters of *Lenin!* re-create “the Wall in the head” for the sake of preserving a sense of *Heimat* [“belonging,” or “homeliness”] within their fractured family unit – the father is absent (in both the nuclear and communist senses), having previously escaped into the West. Central to this process are a number of spatial practices employed by the young protagonist, Alex (Daniel Brühl), who spends a significant portion of the film recreating the space of socialist East Berlin. This is done through a combination of tricks and deceits, including faked news reports, salvaged GDR consumer product discards, and staged social gatherings. In carrying out his act, Alex comes closer to his mother, realizing that her own efforts to negotiate life in the GDR that he had previously

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on post-Wall Germany’s belated, obsessive rush to acknowledge its wartime guilt in art form, is but an exaggeration of a preexisting condition in which we all participate” (2011, 241).

viewed cynically, such as instigating a letter-writing campaign to East German manufacturers bemoaning the limited range of female underwear available to older women, actually functioned as a “middle way” between the extremes of the GDR and her own pragmatic approach towards socialist praxis (Cook, “Good Bye, Lenin!” 2007, 210). Significantly, this letter writing campaign neatly intersects between the three parts of Lefebvre’s triad in that it gestures to the gap between the conception of her body from the perspective of the manufacturer, and her own experience of living in it, and of recognizing the inadequacy of her clothing options. Likewise, many of Alex’s efforts to reproduce the space of East Germany require him to negotiate these gaps between the new conception of Berlin as reunified city, his own experiences and identity as an East Berliner, and the changing routines of daily life in the city.

The film is not unproblematic, and has been criticised for its *Ostalgie*, or nostalgia for East German Socialism, in its fetishization of East German consumer goods, and well as for its incorporation of narratives of escapism that support the neoliberal ideology of personal transformation (Cook, “Good Bye, Lenin!” 2007, 218). Regardless of the ostensible fidelity of the film’s depiction of the past, *Lenin!* does work towards presenting a set of images, practices and myths of the GDR and the period following Germany’s reunification whose collective accretion points to the existence of an alternative narrative for Berlin’s recent history, as well as the way in which it is deployed going forward (Jozwiak, and Mermann 2006, 793). Against this backdrop, *Berlin Wall 3D*’s potential as spatial practice is largely relegated to providing tourists on Berlin’s memory trail with a necessarily limited window onto the city’s past while simultaneously drawing attention to the future promise of augmented reality and of Berlin as a site of creativity and technological development.

Like *The Witness*, *Berlin Wall 3D* gestures to the possibility of new spatial configurations even if it does not deliver them in any meaningful sense. In the conclusion of “The Poetics of Augmented Space,” Manovich proposed that augmented space might help architects and artists recognize “the ‘invisible’ space of electronic data flows “*as substance* rather than just as void [author’s emphasis]” (2005, 28). *Berlin Wall 3D* takes the place of a number of ‘voids’ within Berlin and, although many have been filled since Germany’s reunification, augmented space’s function as a filler of voids has a very literal significance here. In fact, around 14 percent of Berlin’s open spaces are made up of vacant or undeveloped plots, many of which are in or around the former GDR border (Colomb 2012, 240). These voids have held a fraught position within both Berlin’s urban



imaginary and are not only evident in much of its city-cinema, but also in the attitudes of the city's planners and politicians, particularly in the period following reunification.<sup>13</sup> As Ladd has demonstrated, city policy in the 1990s generally tended towards a disavowal of these empty spaces, leading to their filling or closure through strategies of 'reurbanization' and 'densification,' and were almost exclusively avoided in the city's promotional imagery because of the way they were perceived to represent the undesirable recent past (Colomb 2012, 241). However, as Colomb points out, these voids have also played a central role in the fertility of Berlin's experimental underground scenes, acting as temporary sites for a whole host of different activities: "flea markets, beer gardens, urban beaches and open air bars, community gardens, alternative living projects etc [sic]" (2012, 241). The city's increasing emphasis on cultural production has resulted in these frequently illicit activities capturing the eye of the city's authorities and as a result the temporary uses of the voids have increasingly begun to appear in the city's promotional material:

The broad range of temporary use projects in Berlin has become a PR and economic factor for the city. Whether as a motor for creating jobs, a catalyst for the relocation of international companies or as an attraction for tourists, the financial stimulus generated by temporary users is increasingly important for Berlin as a creative metropolis. (SenStadt qtd. in Colomb 2012, 241)

In fact, the term 'space pioneers' has even entered the lexicon of Berlin's place marketers after being coined by the architect Klaus Overmeyer in 2005 (Colomb 2012, 241-242). This term could equally apply to the work of AR developers such as Gardeya, whose work might also be interpreted as 'pushing the visual urban frontier' of the city through the use of innovative spatial practice. Likewise, in making use of the dataspace along the (in places still very visible) absent space of the Wall, *Berlin Wall 3D* engages in comparable practice of void filling. However, as Colomb is careful to point out, the increasing drive to capitalize on the creative work being done in Berlin's margins and liminal spaces also raises significant issues for the ongoing viability of the very environments which sustain their efficacy in the long term: "Reducing interim and small-scale users to being solely a marketing tool for real estate in the city, combined with the lack of any strategy for their

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<sup>13</sup> Examples include the lost Potsdamer Platz and the vacant lot occupied by Marion's circus in *Der Himmel*, and the abandoned buildings in East Berlin explored by Alex in *Good Bye, Lenin!*

support, undermines the development of a proper long-term creative city policy” (Bader and Bialluch qtd. in Colomb 2012, 245).

Central to this process is the real estate market which has inexorably expanded into East Germany, leading to a gentrification of the city’s inner-city districts that has incited conflicts around many of the spaces that had originally attracted the investors in the first place. Nightclubs, beach-bars and squatting culture have all been affected by these developments, and the ongoing closures, noise-restrictions and police crackdowns have increasingly taken their toll. It is all good and well for Berlin to be “poor, but sexy,” but this slogan is worthless to investors if they cannot capitalize on the cultural class that it attempts to tempt to the city with its rhetoric. Part of what is so intriguing about the development of augmented reality in Berlin as a case study is that it is the product of precisely this cultural class. As well as promising to generate new ways of seeing urban space, it is also increasingly viewed as a tempting opportunity for investors. In 2010 Berlin hosted the first European Augmented Reality conference, which promised to “showcase the fantastic outlook of AR with the goal of transforming it into a concrete business reality” (“Announcement Presentation” 2010). The increasing visibility of augmented reality projects such as *Berlin Wall 3D* and *The Witness* in Berlin therefore points not only to the promise of the technology, but also to the perceived successes of Berlin’s place-marketing campaign. Mark Gardeya therefore emerges as an ideal poster-boy for a Berlin that emphasizes individuals as key constituents of place in the city post-reunification. In reproducing the Berlin Wall, Gardeya is almost a literal embodiment of this narrative, in that his project’s use of the GPS grid produces a very visible (if not wholly material) marker in, and of, space along the border of the former GDR.

### ***The Berg: Sublime Virtual Object***

My final example of augmented space is at once the most unremarkable in terms of its technological innovation, but perhaps also the most representationally suggestive. It stems from a social media campaign instigated by German architect Jakob Tigges in 2009 in response to the issue of the closure of Berlin’s Tempelhof airport, and the subsequent indecision as to how the large grassy site might be used in future. Tigges’ proposal for the site was the knowingly absurd construction of a 3,000-foot mountain, called *The Berg*, with the airport’s immense curved terminal functioning as a partial perimeter (see Appendix C).

Central to the campaign was a website ([www.the-berg.de](http://www.the-berg.de)), which included a manifesto for the project:

*While big and wealthy cities in many parts of the world challenge the limits of possibility by building gigantic hotels with fancy shapes, erecting sky-high office towers or constructing hovering philharmonic temples, Berlin sets up a decent mountain. Yet, never at a loss for anything, we do not have to build it. We just picture it to ourselves and pretend its beautiful existence to everyone else: Its peak exceeds 1000 metres and is covered with snow from September to March...*

*Hamburg, as stiff as flat, turns green with envy, rich and once proud Munich starts to feel ashamed of its distant Alp-panorama and planners of the Middle-East, experienced in taking the spell off any kind of architectural utopia immediately design authentic copies of the iconic Berlin-Mountain. Tempelhof no longer only is on Berliners' minds: People come in flocks to—not to see the mountain. Thus,*

*Come and see The Berg!*

The site also contains crude architectural diagrams, mock images depicting the view from *The Berg's* summit, and even a series of 'proof' documents, including fake postcards, *Berg* inspired graffiti, and a détourned street map featuring *The Berg* at its centre (see Appendix D). Upon its closure, Tempelhof became the largest void in the city, and in explicitly acknowledging the complete implausibility of its own scheme, *The Berg's* manifesto plays on the city's desire to fill, and eventually, exploit, its voids. "Never at a loss for anything, we do not have to build it. We just picture it to ourselves and pretend its beautiful existence to everyone else." This imaginary void filling is pitched as the perfect project for Wowereit's "poor, but sexy" Berlin, in that it is at once 'creative,' cheap, and utterly beguiling in terms of the sublime image that it depicts. It also has a subversive edge, in that it draws attention to the hollow attempts of the city's architects and planners to fill both the Tempelhof space and other vacant sites around the city. Although the mocked up images depicting *The Berg* in the centre of Berlin lack material referents, this does not detract from their symbolic efficacy, and in the selection of a series of souvenirs and fake photographs they even point to a series of spatial practices that seem to authenticate *The Berg's* existence. In this sense, *The Berg* has a more visible materiality than Gardeya's *Berlin Wall 3D*, which lacks precisely this participatory culture around it.

Visually, *The Berg's* promotional images are remarkably crude, and do not even attempt to aspire to any kind of verisimilitude; rather, the heavy-handed way in which images of an immense mountain are superimposed over the backdrop of inner-city Berlin functions as a knowing gesture, informing the viewer of its illusory status, while appealing to them to believe in it regardless. *The Berg* also functions as a marker of place, in that it explicitly gestures to the spatial processes of place-making at all three levels of Lefebvre's dialectic. Representational spaces are accounted for in the mocked photographs, spatial practices are alluded to in the images of *Berg* inspired graffiti, and representations of space are acknowledged in *The Berg's* appearances in détourned maps and architectural blueprints. For all its sublime splendour, *The Berg* campaign is at its most effective when, as in the best moments of Berlin's city-cinema and documentary film-making, it demystifies the production of space itself. It directly contradicts *Wired's* pronouncement that only seeing data allows you to see authentically in that it reveals that space itself is social, that there is no possibility of accessing a 'real' through, or behind, the data. Rather than privileging the digital layers as *Berlin Wall 3D* does, or revelling in its own spectacular technological innovation, as in *The Witness*, *The Berg's* implicit acknowledgment of the social character of space provides a glimpse of how a blueprint for Manovich's 'poetics' of augmented space might be generated.

### Logocentric Cartographies

Taken collectively, each of my chosen examples of augmented space in Berlin contributes to, in the words of Janet Ward, Berlin's "fictitious status as a networked city, as a virtually conceived version of itself" (*Post-Wall Berlin* 2011, 328). While the emphasis on cultural production does mark Berlin as 'augmented city' out as a new development, its "artifice of becoming," visible in each of these examples, neatly corresponds with the city's tradition of imagining and staging itself virtually as a means to ignore, obscure, or substitute for deficiencies, both perceived and actual, in its past as well as its present (Ward, *Post-Wall Berlin* 2011, 329). This tendency also speaks precisely to the paradigmatic assumptions of the augmented space as a theoretical framework, in that its emphasis on physical space as a container, or backdrop, for digital augmentations generates a hierarchical relationship between the material and immaterial layers in which the latter are privileged over the former. The emphasis on the Euclidean nature of dataspace in Manovich's 'poetics' and

the production of finite augmented hypertexts built to cohere precisely to Berlin's urban landscape ignores the social nature of the production of space as outlined by Lefebvre.

If augmented space is to have any sense of a 'poetics,' these are likely to emerge in the representational spaces of augmented space as indicated in the example of *The Berg*, and in the production of modes of seeing which reject the Logocentric cartographies of Manovichian dataspace, as in my erotic reading of *Lola Rennt* in Chapter Two. Following the dual logics of remediation, augmented space comes with a promise of generating new ways of seeing the city, and just like city-cinema, in doing this it necessarily functions as a reimagining of what a city is. In each of my examples, the promise of augmented space as a new kind of visual economy is tied up with the promises of the 'New Berlin' as a result of their shared emphasis on the spatial practices of the city's 'creative class,' exemplified by the protagonist in the trailer for *The Witness*, and also by the figure of Marc Gardeya in the promotional material for *Berlin Wall 3D*. The 'sites' that these examples visit are also significant for their effacement of markers of place, something that is most clearly evident in the trailer for *The Witness*, which imagines Berlin as a sterile assemblage of empty car-parks and hotel rooms. As a landscape of non-places, Berlin becomes an indeterminate city, a space of "pure potential" which evades actualization (Deleuze qtd. in Shaviro 2010, 43). This is an extreme extension of the notion of Berlin as the city-to-be identified by Janet Ward, a place where nothing can be finished, and where any potential becoming is delayed via an "endless postponement" (Deleuze qtd. in Shaviro 2010, 43). After the 'New Berlin,' individuals are cast as the primary markers of place, something that occurs both at a paradigmatic level, in that augmented space requires the user to (following Lévy) be physically present to be actualized, but also in the way that the its developers are transformed into 'space pioneers,' able to single-handedly restructure the city's visual economy by holding up an iPhone. However, their project can never be completed, can never be entirely actualized, because that would necessitate more than merely 'filling in' the city's voids; it would require a committed engagement with the social nature of space that is unsustainable in the context of late capitalism. Instead, Berlin must always remain virtual, as city to be, as development to complete, and as memory to obscure.

## Conclusion: The Persistence of the Virtual

In studying Berlin as virtual city and as mediated space generated through processes of virtualization and augmentation, this thesis attempts to stage an intervention in new media theory. In this, it has demonstrated the extent of the struggles over the production of space in Berlin after *Die Wende*, and outlined how these tensions extend into the distinctive visual regimes that structure the everyday experience of the city's urban spaces. Promises of the new, evident in the visual economy of Berlin's city-cinema, the representations of space in the 'New Berlin,' and the 'cinemas of transactions' in augmented space as forms of place marketing and 'creative class' triumphalism, have been a consistent theme. With reference to the work of Pierre Lévy, I have also drawn attention to how the fragmentary, multiple nature of Berlin as a mediated, virtual space is produced and sustained through transformations between different modalities of being occurring in the actualizations, virtualizations and potentializations of its (urban) space. What these movements point to is a persistence of the virtual city, even in the face of the promise of the new which accompanies the augmented space paradigm, both as a theoretical framework, and as a commodity in Berlin's media economy. Rather than recede, the virtual city of the 'New Berlin' actively structures the logic of Berlin as 'augmented city,' particularly in its production of non-spaces, and in its emphasis on the role of the individual as the fundamental marker of a place that can never be fully realized, but whose presence is always gestured to in the city's self-staging theatrics and promotional discourses.

The efficacy of the virtual city is particularly pronounced in the visual regimes established throughout the history of its city-cinema, from Ruttman through to Wenders, Tykwer, and Sievert. Successively, the city appears as a spectacle of industrialized and mechanized modernity, a fractured landscape of wounds and fraught memories, as erotic anti-cartographic geography, and as a self-eliding city-as-commodity. Where Tykwer and Wenders gesture to the possibility of generating visual experiences that evade the Logocentric tendencies of the abstract space of capital, the 'New Berlin' that is shown taking shape in Sievert's *Berlin Babylon* is over-determined by its own rigid insistence on nineteenth-century representations of space, a tendency which in turn obscures the city's platonic ontology as a site of multiplicity, otherness and encounter. The visual regimes of augmented space, particularly as they are generated within *The Witness* and *Berlin Wall 3D*, are in many ways a continuation of the latter tendencies, reterritorializing Berlin into a space that is at once indistinct in the lack of experiential possibilities implied by its non-

placeness, but also intensely reified through an ongoing series of memorializations. The ways in which augmented space promises to paint over, or fill in, urban spaces which are deemed undesirable are exemplary in this respect, in that they gesture to the production of an urban landscape where sites that retain any sense of otherness might be completely elided, while the very ‘creative’ individuals who engage in these acts of visual marginalization are championed as transformational ‘space pioneers.’

I have also worked to trace the limits of Manovich’s ‘poetics’ for augmented space in the context of Berlin. In particular, I draw attention to how the discourses of the new around augmented reality neatly parallel and extend those made as part of the ‘New Berlin’ project. However, where the limits of this discourse in the ‘New Berlin’ are exposed in the total absence of any vision for the future of the city without resorting to simulacrum and non-places, and therefore functions as an intensive and distinctively Germanic form of capitalist realism, the promises of the new in the city’s augmented spaces are perhaps even more hollow. Here, the spectacular qualities of augmented space as a ‘cinemas of transactions’ completely overwhelms the limited—both at the levels of access and visual economy—nature of its ‘poetics.’ Far from offering a challenge to the hegemony of abstract space in Berlin, the primary function of augmented space in the city to date is to function as a distinctive form of self-marketing that simultaneously generates an image of Berlin as ‘creative city’ and of its inhabitants as the primary markers/makers of place.

These critiques have serious implications for the theoretical assumptions that underpin augmented space as a paradigmatic framework for making sense of the relationship between new media and the city. If ‘dataspace’ is understood in strictly Euclidean terms then it can only ever be a reflection of representations of space, and an extension of the abstract space of capital. This insight therefore leads me to reject the assumption that augmented space necessarily supersedes the virtual as a productive theoretical framework. Instead, I argue that virtuality retains its efficacy as a framework for understanding the operation of new media, the production of space in the city, and the significance of visual regimes, particularly within its representational spaces. Instead of simply disregarding the ‘virtual city’ on the basis of the failures of the reductive binaries which tended to be employed when articulating its operation during the 1990s further research engaging with new media in an urban context, and augmented space in particular, might benefit adopting and extending my attempt to engage in a dialectical form of dialogue between Lefebvre and Lévy here.

The moments in Berlin's city-cinema, such as in *Lola Rennt*, *Berlin Babylon*, and *Der Himmel*, which draw attention to the social nature of space, and the contingency of its production along historical, economic, political and cultural lines, are worth treasuring in this respect. Following Lefebvre, I have shown how the production of space remains dominated by the abstract space of capital, but my emphasis on the production of an Anti-Logos in the urban erotic's of Berlin's city-cinema is intended to repoliticize its virtual spaces, and open them up as potential sites where alternative futures might be imagined, and then actualized. Manovich hopes that the 'space pioneers' of the future learn from Prada (2005, 24) but I would prefer that they pay attention to the work of Wenders, Siegert and Tykwer. In particular, I would like to highlight the significance of the moments in these films that draw attention to the link between the production of space as a social process, and what Steven Shaviro has refers to as the "antimony of neoliberal globalization." Here, Shaviro points to a fundamental paradox in the logic of late capital between the immaterial, fluid nature of its abstract spaces, the problematic posed by their representation, and the way this is contradicted by their capacity for violent efficacy as experienced, for instance, in the consequences 2008 financial crisis (2010, 36), or in the immediate failure of Berlin's economy following the 'New Berlin' project. Augmented space, and its ability to allow users to engage at the level of 'dataspace' has the potential to help us overcome this antimony, in that it might generate a means of 'seeing,' and perhaps even intervening, inside the space of flows, and render the abstract nature of capital if not wholly intelligible, then at least somewhat visible. Augmented space, and the theorists, writers, programmers, and hackers who constitute it need to learn from cinema, the powers of its visual economy, and its technological and virtual promises. Like the children who catch a glimpse of Daniel in *Der Himmel*, the radical potential of augmented space might reside in its ability to enable us see the unseeable, to represent that which evades representation, so that we can render it familiar, and therefore develop the means to alter it.

Alternatively, we might consider how augmented space could be made to extend the erotic vision of *Lola Rennt*, producing an Anti-Logos that might further virtualize Berlin's landscape, accelerating the processes of deterritorialization until they reach a radical limit or breaking point. Following the sublime image of *The Berg*, the transgressive potential found in Berlin's 'dataspace' might be actualized by rendering it uncanny, transforming its rigid Euclidean geometries and spatially reified architectures into a heterogenous space of encounter, chance, and carnival. Either way, the 'poetics' of



augmented space in Berlin need to adopt a properly dialectical attitude towards the production of the city as a virtual space and avoid the postmodern traps of irony and pastiche.

Finally, it is worth pondering whether the conversation I have attempted to facilitate between the work of Lefebvre and Lévy might be expanded beyond the space of Berlin. As I noted in my introduction, Berlin has a particularly complex and fraught relationship with the virtual. Different urban contexts will necessarily generate different outcomes, so further research conducted within a Lefebvre-Lévy framework would undoubtedly benefit from exposure to other urban spaces. In fact, this relationship does not necessarily even have to remain within the frame of the city. The work of both theorists is remarkably flexible, and there is no reason why a dialogue cannot be sustained between them in contexts that are not urban in their nature. There are many possibilities here, for, if Lefebvre is correct, wherever the relentless movement of capital flows, it produces a distinctive space that necessarily remains open to critique at the level of representation.

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## Appendix A: *The Witness*



## Appendix B: *Berlin Wall 3D*



## Appendix C: *The Berg*





## Appendix D: *The Berg*

The Berg

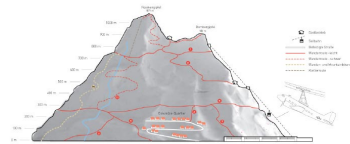


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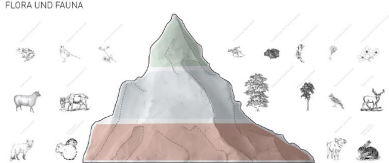
The Berg



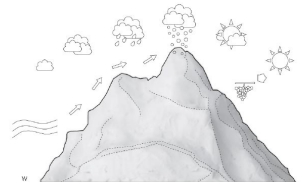
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