

RETHINKING URBAN LIGHTING: GEOGRAPHIES OF ARTIFICIAL LIGHTING IN EVERYDAY LIFE

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Rethinking urban lighting: geographies of artificial lighting in everyday life

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DEDICATION

This thesis is driven by curiosity and a desire to challenge my own beliefs and understandings of elements that are taken for granted in our everyday lives. One of these elements is light, and over the past five years, I have been curious to know more about this medium that seems so ephemeral and effervescent, yet powerful and immediate.

My curiosity has been stimulated throughout my education and studies at various universities, dating back to my time at University of Copenhagen, later Roskilde University, then a short stop at City University of New York, and lastly Queen Mary University of London. Each of these institutions have provided me with social and intellectual backing and at different times in my life they have served as homes. I cannot understate the importance of the many inspirational teachers, colleagues and students that I have encountered, worked with and become close friends with at each of these places. This thesis is the culmination of my journey through each of these places, and is dedicated to the power that education holds, in changing minds of students, and thus, sparking curiosity in new generations to critically engage with the world that surrounds us. My dearest hope is that this thesis will inspire students to keep on questioning what we take for granted. I therefore dedicate this thesis to all the students that embark on their own quest to become wiser on the mysteries of the world, and help others understand our predicaments. Keep on questioning.

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Putting my name on this thesis as a single author does not do justice to the immense support I have had from all the people around me. The thesis would never have been if not for the support of my family, partner, friends, colleagues and of course the people who entrusted me with their personal stories and spent their dearest time talking to me about mundane stuff and esoteric topics, my research participants. Let me therefore dedicate a couple of sentences in acknowledgement of the efforts and contributions of these people.

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The conceptual framework and intellectual scaffolding that forms the backbone of the thesis is a product of a long series of discussions I have had with supervisors, colleagues and friends. My supervisors David and Jonas are inspirational figures and role models to me, and through stimulating conversations you have helped me build up an understanding of what research is. You guys have shown me unconditional support, shown belief in my ideas and ability, and encouraged and helped me through good and hard times. You have taken me seriously as a researcher and a human being. Your supervision supersedes academic advice – you have become true friends, friends I hold very dear.

I have been fortunate enough that Tim Edensor, Robert Shaw and other academic friends have been willing to discuss my research at conferences and talks, challenging my ideas and approaches. The field of lighting studies would not be without you, and I acknowledge that my work would not have been possible if I couldn't stand on your shoulders. You have all helped me understand my own work better and sharpened my arguments.

I have been fortunate enough to present different snippets of the thesis at conferences and workshops, which have greatly helped me in developing arguments and challenging my ideas. Thanks to Rob for inviting me to the ‘Conceptualising spaces of light and dark’ workshop at Durham University, thanks to the participants at the ‘Light Cultures’ conference at RUC, and thanks to Don Slater and the rest of the Configuring Light team at LSE, for inviting me to speak at the ‘Cities, Light and Technology’ conference in Eindhoven. I have also presented my work at the ‘Ambient and atmospheric geographies’-session at the annual AAG conference in Chicago 2015, at the ‘Lighting Conflicts’-session in 2014 and the ‘Illuminating Space (2) – Designing with light’-session in 2013, both at the Annual International Conference of the RGS with IBG. Session organisers and participants have been helpful in critically engaging with my ideas and thus developing and sharpening my arguments.

Last, I want to recognise the effort and goodwill shown by my research participants. You have all taught me what light means and how it can be understood. I have thoroughly enjoyed getting to know you, and hope that the thesis does justice to the efforts you have made to meet my obscure demands about timing and topic of conversation. A special thanks must go to Leila Nicholas, Rakhi Sudra, and Junia Andrews, for showing interest and putting me in contact with residents. Thanks to Carrol, Ishmael, and Beverly for showing me around Newham’s corners, and making sure I didn’t get lost on our treks.

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ABSTRACT

In this thesis I study the role of artificial lighting in the everyday urban life of older residents living in the London Borough of Newham. Newham's light infrastructure is currently undergoing change as the borough's entire 19,000 street lamps are being replaced with Light Emitting Diodes and as a range of regeneration projects provide public spaces designed with new lighting. By increasing visibility and encouraging everyday activity into the evening, the Council claims that the changes in public lighting will provide 'eyes on the streets' and encourage 'eyes from the windows' of buildings, contributing to increasing 'natural surveillance'. The Council's avowal of everyday practices in streets and in homes, has made me question how lighting affects the way older residents move through streets and carry out domestic practices as darkness falls. The study explores how light planning, lighting design and everyday, routine practices in the public realm and inside homes co-produce the urban, lit environment.

Two major contributions of the thesis lie in the (post)phenomenological approach I develop to study everyday experiences of urban lighting, and the methodological framework I employ to research such practices, which combines mobile and visual methods. I have conducted 11 in-depth interviews with nine different planners and designers, 12 walk-along interviews with 22 residents between 58 and 79 years old, and a collaborative photography project with 14 residents between 68 and 96 years old. As I show how older residents experiences different lighting technologies, layers of light, and different lit spaces in their neighbourhoods, I discuss how urban lighting makes them see, feel and carry out routine practices in particular ways. Based on my findings, I argue that urban lighting shapes what, and how, people see, but *how* people see depends on how they negotiate changes in lighting. In a range of examples where residents mould the urban, lit environment or respond to lighting in different ways, I show how they play and active part in co-producing ways of seeing. I argue it is crucial that light planners and lighting designers recognise such co-constitutive role of everyday practices in order to ensure better lighting for our future cities.

DANISH SUMMARY

I denne afhandling undersøger jeg hvordan kunstigt lys indvirker på ældre borgeres hverdagsliv i Newham—en kommune i den østlige del af London. Sideløbende med at Newhams 19.000 gadelamper bliver udskiftet med LED armaturer introduceres ny belysning i en række større byfornyelses projekter, hvilket bidrager til en radikal ændring i lysinfrastrukturen i hele bydelen. Kommunen argumenterer for at ændringen i den offentlige belysning øger sigtbarheden og tilskynder en øget aktivitet efter mørkets frembrud i det offentlige byrum, og hermed fremskynder en tilstedeværelse af folk i gader (‘eyes on the streets’) og folk, der overvåger gader fra bygninger (‘eyes from the windows of buildings’), hvilket bidrager til den ‘naturlige overvågning’ af det offentlige rum. Sådan en blåstempling af hverdagspraksissers rolle i at skabe overvågning og sikkerhed i byen har drevet mig til at undersøge hvordan lys indvirker på ældre borgeres færden gennem gader og deres hjemlige praksisser efter mørkets frembrud. Mit studie undersøger derfor hvordan lys planlægning, lys design og hverdagspraksisser i det offentlige byrum og i hjemmet samproducerer den belyste by.

To af afhandlingens centrale bidrag ligger i den (post)fænomenologiske ramme jeg udvikler til at studere praksisser i og oplevelser af urban belysning, og den metodologiske tilgang jeg iværksætter i studiet af sådanne praksisser ved at kombinere mobile og visuelle metoder. Jeg har udfærdiget 11 semi-strukturerede interviews med ni forskellige planlæggere og designere, 12 walk-along interviews med 22 borgere mellem 58 og 79 år, og et kollaborativt fotografi projekt med 14 ældre mellem 68 og 96 år. Jeg viser hvorledes ældre oplever forskellige lys teknologier, forskellige lyslag, og forskellige belyste byrum i deres nabolag, og diskuterer herudfra hvordan lys indvirker på hvorledes de ser, føler og gør deres rutiner. Jeg argumenterer for at bybelysning former hvad og hvordan ældre borgere ser, men hvordan de ser afhænger af hvordan de aktivt forhandler ændringer i belysningen. Gennem en række eksempler, hvor de ældre borgere former det belyste byrum eller reagerer på forskellig vis, viser jeg hvorledes de ældre borgere spiller en aktiv rolle i at medskabe de måder de ser på. Jeg argumenterer for at lysplanlæggere og –designere bør anerkende denne medskabende rolle af hverdagspraksisser for at sikre bedre belyste byer i fremtiden.

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1. INTRODUCTION

Lucie: This is the best lighting, this lighting.

Jackie: It is a blue lighting, it is not that orange one ... you've got a clearer view. When you come here ... stand here, and see how clear that looks ... and then now look over at the orange lighting. That's the difference of the colour in the lighting.

Casper: So it really affects the way you see?

Jackie: It reflects better, it feels...

Lucie: You feel confident walking here. You can see your face quite clear.

(Lucie, 69, and Jackie, 67)

when you can see lights around you, like here, where you have shop lights and light coming from people's homes and lights from the traffic, you don't feel alone...But if all these lights from traffic, shops and people's homes weren't on...you would feel lonely and you would need street lighting.

(Mary, 70)

These two quotations are taken from conversations I had with residents in two different residential parts of Newham, as they took me along routes they routinely walk during the hours of darkness. The conversations were focused on the different lights they encountered along their walks, which either bore significance to them or which they had never considered until we started talking about them. A common point the women raise is the sense of comfort lighting can give, as it makes Lucie feel "confident" and Mary feel surrounded by people, even though there is no one around. But, it is not any kind of lighting that induces these feelings; the women identify very different light sources in the urban lightscape and attach different meanings to them, giving reason to question how different types of lighting condition ways of seeing and being in the city during the hours of darkness in very different ways. This question lies at the heart of this thesis.

Like most of the residential streets in East London, the streets we walked down were covered in a thick, murky, yellowish haze; the kind of dull miasma we know well from noir-inspired Hollywood movies that give an eerie feel to the illuminated ‘night’. The oft-criticised Low or High Pressure Sodium (SON) lamps – the preferred street lamps of the 1970s – are what make them look like rivers of gold, when seen from above. But we were not seeing them from above, we were walking through them, and Lucie, Jackie and Mary, live in them. These residential streets are embellished in the orange light that the women see *through*, only realising this once a different light source broke with the orange penumbra—the newly installed LEDs that give a bluer, clearer light along Lucie and Jackie’s path. Along Mary’s path, the different colours and intensities, streaming from the lit homes and shops, caused such disruption. As the aim of the thesis is to scrutinise the role of lighting in everyday urban life, such interruptions in the embodied experience caused by a sudden change in lighting provide a point of entry into exploring how lighting is most often taken for granted; we simply see, without questioning *how* we see. Newham proves a particularly interesting case for raising such questions and exploring such interruptions in the urban, lit environment. Once an industrial heartland, heavily affected by processes of deindustrialisation and decline from the 1970s and onwards, Newham has overseen a number of large-scale regeneration projects since the turn of the century. Newham lays ground to some of the current biggest regeneration projects in the UK, for example The Olympic City in Stratford, Canning Town and Custom House and the Royal London Docks. As part of the policy-driven urban change, the London Borough of Newham Council (hereafter, referred to as the Council) have initiated a plan to change all the street lights by 2018, which evidently means that the borough currently provides luminous interruptions throughout all its neighbourhoods.

In 2015, almost 80% of the 19,000 streetlights in Newham were SON lights and the remaining 20% an equal mix of Light Emitting Diodes (LEDs) and Philips’ Cosmopolis Metal Halide (MH) (London Borough of Newham, 2015). However, this will not stand for long. By 2018, Newham’s Highway Maintenance & Street Lighting unit will have replaced all SON lights with LEDs—producing a bluish light with up to four times better Colour Rendition, yielding the “clearer” light Lucie and Jackie remark upon in the quotation. The overhaul of the lighting system in Newham is driven by the Council’s aim to reduce energy consumption and maintenance costs (LEDs consume between a quarter and a third of the energy that SON lights consume and only

need replacing every 20 years, compared to every fourth year for other sources) (London Borough of Newham, 2015). Furthermore, the change is driven by a wish to produce a “better quality of light”, which LEDs are argued to provide, benefitting the “safety and security” in the borough (Interview John Biden, 23 February, 2016).¹ The Council claims that:

Street lighting can improve a feeling of security and also reduce the ‘cover’ for crime... [and therefore] it may be necessary to consider the *lighting* within the borough in order to maintain a perception and reality of safety in the borough. (London Borough of Newham, 2007a, p. 29 emphasis added)

‘Security’ is a prime concern for the council and lighting is seen as crucial in improving the “perception and reality of safety”. But it is not only the streets that are being refurbished with LEDs. For all new developments, whether in the public realm, housing or office buildings, installation of SON lights is banned in the British Standards (Secured by Design, 2014, p. 25). With the on-going regeneration and development of the borough, a plethora of new commercial, residential, leisure and public spaces are being constructed, and evidently designed with new lighting. Therefore, the council furthermore aims at:

ensuring that new developments, open spaces, residential and business areas are designed in ways that reduce the opportunities for crime. This includes creating spaces that are overlooked, *suitably lit*, and with clear demarcations between public and private space. (London Borough of Newham, 2012, p. 224 emphasis added)

Thus, lighting and the upgrade of the urban, lit environment is intricately linked to issues around “safety” and “crime”. And in Canning Town and Custom House lighting is given a central role in the attempt to “open up the area” for pedestrians as darkness falls, creating “simple and accessible routes” that partly help alleviate the “confusing street layout” by increasing transparency and visibility (London Borough of Newham, 2003, p. 4). Such transparency is claimed to improve safety and security and encourages people to venture out in the streets during the hours of darkness in greater numbers.

¹ Safety and security is a problem in Newham, according to the council; together with boroughs Tower Hamlets and Barking and Dagenham, Newham yields the highest levels of fear of antisocial behaviour and walking alone after dark (Greater London Authority, 2015): 43% of the residents felt unsafe by walking alone in the area after dark in 2015 (London Borough of Newham, 2016b, p. 112). 66% of the residents experience problems with “Teenagers hanging around streets” and 50% with “People being drunk and rowdy on the streets or in other public spaces” (London Borough of Newham, 2016b, p. 114).

Therefore the supposed effects that lighting is claimed to have on the urban environment and the urban populace, suggests that experiences and everyday lives can be profoundly affected through design.

I want to question this assumption and put such claims under scrutiny by exploring how people respond to different light sources throughout their routinized, everyday lives. My research has been conducted at a time where these changes were in their infancy, and only emerged in central areas of Canning Town central, Stratford and the Royal Docks. In the residential areas further east and north, most residents had not seen any change at all, and for those that had, change was limited to a single street corner, pedestrian crossing or a side street refurbished with LEDs, standing out against the carpet of orange SON light. Cutting across newly designed neighbourhoods and residential areas awaiting their impending luminous overhaul, my research considers how residents experience the lighting in their local neighbourhoods, within a context of policy- and technology driven change. Rather than studying the experiential ‘effects’ of the design and refurbishment initiatives, I therefore consider how different types of lighting ‘as found’ in the urban landscape impinge on, and support, everyday life in different ways. I focus on the ways that the Council claim to change experiences through light planning, how lighting designers claim to give spaces presence in particular ways through lighting design practices, and how residents use the various artificially lit spaces in their local neighbourhoods in everyday life, walking to the station, visiting relatives, or coming home and drawing curtains. When focussing on the varying practices that are invested in producing the urban, lit environment, I therefore wish to focus on the everyday practices, such as walking in the streets or drawing curtains in the home, and how these relate to policy, planning and design practices that aim at giving shape to the illuminated city. A central question that drives the research for this thesis reads: how is the urban, lit environment produced, and how do the diverse processes of production affect the everyday lives of residents in the city during the hours of darkness?

* * *

My research makes a distinctive contribution to the understanding of urban lighting by exploring how everyday, routinized practices – such as going out to visit neighbouring relatives, going to the bus stop, preparing a meal at home, or getting ready for bed – are shaped *as well as* give shape to the urban, lit environment. To unfold how I do

this, I will briefly situate my approach within wider debates in social sciences, asking three sets of questions that inform and position my research in the field of lighting studies.

First, I engage critically with ideas of how lighting technologies condition urban experiences (McQuire, 2005; Nye, 2013; Schivelbusch, 1995; Thrift, 2004a) and shape night-time practices (Beaumont, 2015; Edensor, 2015b; Ekirch, 2005; Koslofsky, 2011; Melbin, 1988; Schlör, 1998) by (re)considering the significance of sensory experiences and embodied practices. My focus on the body, the senses, and everyday practices, lends itself to recent debates in geography and anthropology on the sensory experience of light festivals (Edensor, 2015c), light art (Edensor, 2015a), and the use of lighting to support routinized practices in urban homes (Bille, 2014; Pink & Leder Mackley, 2014). Through the concept of ‘atmosphere’ these scholars pay attention to the role of light in shaping the relations between bodies and urban spaces (Bille, 2015; Edensor, 2012). While sympathetic towards such approaches, I consider the value of turning towards the work of phenomenologist Maurice Merleau-Ponty (1962, 1968), who is only briefly referenced by the above mentioned scholars. The value of thinking through Merleau-Ponty’s phenomenology of light, lies in considering how vulnerable and porous bodies (Vasseleu, 1998) are opened up towards invasion (Merleau-Ponty, 1962, p. 370) and (dis)orientation while maintaining a robust sense of experience and agency (Simonsen, 2013, p. 19). Yet, by drawing on post-phenomenological debates in geography, I address shortcomings of a ‘pure’ phenomenological approach (see Anderson, 2009; Ash and Simpson, Wylie, 2006) and develop a conceptual framework that pays attention to the co-constitutive relationship of the experiencing body and the material environment. I argue for the need to take the relation between body and environment as the starting point for analysis, as it is manifested in the ways people negotiate, adapt to, and rework, changes in the urban, lit environment through everyday routinized practices. Doing so, I ask the question: how do people’s routinized, everyday engagements with artificial light give shape to the urban, lit environment?

To engage with this question, I expand on how residents negotiate changes in the lit environment by drawing on recent work on the practice of walking in cities after dark (Beaumont, 2015; Morris, 2011) and the role of lighting urban ‘furniture’ in mediating the experience of walking in cities (Forsyth, Hearst, Oakes, & Schmitz, 2008;

Laurier, Brown, & McGregor, 2016). By investigating how pedestrians negotiate interruptions along their routinized walks (Middleton, 2010a, 2011b) such scholarship provides a vocabulary for considering the role of lighting in mediating and interrupting everyday practices during the hours of darkness. Furthermore, as hinted at in Mary's quote at the head of the chapter, the lighting that pedestrians meet is often varied and stems from a range of different sources that transgress borders between interiors and exteriors, the private and the public, the home and the city. Therefore, I also give attention to how people negotiate the changes in the urban environment once they have finished their travels through the streets and enter their homes.

Within scholarship on the home and the city, such negotiation with the 'outside' through the home has put the spatial categories of the home and the street into question (Blunt, Bonnerjee, McIlwaine, & Pereira, 2012; Blunt & Bonnerjee, 2013; Blunt & Dowling, 2006), bringing attention to the ways that borders of the home are stabilised (Burrell, 2014) and dissolved (Baxter & Brickell, 2014; Bille, 2017). While scholars have given attention to how residents communicate with the 'outside' through leaving windows lit and open (Bille, 2014) or communicating aesthetic taste and marking class distinction through decorative lighting (Edensor & Millington, 2009, 2010) I consider how residents negotiate, adapt to and rework the lighting that spills into their homes (see also Pink and Leder Mackley, 2014). I therefore contribute to studies of urban lighting by questioning the spatiality of the urban, lit environment, not as confined to spatial containers (Bille, 2014; Pink & Leder Mackley, 2014) or temporal events (Edensor & Millington, 2009, 2012), but rather as cutting across the borders of the home, the street and the wider neighbourhood, over time.

Second, my research into the everyday use and experience of urban lighting in Newham is situated within a context of policy-driven urban change. To elaborate on this, I engage with wider debates in geography on urban regeneration and architecture, particularly scholarship that scrutinizes urban regeneration projects through the prism of the senses (Degen, 2008) or mundane social practices (Koch & Latham, 2013). As an undercurrent running through this literature, scholars object to understanding experiences and social practices as direct effects of design initiatives or policies (see also Degen & Rose, 2012). Rather, Monica Degen, Gillian Rose and Begum Basdas (2010) argue that everyday use of spaces influence how people experience the urban form, suggesting the need to reconsider how spaces are produced through planning and design *as well as* everyday practices (see also Degen, 2008). Taking great inspiration in

such scholarship, I make it a core aim of my research to develop an understanding of how the urban, lit environment is produced through a diverse range of practices, counting light planning, lighting design and routinized everyday practices. While scholars who investigate how the artificially lit city is produced, give attention to practices such as master planning (Entwistle, Slater, & Sloane, 2015; Köhler, 2015), lighting design (Edensor & Millington, 2012; Isenstadt, Petty, & Neumann, 2015), light engineering (Shaw, 2014) or legislation (Krause, 2015; Morgan-Taylor, 2015) the role of everyday practices in producing the urban, lit environment is less explored. Apart from Tim Edensor and Steve Millington's (2009, 2010) recognition of vernacular Christmas light sources in giving shape to the urban lightscapes in Manchester and Sheffield, and Mikkel Bille's (2014) discussion of the role of luminous windows in contributing to creating a feeling of domestic cosiness in Copenhagen, no considerable work has yet discussed how the urban, lit environment emerges through everyday practices such as walking through streets, lighting up the home or drawing the curtains. I therefore wish to question the claims that are made to the supposed effects that light planning and design can have on everyday life and experience: in what ways do light planners and lighting designers think about their roles and how do they claim to shape and encourage particular forms of use and experience in the city? And furthermore, what are the limits to light planning and lighting design?

Finally, a third significant contribution of my research comes out of the empirical focus on the lived experience of older residents in Newham. By 'older', I refer to retired residents, but acknowledge that with participants ranging between 58 and 96 years old, the term older becomes somewhat generalising. However, I make an analytical point of distinguishing between different age groups as will become clearer in chapters 4, 6 and 7. Older residents have not received substantial attention in studies of urban lighting as scholars have produced 'broad representation' of populations (Bille, 2014; Edensor & Millington, 2009; Pink & Leder Mackley, 2014) or assumed an able, middle-aged body (Cook & Edensor, 2014; Edensor & Falconer, 2015). By bringing attention to the lived experiences of older residents, I consider the significance of lighting in mediating the felt (dis)connection from wider society (Ewart & Luck, 2013), and the (dis)orientation of older, vulnerable bodies in the city. I do this through a situated, ethnographic methodology, which approaches the embodied experiences and practices of older residents through their daily engagements with light, taking me along their routine walks, to see places they frequently visit and into their homes. Yet, in

doing so, I ask the question: how can everyday engagements with lighting be researched? And how can taken-for-granted aspects of everyday experiences of light be represented in research? With these questions, I engage with wider debates in geography on non-representational theory (Latham, 2003; Vannini, 2015) and develop a methodological framework to study everyday life and sensation. I propose a tripartite methodological setup, which draws on in-depth interviews with planners and designers (Adey, 2008a; Degen, 2008; Flyvbjerg, 2004), walk-along interviews with residents (Degen & Rose, 2012; Kusenbach, 2003) and the use of photography and photo-elicitation interviews (Dwyer, 2014; Harper, 2002; Rose, 2008a). With these methods I argue that sensitivity is brought to aspects of everyday engagements with lighting in the city, which are often overlooked or little recognised in light planning.

* * *

With the three sets of questions outlined above I provide different cuts into how the urban, lit environment is given presence. I focus on three distinct practices: the Council's provision of lighting across Newham and the lighting design of urban public spaces in Canning Town (chapter 5); routinized walks through the streets of Newham once darkness falls (chapter 6); and domestic practices, such as drawing curtains, getting ready for bed, or getting up in the mornings (chapter 7). Rather than studying how residents respond directly to changes in the built environment, I explore how residents experience the lighting in their local neighbourhood—amidst wider processes of urban change and luminous upgrade across the borough.

The conceptual discussions about how urban lighting can shape experiences and everyday practices in cities are unfolded in the following chapter, 'Rethinking the urban, lit environment'. I scope both past and recent debates on urban lighting in social sciences, and call for the need to reconsider central concepts such as the body, experience and practices in order to pay greater sensitivity to how people experience urban lighting. First, I discuss how the gradual emergence of street lighting in London and other cities is claimed to have changed the nature of subjectivity in cities by domesticating and disenchanting the urban night, utilising light as a means of exercising power and control over, and through, embodied practices. Second, I turn towards recent debates in geography and social sciences that nuance the understanding of such processes of domestication, by bringing greater sensitivity towards lived experiences.

In an attempt to answer such calls for paying greater attention to the senses and the diversity of lived experiences of lighting, chapter 3, 'A light phenomenology', develops an understanding of light as embodied while also providing an epistemological discussion of how such embodiment can be researched. I explore the potential value of turning towards Merleau-Ponty's phenomenology of light to take more seriously the role of the body, social practices and experience, and in particular to account for how people experience differently. With the notion of 'carnal light', I argue that scholars are better equipped to explore the paradoxical ways that lighting both shapes, and is given shape by, social practices. By raising the epistemological question: how can we know about everyday experiences of lighting? I put Merleau-Ponty's phenomenology into dialogue with methodological debates in anthropology and geography. As such, I develop an epistemological approach to studying light in practice.

The practical task of putting such conceptual thought about the urban, lit environment into practice is discussed in chapter 4, 'Researching light in practice'. In order to give the reader a sense of the context for the research project, I introduce the case study area and explain in more detail the practical measures through which the fieldwork was carried out. I present the ethnographic and situated methods I use to explore the variety of practices that produce the urban, lit environment: in-depth interviews; walk-along interviews; and photography and photo-elicitation interviews. Each of these methods is discussed in relation to wider debates about representation in cultural geography, anthropology, and sociology. The empirical work is unfolded in the following three chapters that provide different cuts into the way the urban, lit environment in Newham is produced.

In chapter 5, 'Newham the borough of (b)light', I turn towards the initiatives for improving the lighting across Newham and in Canning Town specifically, and focus on how lighting is used to shape human practices and experiences in particular ways. By tracing the different types of knowledge that inform light planning and design decisions, I claim that a subtle mismatch appears between light planning and lighting design practices. Planners and politicians aim at prescribing practices by making spaces more transparent and uncluttered, easing movement and increasing the number of pedestrians – providing 'eyes on the streets' and 'eyes in the windows' of buildings – all with the benefit of enhancing natural surveillance. Lighting designers, on the other hand, acknowledge the limits to their practice and conceive of their designs as per-

formative. By turning to the work of architects, landscape architects and lighting designers in delivering lighting designs for two specific public realm spaces in Canning Town – the A13 flyover and the Rathbone Market – I show how lighting designers use lighting as an incipient medium for leading and suggesting practices incidentally. The final section discusses the limits to lighting design and calls for researchers and practitioners to pay greater attention to the role of everyday practices in giving shape to the urban, lit environment.

Prompted by the Council's dedication to increase pedestrian traffic and encourage 'eyes on the streets', the following chapter, 'Moving through the illuminated night', turns towards the mundane practice of walking through the urban, lit environment. With an analytical focus on the embodied practice of moving through differently lit spaces, the chapter draws on material I produced through 12 walk-along interviews with 22 residents between 58 and 79 years old. The chapter gives attention to different ways that lighting conditions seeing and moving, unfolding how lighting gives shape to, and is given shape through, everyday use. By putting people's lived experiences into dialogue with policies and design initiatives, I discuss how a luminous mismatch occurs between the ways that the Council light their streets and the ways people experience them. As such, I call for greater attention in planning practices towards the sensibilities and sensualities different types of lighting produce, and the ways people in turn respond.

Following from the Council's recognition of the importance of 'eyes from the windows' of buildings in creating natural surveillance in the city, chapter 7, 'Nocturnal domesticity: the luminous home', examines the role of the luminous home to the experience of the urban, lit environment. With attention given to the home in planning guidelines and strategies I explore, on the one hand, the role of the luminous home to the experience of the urban, and on the other hand, I consider the role of urban lighting that streams through windows and into the home to domestic practices, as darkness falls. Drawing on a collaborative photography project I carried out with 14 residents between 68 and 96 years old, I show how lighting figures as a medium for exploring the relations between the home and the wider city. The chapter expands on the co-constitutive role of the luminous home in the urban, lit environment and the role of the urban, lit environment to domestic practices during the hours of darkness. Domestic practices are shown to be carried out in conjunction with changes in lighting

in the streets and in other people's luminous homes, suggesting that practices of making homes in the city as darkness falls – luminous urban domesticity – is intricately related to the wider experience of luminous city as home – luminous domestic urbanism. The chapter therefore develops the conception of the luminous urban home as integral to everyday life in the city during the hours of darkness.

Finally, in chapter 8, 'Conclusions: living with light', I draw out the main findings of the thesis, and sketch out how these findings contribute to key literatures on urban lighting and the night, and debates in cultural geography on architecture, urban walking and the home and the city. From these findings I draw some practical implications that speak more widely to urban planning and design practices, presenting three recommendations for practice.

2. RETHINKING THE URBAN, LIT ENVIRONMENT

In times when advances in lighting technologies are changing how people light their homes and how city authorities light their streets, it seems ever more urgent to question how such changes give shape to, and are shaped by, human practices in the city. Users can now control variables such as colour temperature, intensity, beam angle and dispersion according to preferences, and naturally city authorities experiment with introducing automated control systems and dimming strategies. New lighting technologies promise to change how people *feel about* the illuminated city, how people *feel in* the illuminated city, and how they ultimately come to live their lives in the illuminated city. Promises, mainly for the better. With the aim of exploring how older residents in Newham experience and engage with lighting in the urban environment, undergoing policy- or technology-driven change, this chapter investigates how lighting has been used historically and in contemporary contexts to configure the city and the experience of it.

The chapter follows Ben Gallan and Chris Gibson's (2011) call for geographers to explore paths that might lead to "more variegated experiences of lighting and darkness in cities...imagining alternative ways of being in the world" (Gallan & Gibson, 2011, pp. 2514–5). The task of exploring such "variegated experiences of lighting" is at the heart of this thesis, and in this chapter I develop an approach for doing so by engaging critically with past and recent scholarship on urban lighting, experience, sensation and social practices. I reason with anthropologist Mikkel Bille and archaeologist Tim Flohr Sørensen as they call for researchers to question "how the actual *matter* and the *use* of light shape experiences in culturally specific ways" (Bille & Sørensen, 2007, p. 266, emphasis in original). The chapter will develop a conceptual framework that takes account of the variegated experiences of lighting, while also questioning how lighting shapes and conditions experiences. Over less than a decade, social scientific research has experienced an unprecedented upsurge in research on urban lighting, providing a rich and well-informed catalogue of studies that document and question the historical, cultural and geographical diversity of how lighting shapes experiences and ways of being in the world. By reviewing this scholarship, I call for the need to pay greater sensitivity to how everyday practices contribute to shaping the urban, lit environment. I do this by putting scholarship on urban lighting into dialogue with

social scientists researching architecture, urban walking, the home and the city, and highlight the need to acknowledge the intertwining of light planning, lighting design and everyday life practices when accounting for how the urban, lit environment is produced through a multitude of practices.

The chapter unfolds in two sections. First, it draws on historical studies of lighting that document how the gradual introduction of new lighting technologies in European cities conditioned ways of seeing, feeling and practicing the city during the hours of darkness (Schlör, 1998; Simmel, 1971; Thrift, 1994). In scoping this literature, I take particular interest in how lighting has advanced processes of domestication and disenchantment of the artificially lit city—domestication understood as the process of taming vagrant and unruly practices (Beaumont, 2015) and disenchantment as the ways lighting systems have become ubiquitous to urban life, gradually taken for granted and unrecognised (Schivelbusch, 1995). By considering how such processes of domestication and disenchantment are claimed to shape urban subjectivity, I briefly revisit the work of Michel Foucault (1977) and Michel de Certeau (1984) as they turn towards the body as the site where such processes are played out and contested. Promoting an understanding of embodied power, the body becomes both an object and an instrument of the exercise of power, opening up for understanding not only subjects as shaped, but also giving shape to the urban environment—as de Certeau underlines—through mundane practices and doings.

Following from such recognition of the role of social practices in shaping the urban, lit environment, the second section, ‘Re-enchanting urban luminosity’, discusses studies of contemporary urban lighting with a greater interest in sensory experiences and everyday practices. By putting studies of urban lighting in dialogue with recent studies on urban walking and home and the city, I reconsider how everyday, routinized practices contribute to, and ultimately change, the way lighting can be conceived to domesticate and disenchant the city. Scholarship on the ‘home and the city’ reconsiders the significance of ‘domestication’ to how urban life is not only shaped by, but plays a constituent role in shaping the urban, lit environment (see Koch & Latham, 2013). Similarly, recent research on urban lighting and night walking re-enchants the everyday experiences of urban lighting by giving attention to the mundane, everyday practices of engaging with the urban, lit environment, particularly practices of walking (Edensor, 2015c; Sandhu, 2010). Through such cross-disciplinary discussion, I develop a framework that enables me to pay greater attention to the way that lighting mediates

experiences and furthermore account for how residents negotiate, adapt to and manipulate the urban, lit environment in everyday life.

Finally, I conclude the chapter by summing up the main points that I have made throughout, and draw some implications for how I can approach the study of light ontologically and epistemologically. These concerns are discussed in the next chapter that re-views the work of phenomenologist Merleau-Ponty, and sets up a theoretical framework for studying everyday practices and experiences of light.

2.1. A VERY BRIEF HISTORY OF URBAN ILLUMINATION

We all know it. When we turn on the bedside lamp or light a candle at the dinner table we use light for a particular purpose—to read a book before going to sleep or to create a cosy atmosphere over dinner. *We* are in control over light and use it as desired. In the streets it's a bit different. The individual is not controlling the lights as such; street-lights, traffic lights, commercial lights and signage are managed by a host of authorities and 'others'. Still, in any case, urban lighting is controlled and used to specific desired ends by humans. But in such mastery over the distribution of urban lighting, I want to question who has the power to control the urban, lit environment, and what the importance of such control holds to the way people experience the city after darkness falls.

An underlying premise for much writing on light and darkness is that each are considered “incessant” forces (Cubitt, 2014, p. 3) that encroach on human life beyond our ability and control (Bille & Sørensen, 2007, p. 269). Light is “entropic”, it transgresses borders and radiates through materialities, yet, humans respond through “negentropic” practices, manipulating and giving shape to it, in order to meet desired ends (Cubitt, 2014, p. 3). In his seminal work that unravels the historical emergence of lighting technologies mainly in European and American cities, since the ‘invention’ of fire, Wolfgang Schivelbusch argues that the gradual taming of fire reflects the taming of society. Each invention and introduction of a new lighting technology, he argues, reveals a desire to tame the “destructive power of fire – a reflection of [humans’] own still-untamed drives” (Schivelbusch, 1995, p. 6). The untamed desire that Schivelbusch alludes to can be aligned with Sigmund Freud’s notion of the death drive—the desire for human dissolution and decay, where chaos reigns. Against such destructive desire, Freud posits the libido—the desire for social reproduction and societal order, materialised in structures, buildings and systems. As Sean Cubitt (2014) argues, the historical taming of fire and light is expressed in the gradual development of technologies that

control, manipulate and contain the incessant medium, but in doing so comes to control human life itself.

This relation between the advance of lighting technologies and the taming of society has likewise been recognised within geography, in particular in relation to the way the urban form has evolved in the age of the modern. In his influential work *Spatial Formations*, Nigel Thrift (1996) questions how technological advances in transportation, lighting, and electricity accelerated speed, light and power, shaping the modern condition of industrialising cities—although not confined to the city alone. Rather than marking a radical shift from pre-modern times, Thrift shows how technological advances, and lighting technologies in particular, gradually came to change ways of seeing and being in the city, questioning how lighting technologies, alongside technologies of speed and power, transformed the “nature of subjectivity” (Thrift, 1994, p. 200). Through interrelated processes, he shows how “an ever-expanding landscape of light” (2004a, p. 41), is claimed to have progressively ‘colonised the night’ (see Melbin, 1988), changed and facilitated specific forms of ‘night life’ (see Schlör, 1998), created new dream spaces of material but more importantly visual consumption (see Benjamin, 1979; Simmel, 1971), new opportunities for surveillance (see de Certeau, 1984; Foucault, 1977), and finally modulated the existing world by changing and challenging perceptions and sensations through use of colour, movement and intensity. By questioning how advances in lighting technologies and infrastructures can be argued to change the face of the urban, as well as the nature of subjectivity, Thrift provides a backdrop for examining how technological advances of lighting can be argued to create new ways of being in, experiencing and practicing, the urban, lit environment. In the following I will briefly touch upon each of the pressures that Thrift identifies, and argue that in order to understand how lit conditions are experienced, scholars need to attend to the lived experiences and social practices through which people engage with, and use, lighting in everyday urban life.

2.1.1. DOMESTICATING THE URBAN NIGHT: ERADICATING DARKNESS

The earliest records that document the emergence of public lighting in cities go back to 16th century medieval European cities. Street lighting was promoted to create visibility and assert an (objectivised) authoritarian presence in the night (see Koslofsky, 2011; McQuire, 2005; Schivelbusch, 1995; Schlör, 1998). The provision of visibility was a key concern, and it was promoted in very particular ways. By unravelling the history of street lighting it becomes clear how lighting was used for multiple purposes

such as patrolling, symbolically representing authoritarian presence, and creating spatial divisions. In doing so, public lighting also facilitated the rise of a range of leisurely activities and an expansion of everyday life practices into the night. Thus, the emergence of public lighting tells a story of how everyday life was promoted through increased control and domestication of the night.

While systematic attempts at providing public street lighting in 19th and 20th century Europe were concerned with the creation of visibility at night, they are argued to be more focussed on imposing structure and order on the city, and thus, by making select buildings and houses visible in particular ways (Schivelbusch, 1995, p. 82). Light was used symbolically to represent places of importance and mark out the presence of authorities in power. Light was not shed on the streets as such, but rather hung from houses, signalling the presence of particular buildings. Thus, the first attempts at promoting street lighting are argued to provide a symbolic demonstration of the power of city authorities, but in doing so, also ensured that “populations expanded beyond the original medieval boundaries” (Beaumont, 2015, p. 258), allowing for the development of distinct forms of ‘night life’. Lighting was used to ensure that people dared go out during the hours of darkness, and thus transcend the urban night formerly belonging to “night-revellers and the immoral” (Schlör, 1998, p. 59). Such seemingly immoral, revelling practices were officially mentioned in public records in the 15th century, under the term ‘nightwalking’. Nightwalking was used to designate the then vagrant acts of being outside in the public realm after dark without permission or a legitimate cause, and thus refer to “suspicious persons” that would be “wandering through the street and common areas, to the harm of all his neighbours and a dangerous example to others” (Ekirch, 2005, pp. 29, 32). At the time, being outside at night was banned in most cities (see Schivelbusch, 1995) and heavily linked to deviant and vagrant practices of thieves, prostitutes, beggars and homeless people, constituting an urban underclass suspect of being “up to no good” (Beaumont, 2015, pp. 2, 126, 138). The moral disorder of the night was embodied in the practice of nightwalking, and attempts to contain and control the city were forced through curfews and limiting activities at night (Ekirch, 2005, p. 32); street lighting became a means of decentred policing (see also Schivelbusch, 1995).

In order to further expand on how the night and darkness were imbued with moral decay and a sense of vulnerability, I want to turn briefly to phenomenologists

like Eugène Minkowski (1970) and Merleau-Ponty (1962) as they have been instrumental in theorising darkness as an embodied phenomenon. They stress that the loss of light and its equivalent sight squanders any sense of the self; once we lose our ability to orient ourselves visually we enter a “spatiality without things” and darkness brings with it an experience of “pure depth without foreground or background, without surfaces and without any distance separating it from me” (Merleau-Ponty, 1962, p. 330). As sight loses terrain, the body’s foothold in the world shrinks onto the subject, which has to rely on other senses in order to distinguish itself from the surrounding darkness (see also Shaw, 2015). As such, Minkowski purports that ‘dark space’ “does not spread out before me but touches me directly, envelopes me, embraces me, even penetrates me, completely passes through me” (Minkowski, 1970, p. 429). The way we are penetrated by darkness acknowledges a profound vulnerability of the body. As Minkowski argues, the “ego is permeable by darkness it is not permeable by light” (1970, p. 429), which therefore denotes a unique vulnerability of the body in dark space. As the body becomes one with the darkness it coincides with a mental unwellness (Campkin, 2013; Minkowski, 1970; Vidler, 1992): the body is *more* vulnerable and *more* open towards its surroundings (Edensor & Falconer, 2015; Edensor, 2013; Morris, 2011). As Robert Shaw argues, “in darkness I am rendered open to that other” (2015, p. 590).

Added to the anxiety of encountering the unknown, embodied in the figure of the other, Joachim Schlör (1998, p. 71) argues that insecurity is felt where there is great disobedience from systems of regulation and little possibility for control. This insecurity has been exploited by authorities in cities like London, Paris and Berlin, he continues, by mobilising the fear of something potentially happening in the darkened night into certain regimes of control; in this way, control is exerted in ways to touch upon “all areas of existence, even opinions, attitudes, forms of dealing with the environment, temporal rhythms and spatial feelings” (Schlör, 1998, p. 18). The eradication of dark spaces, and the attempt at policing streets during the hours of darkness while imposing curfews, therefore attempted at alleviating fear by rendering spaces transparent and visible. However, as A. Roger Ekirch argues, policing in London “grew less restrictive for pedestrians. Step by step, more persons enjoyed greater freedom of movement, particularly if they bore honest reputations and sound reasons for travel, unlike night-walkers” (Ekirch, 2005, p. 65).

The gradual acceptance of the freedom to move about in the night must be seen in parallel to the way the emergence of public lighting allowed for a socialisation

of the night. Public lighting is argued to promote ways of policing vagrant practices of nightwalking, and at the same time encouraging more sociable activities during the hours of darkness. As Craig Koslofsky puts it, lighting provided pedestrians with “convenience and social amenity by encouraging respectable traffic on city streets after dark” (Koslofsky, 2011, p. 133). The appeal to, and encouragement of, more ‘respectable traffic’, shows a deliberate attempt from City authorities to promote particular practices at night, because, as Koslofsky argues “City authorities tolerated and...knew that some nocturnal activities were necessary, such as the work of midwives, doctors, or latrine-cleaners, and others unavoidable” (Koslofsky, 2011, p. 133). The ‘unavoidable’ activities are radically different to the vagrant practices of nightwalkers, as these were first steps in promoting an expansion of everyday activities into the “frontier of the night” (Melbin, 1988). Such an expansion allowed for the city’s functioning after dark, and in London encouraged what Matthew Beaumont argues can be termed as an increased “gentrification of the night” (Beaumont, 2015, p. 115), by which is meant that upper- and middle-classes ventured out in greater numbers. Closely related, he argues that the increased leisurely and commonplace use of the city streets during the hours of darkness caused the “domestication of the night” (Beaumont, 2015, p. 116), referring to ‘taming’ of the once vagrant night, now accessible for the bourgeoisie. While not to be conflated, the two processes of nocturnal gentrification and domestication allude to the naturalisation of leisurely practices alongside mundane practices into the hitherto vagrant night. The expansion of light technologies marked a shift in the way that the city was practiced as “*pedestrians* filled major avenues, so did squares plazas become hubs of commotion and activity” (Ekirch, 2005, p. 325). The rise of ‘the pedestrian’ in London, marks an upper and upper-middle class expansion of activities by “promenading” the streets and to “securely stray” (Beaumont, 2015, pp. 129, 132), testifying to how the “city at night...became flamboyant” (Beaumont, 2015, p. 119). Yet, with the temporal expansion of the day into the ‘frontier of the night’, the night became accessible to the ‘public’. With more (middle- and upper-middle class) residents venturing into the streets when darkness fell, so ensued the need for protection and entertainment. The increased socialisation and bourgeois domestication of the night required policing of the streets in order to ensure the safety of people, seeking leisurely entertainment, but also people who were “forced in the first hours of evenings to run errands or make their way home in darkness” (Ekirch, 2005, p. 39). People who ventured into the night were potential targets for violence and crime, and lighting was

instrumental, on the one hand in deterring against crime, and on the other hand, in providing entertainment and possibilities for leisurely consumption. Through the taming of light and the night, gradually society was tamed. Such parallel processes of creating secure urban environments through, or alongside, entertainment, is captured by Schivelbusch as he argues that “public lighting creates the framework of security within which commercial lighting can unfold” (1995, p. 142).

2.1.2. DISENCHANTING THE URBAN NIGHT

With the introduction of new lighting technologies, “incessant activity” spread across the 24 hours of the day, which is argued to have fundamentally changed how humans came to practice and experience cities (Melbin, 1988, p. 7). As advances in lighting technologies through the 18th and 19th centuries allowed for brighter lighting systems to be deployed with fewer interruptions and fluctuations in intensity, city authorities and private businesses in London, Paris, Berlin, and New York, started using light in unprecedented ways (for further examples across the globe see Isenstadt et al., 2015). With the early promotion of pleasure gardens, lighting was used to create experiences that changed people’s leisurely consumption of the city at night, promoted through world fair exhibitions, light festivals and the increasing use of colourful lighting (Edensor, 2015c; McQuire, 2005; Schivelbusch, 1995). The urban night slowly gained a more experiential luminous presence, with shop-window displays along high streets, advertisements, pleasure gardens and light festivals emerging as nocturnal entertainment. Most notably the electrification of cities is argued to have changed urban lighting altogether, as it “exceeded any rational desire for maintaining public order” (McQuire, 2005, pp. 128–129). With electrification, lighting technologies are argued to have conferred “a novel sense of mutability on the previously immutable and monumental” (McQuire, 2005, p. 131), and allowed to inspire awe and fascination as the unprecedented intensity and durability of light suddenly produced a “spectacle for a mass” (McQuire, 2005, p. 130). With such increase of leisurely use and consumption followed an unceasing pressure on the city during the hours of darkness, continuing night shift working, policing, commuting, communication and so on, into the night. According to Jonathan Crary (2013), the consequence of the seeming solipsistic progress of human activities into the uncharted territory of the night has been the erosion of the ‘natural’ 24 hour cycle. The ever-present demand for ceaseless production and consumption around the clock, he argues, has turned the temporality of the urban into an indeterminable non-time, with ruinous implications for everyday life as urban dwellers

have gradually become deprived of sleep, privacy, and freedom of choice. The erroneous consequences for everyday life that Crary alerts us to, must be seen in relation to the ways new technologies—while welcomed enthusiastically for overcoming darkness with brilliance and unprecedented brightness—changed how people came to see, and therefore be in, the city. Other scholars support this point, and I briefly want to consider two examples for illustration.

First, Alice Barnaby remarks how prior to the emergence of public lighting in London in the 18th century, lighting had been used during mass protests to express discontent and revolt. However, an increase in systematically orchestrated and curated lighting displays and firework events in London marked “a general shift away from impromptu issued-based demonstrations towards more organized lighting displays” (2015, p. 21). Barnaby argues that London was staged through a bourgeois distanced appreciation of its form, suggesting that “the increasingly spectacular appeal of these types of events silenced the politically radical contingent present in earlier crowds” (Barnaby, 2015, p. 23). Barnaby therefore argues that the aesthetic appeal, the awe and fascination by which new modes of lighting was received, silenced voices and sedated the public into a state of passive fascination, appreciation and convivial co-existence.

Second, the awe, fascination and enthusiasm for new lighting technologies quickly waned. As Schivelbusch argues, new lighting technologies became commonplace—as the title of his book alludes to, with technologies becoming engrained in everyday urban life, artificial lighting *disenchanted* the night. As the night was slowly domesticated through increased use for work and leisure, street lighting technologies and the access to ‘light’ became everyday and part of a taken-for-granted fabric of the city. It is in this relation that Thrift’s (1994) discussion of the emergence of street lighting presented in the beginning of the chapter becomes particularly useful, as he argues – with reference to Georg Simmel’s writing on the urban experience – that the mainstreaming of new technologies provided new ways of seeing the city:

It is true that we now have acetylene and electrical lighting instead of oil lamps; but the enthusiasm for the progress achieved in lighting makes us sometimes forget that the essential thing is not the lighting itself but what becomes more visible. (Simmel quoted in Thrift, 1994, p. 220).

New technologies allow for a different visibility, fostering a new vision of the city. Returning to Thrift (1994), he mentions lighting technologies along with other technological inventions such as the camera, the cinema, and the television, in providing

different types of vision, different ways of reproducing vision and different ways of representing the self. As such, it is not the technology in itself that is of interest, but its effects on modes of being in the city at night that, according to Thrift, warrants scrutiny. Here, Walter Benjamin's work is useful in furthering Simmel's argument as he comments on the (al)lure of advertisement lighting that emerged in his time:

What, in the end, makes advertisements so superior to criticism? Not what the moving red neon sign says — but the fiery pool reflecting in the asphalt.
(Benjamin, 1979, pp. 89–90)

It is not only the representational elements of lighting technologies and infrastructures that warrant criticism and scrutiny, but also the more-than-representational domains of affect, atmosphere, emotion and sensation. The 'fiery pool' denotes this affective dimension of the urban, lit environment, which influences ways of being and feeling in the urban, ultimately shaping the nature of human subjectivity (Thrift, 1994). By turning away from the technology itself, or the particular light it sheds, towards the ways urban lighting makes the city visible and therefore makes residents see, feel and be in the city in particular ways, Simmel and Benjamin mark a shift in understanding light through representational means towards sensory, embodied and non-verbal accounts. I am sympathetic towards this shift in focus because it gives attention to the body and sensations in considering how lighting shapes urban life.

Along similar lines, Foucault has been instrumental in giving attention to such processes in his genealogical study of the role of architecture and urban design in shaping subjectivity. Alongside the development of the telescope and the lens, he argues that architectural designs have facilitated the means for "eyes that must see without being seen" (Foucault, 1977, p. 171). Encapsulated in the design of Jeremy Bentham's Panopticon, he argues that the design:

is an important mechanism, for it automatizes and disindividualizes power. Power has its principle not so much in a person as in a certain concerted distribution of bodies, surfaces, *light*, gazes; in an arrangement whose internal mechanisms produce the relation in which individuals are caught up. (Foucault, 1977, p. 202 emphasis added)

As such, the workings of power, practiced through technologies such as lighting, are conceived by Foucault as mechanisms that are distributed into an arrangement of relations "in which individuals are caught up". Returning to the points raised by Simmel and Benjamin, such arrangements of relations would therefore come to underpin the

everyday practices in the city, shifting attention from the institutions and apparatuses *in* power to the “individuals both as objects and as instruments *of* its exercise” (Foucault, 1977, p. 170 emphasis added). The ways such exercise is distributed in an arrangement of relations, and thus permeates social institutions, is carved into the material fabric of cities through architectural design, and practiced by bodies in everyday life. The crucial point here is that ‘power’ is exerted over, but also exercised through, the body, and it is in the everyday, mundane practices, that such embodiment of power resides. In his sympathetic critique of Foucault, de Certeau labels such embodied workings of power the “microphysics of power” (1984, p. xiv), which are played out between the ‘strategic’ systems of operation and the ‘tactical’ operations of subjects. As such, de Certeau sets out to explore the workings of “ordinary” aspects of life that are “ubiquitous” in the sense that they appear as indistinct as “the murmuring voice of societies”, being “indistinguishable” and “anonymous” to the degree that they appear to “belong to no one” (1984, p. v). His project aimed at developing theoretical and methodological ways of approaching these practices in order “to articulate them” (de Certeau, 1984, p. xi), and allow ‘us’ to explore what actually takes place as people do what they do. He used the example of watching television, arguing that researchers should not study what the television shows (representations) nor how the seer sees (behavioural science), but rather what the user *does* while watching. By turning attention towards what users do while carrying out seemingly mundane practices, de Certeau contests the all encompassing power of urban planning and architectural design; by bringing attention to the embodiment of practices, such as walking in the city, de Certeau is concerned with ways of operating within and responding to such ‘strategic’ practices. This perspective shares affinities with Benjamin’s critique of neon signs, and applies more generally to the quest of this chapter; when questioning how lighting configures the city and experiences, we should not only be fascinated by the technology, its performance, or aesthetic transformation of a space, but also what people do, and how they feel doing this.

2.1.3. SUMMARY

By questioning how lighting technologies change ways of seeing and being in the urban, lit environment, this section has discussed how lighting has been used to configure the city and shape experiences. Through historical accounts, public lighting is theorised as the socio-technical system that asserts an authoritative presence in the night, eradicating darkness, and enabling people to venture out into the night. Such function

of urban lighting is argued to have supported a process of domestication, as nocturnal populations increased along with the tolerance for people to walk the streets during the hours of darkness, leading scholars to argue that the streets were socialised, and ultimately gentrified (i.e. upper- and middle-class citizens ventured out into the hitherto unruly streets). To support leisurely and everyday use of the city during the hours of darkness, lighting systems had to fall into the humdrum background of everyday life, taken for granted, disenchanting. It is through these processes of domestication and disenchantment that urban lighting is argued to become a ubiquitous part of the urban fabric, working through the very automatized and disindividualized power that is engrained in social institutions, the material fabric of cities and in social practices of everyday life. However, with attention given to the role of lighting in exerting power *over* and enabling power *to*, I wish to recognise the potential productivity of everyday practices in giving shape to the urban, lit environment. By turning to recent studies that reconsider processes of domestication and disenchantment, I wish to explore how the urban, lit environment is configured, shaped and controlled through socio-technical lighting infrastructures as well as everyday practices.

2.2. RE-ENCHANTING URBAN LUMINOSITY

By focussing on how the emergence of lighting technologies has changed the nature of subjectivity historically, scholars have turned attention away from the institutions and apparatuses ‘in’ power towards the very disenchanting, ubiquitous and unobtrusive background of everyday life. Such a turn towards social practices and everyday experiences of the artificially illuminated city considers how lighting shapes practices, but moreover, following de Certeau’s approach, how practices shape the nature of the urban, lit environment. Drawing on research that unfolds the transaction between the built environment and social practices, I wish to question and reconsider how processes of domestication and disenchantment give shape to the urban, lit environment.

The occupation with everyday practices and sensory experiences of lighting can be divided into studies that consider the public realm and the domestic interior. While such spatial division comes from research projects being concerned with very specific phenomena—such as, for instance, household energy consumption or changes in street lighting technology—the spatial division seems to unintentionally create a distinction between interior and exterior lighting. I argue that the spatial division between the private and the public, the building and the street, the home and the city, is unhelpful, if not artificial, when trying to account for how people engage with,

and experience, the urban, lit environment. In an attempt to think about the relations across and between such spatialities, I challenge this division and reconceptualise the urban, lit environment by putting the literature on contemporary urban lighting into dialogue with debates in geography and wider social sciences on architecture, embodiment, walking, and the home and the city. The aim is to nuance the perspectives and broaden the understanding of how the urban, lit environment is configured through a range of practices—that are not limited to planning and design, but also count everyday practices—and cut across spatial boundaries of the public and private.

2.2.1. THE DOMESTICATED URBAN NIGHT: THE LUMINOUS STREET

In recent studies of urban lighting an (over)emphasis is put on public lighting or lighting that is installed in the public realm. Broadly speaking, studies of urban public lighting can be divided into three main categories; first, studies of the psychological and perceptive ‘effects’ of light and darkness, most prevalent in environmental psychology and scientific disciplines; second, studies of light planning and regeneration projects that serve as macro structures for everyday lives; and third, studies of the sensory and affective dimensions of light festivals, light art installations and festive lighting that suspends everyday life. By briefly revisiting each of these literatures in the following, I will argue for the need to turn away from approaches that study the experiential ‘effects’ of certain lit environments, towards researching how experiences are mediated and constantly negotiated in everyday life.

Among architects, engineers and lighting designers, it is widely assumed that lighting profoundly changes people’s experiences, and in doing so allows designers to structure and guide experiences in particular ways (Fiori, Leroux, & Narboni, 2009; Isenstadt et al., 2015; Laganier & Pol, 2011; Narboni, 2009; Neumann, 2006, 2010). A common assumption among lighting designers is that by moulding the lighting in any given space, the designer can give “comfort”, “direction” or even spur “inspiration”, “imagination” and “excitement” in users (Laganier & Pol, 2011, pp. 7, 9, 173 and 193). Such ways of directly affecting and guiding people’s profound ways of feeling, suddenly changing their mood or way of doing something, tends to be accompanied by a range of unsubstantiated claims about the effects of lighting design and planning (for a critique of such perspective see Ebbensgaard, 2015a; and see some of the designer’s chapters in Isenstadt et al., 2015). While such claims are briefly critiqued in social sciences (Ebbensgaard, 2015b), it should be acknowledged that lighting designers are aware of the limits of shaping experiences through design, and furthermore, provide

innovative solutions to meeting challenges of lighting cities in ways that are sensitive to human perception, affordance, animal behaviour and the environment more broadly.

Over the past two decades lighting designers have led the way for developing sensitive approaches to lighting urban spaces. While it might seem self-evident that lighting designers have driven the field of architectural and urban lighting, the practice has long been dominated by engineers and architects and not considered a practice in and of itself. Prior to the work of the pioneering American lighting designer, Richard Kelly—who is argued to be the first designer devoted to lighting alone (Neumann, 2010)—lighting design was predominantly functional and driven by rational planning ideals. The modernist drive for opening up the city for the circulation of people, air and light was greatly helped by the development of the cheap and efficient lighting technologies such as the fluorescent tube and sodium vapour lights. The increased pressure on and introduction of new lighting technologies in 20th-century cities resulted in a “piecemeal lighting development by generations of illumination engineers, architects and planners, all of whom have over-layered the latest standards and technologies upon each other” (Major, 2015, p. 153). While Kelly’s work did much for recognising the importance of lighting design in America—especially through prolific collaborations with architects such as Mies Van Der Rohe and Philip Johnson—it was still very much restricted to architectural design or as a rationalistic planning tool, and not recognised as such in the UK until the 1990s.

Since 1924 lighting engineers in the UK were organised in the Association of Public Lighting Engineers (APLE), and since the 1980s theatre and stage lighters in the Association of Lighting Designers (ALD). The practice of lighting design was organised according to the distinctly different tasks, and it was not until the 1990s that a merge between the engineering and arts side of lighting gathered significant pace. Prominent figures in the lighting design profession, such as Roger Narboni in France and Mark Major in the UK, opened their lighting design practices in 1987 and 1989 respectively, slowly gaining a footing in the urban planning, design, and architecture community. As Major argues when commenting on the development of the lighting design practice, “traditionally public lighting in cities like London has been ‘engineered’ to assist our vision, provide security and to keep us safe” (Major, 2015, p. 154). What lighting designers professed, was to light the city differently, paying greater attention to the lived experience of places and recognising the crucial role that lighting plays in

the human understanding of form and space. Such self-awareness was paralleled by an increased organisation of the profession extending beyond national boundaries; APLE and ALD were joined by the European Lighting Design Association in 1994 (later the Professional Lighting Design Association, PLDA), and in 2002 the formation of the Lighting Urban Community International (LUCI Association) sought to bring together City officials and lighting professionals in proliferating the practice of lighting design, and ensuring collaboration across disciplines, internationally. In 2010 APLE was re-named to the Institute of Lighting Professionals (ILP) further accelerating the professionalization, promotion and proliferation of the craft's knowledge about lighting, accrued over years of working, figuratively, in the dark.

The point I want to raise is that the multidisciplinary task of urban illumination gained recognition in the latter part of the 20th century in urban planning and design circles, thanks to an increased self-awareness, organisation, proliferation and professionalization of the discipline. Professionals beyond the lighting community came to recognize the importance of thinking carefully about lighting—and in turn realising the adverse effects of over illumination, over-layering of light technologies and the social stigma that certain Modernist lighting types and styles bring to cities. Heading into the 21st century Edensor argues that “[i]ncreasingly, light designers express disenchantment towards the ubiquitous use of sodium vapour lighting...banishing darkness so that all is subsumed within an ambient glare.” (Edensor, 2015b, p. 433). Without completely renouncing the experiential qualities of past lighting principles and technologies, lighting designers have been prominent in recognising the need to more carefully “charm the nightscape and introduce more sustainable forms of lighting” (Edensor, 2015, p. 433). Therefore, when directing a critique towards the somewhat instrumental understanding of producing lit environments that produce certain ‘effects’, I want to acknowledge how lighting designers have been instrumental in nuancing the understanding of the role of lighting to the urban experience and practicing lighting design in more socially and ecologically sustainable ways. The recognition of the human aspects of lighting have met further support from research in social sciences and psychology particularly, that since the 1990s and early 2000s have paid greater attention to the way different lighting conditions and technologies shape experience.

Environmental psychologists tend to focus their studies on the experience of lighting by accounting for the ‘effects’ that different light settings have on people’s psychological performance and experience. The rich literature in the field has explored

the role of different light settings to people's perception of safety (Haans & de Kort, 2012; Pena-Garcia, Hurtado, & Aguilar-Luzon, 2015), the feeling of fear (Li et al., 2015), alertness, vitality, performance and physiological arousal (K. C H J Smolders, De Kort, & Van den Berg, 2013; Karin C H J Smolders & de Kort, 2014), mental orientation (Ferlazzo et al., 2014), cognitive performance (Hygge & Knez, 2001), and mood and cognition (Knez, 1995). Measuring and accounting for the direct effects of certain light settings has similarly been taken up by geographers who evaluate the social and emotional effects of different lighting designs. Studies include the evaluation of changes in felt ambience from dimming strategies for road lighting (Zissis & Sajous, 2009), the user experience of different light sources and their visual performance in pedestrian urban areas (Deleuil, 2009b; Marc Fontoyntont & Deleuil, 2009), the social dimensions of dimming urban lighting (Deleuil, 2009a), a lighting plan specified for visually impaired (Chain, Marty, Franzetti, & Marc Fontoyntont, 2009), and the evaluation of adverse effects of light pollution (Challeat, 2009). And lastly, in recognising the effects that different lighting technologies and strategies have on the non-human world, scholars have demonstrated the potential adverse effects of urban lighting on plant life and animal reproduction, foraging and communication (Holt & Waters, 1967; Meyer & Sullivan, 2013; Rich & Longcore, 2006).

Throughout these studies the mode of hypothetic deductive enquiry assumes that the sensory and emotional experiences of the atmospheres and ambiances of the urban, lit environment can be measured in numbers, explained by residents in surveys, and calculated in simulated and hypothetically recreated urban environments. To provide an example of the findings that such approaches can conjure, I briefly want to consider Anja Besecke and Robert Hänsch's (2015) study of council led refurbishment and retrofitting of street lighting – introducing LEDs – in urban and suburban residential areas in Berlin. Their survey and questionnaire research interestingly shows that in some areas “respondents barely recognised any change at all” (2015, p. 234), and that “the new lighting technologies [had] not brought about any conspicuous change” (2015, p. 237). The acknowledgement of the project's utter lack of perceptual or experiential change is interesting, as it seems to question the validity of claims that architects, engineers and designers often make regarding their designs.

While it is an interesting enquiry to evaluate the experiential effects of particular light settings and technologies – not least for city authorities or designers when auditing the effects of their initiatives – I want to question the soundness of deploying

any such causal approach to studying the social and cultural dimensions of urban, lit environments. Apart from disagreeing with the epistemological endeavour of recording emotional ‘effects’ of lighting design, I disagree ontologically. The way that such studies conceptualise light as an object that can be identified in a world ‘out there’ and measured and evaluated through numerical, or what is assumed would be easily verbalised accounts, fundamentally diverges from my approach. How can Besecke and Hänsch be sure that people do not feel the change or come to change their ways of doing things on a pre-reflexive, unconscious level? How can surveys or the simulation of urban environments reveal how changes in lighting shape the nature of subjectivity? And furthermore, how can such evaluation of the ‘effects’ of changes in lighting escape the underlying assumption that lighting shapes social practice, and not the other way around? Without disregarding the contribution the above-mentioned research has made to the field of studies of urban lighting, I do not think that the scientific approach that is deployed can give convincing answers to these questions. Nor do I think that their methods can bring substantial knowledge to the field (alone). My problem with these approaches lies in the way bodies are constructed as passive receptors and social practices are researched as direct effects of design or planning practices.

The ‘scientific’ problem or challenge of how to account for and research the role that lighting plays to experience and everyday life, has been briefly acknowledged by scholars who scrutinise light planning and lighting design practices. Uncovering the power symmetries that underpin planning offices as they develop and maintain lighting infrastructures in cities, scholars have given attention to the role of lighting masterplans (Entwistle et al., 2015; Köhler, 2015), the regulation of light pollution (Challeat, 2009; Morgan-Taylor, 2015), and dark-sky initiatives and dimming strategies (Deleuil, 2009; Meier et al., 2015). One of the problems in light planning, Dennis Köhler argues, is the poor integration of fields of expertise in the planning apparatus of European cities, such as lighting design, engineering and policy planning. By focussing particularly on the development of masterplans, he suggests a need for someone to “diplomatically bridge the boundaries between disciplines” (2015, p. 155).

Similarly, Martin Morgan-Taylor argues that urban planners, along with the public, remain ill informed on issues of light pollution, suggesting that both should be better educated for decisions to be “based on fact and not on misunderstanding” (2015, p. 172). However, such lack of knowledge is by far the fault of planning departments or designers alone. As Katherine Krause (2015) shows in her study of the case

of light planning in Schulzendorf and Berlin in Germany, local and EU level regulatives encourage local authorities to “pursue innovative and unexplored paths, making experimentation [with new lighting technologies] ... pivotal” (2015, p. 138). The problem, however, is that local authorities are made responsible for testing new technologies without prior knowledge of their potential effects, and consequently made accountable for the results. Thus, local governments reside in a field with little power and space for manoeuvring, due to lack of knowledge, lack of legislative backing, and lack of coherent integration of different expertise fields.

Such mismatch between requirements and the abilities of authorities is similarly uncovered through Shaw’s (2014) study of street lighting in the UK. With local governments developing plans to refit street lights with LEDs, Shaw shows that the engineers effectuating the refitting of the lamps do not have the required knowledge about how people respond to the specific levels of light they install, potentially compromising the quality of public lighting. With Krause and Shaw it therefore becomes clear that ambitious, well-meaning and future-oriented policies for luminous upgrade and innovation can be hard to ‘plan’ and put into effect because of a lack of knowledge and legislative mandate. The importance of addressing the problem of such a lack of knowledge lays in the latent questioning of how research can inform the grounds for improved decision making and planning of urban lighting.

Suggesting that light planning and design practices generally lack knowledge about the lived experiences of urban lighting not only encourages researchers to investigate such matters, but also, more importantly, raises questions about how researchers can make their research count when it comes to planning practice. I argue that any attempt at planning, regulating and strategically enhancing user experiences of the city once darkness falls needs to acknowledge how experience is continually reworked, remodelled and reproduced through everyday life. I therefore turn towards the work of cultural geographers and anthropologists who research lighting with greater sensitivity towards the lived experience of light and urban, lit environments. Without explicitly verbalising a critique towards the ‘scientific’ tradition this body of research conceptualises lighting as a social and cultural phenomenon, emerging through everyday practices, such as turning on lighting in the home, visiting light festivals, and letting street lighting stream into the home.

Providing a body of seminal work on lighting within cultural geography, Edensor and Millington (2009) have studied the social landscapes of class and taste through

Christmas lights installed by residents in Manchester and the Sheffield. Continuing the tradition of looking at the abject, they studied the illuminations in Blackpool (2012) with Edensor giving particular attention to the sensory experiences of ‘illuminated atmospheres’ (2012), light art installations (2015a) and light festivals (2015c). In these studies, Edensor presents accounts of sensory experiences of being immersed in such experimental and festive lighting, developing key concepts in theorising how artistic lighting can defamiliarize places, deepen a sense of place and foster a sense of conviviality—concepts that lock horns with Schivelbusch’s notion of disenchantment. Conceptually, Edensor’s study therefore presents what I would label a ‘critical optimists’ approach, that reconsiders the enchanting qualities of light art and festivals, rather than sceptically critiquing their role in the “eventalisation” of public space (Pløger, 2010) or as part of city branding and profit maximisation (Bell & Jayne, 2001; Edensor & Millington, 2012).

In recognising such enchanting qualities of the urban lit environment, Edensor crucially brings attention towards the sensory experiences, affective dimensions and the atmospheres that are co-produced in light and dark urban spaces. A crucial point lies in acknowledging the multisensory dimensions of visual experiences, and in particular how varying degrees of darkness increases the reliance on other sense than the visual (Edensor, 2013, 2015b; Morris, 2011). Such appraisal of the heightened experiences produced in darkness, shadow and in spaces of varying light intensities is similarly echoed in Jun’ichiro Tanizaki’s (1977) manifesto *In Praise of Shadows*. What Tanizaki brings attention to is the importance of darkness in designing urban public and domestic spaces, and thus critiquing the spread of Western lighting aesthetic that heralds brightness, shine and over illumination. By embracing the qualities of darkness, Tanizaki brings sensitivity towards the multimodal affordances of spaces, as they are shaped through varying degrees of light, shadow and darkness. These writings hark back to the work of Minkowski and Merleau-Ponty, as they develop a phenomenological approach to understanding the sensory experience of dark spaces, where the lack of light and sight demands a heightened multimodal sensory engagement, in order to negotiate the increased vulnerability of the body. Added to such studies, psychologists have experimented with ways of researching the multimodal experiences of light and darkness. For example, wine tasting under different lit conditions has been shown to profoundly affect wine tasters’ judgement of the wines (Spence, Velasco, & Knöferle, 2014). Similarly, in a study exploring the ability of participants to tracking objects in

darkness after having been exposed to a brief bright light shows that visual perception relies on multiple senses, and not just visual input (Stone & Tinker, 2016).

Drawing from such studies, the understanding of visual experience of lit spaces and darkened environments is therefore further complicated. Light is argued to enable visual experience, but a multisensory experience not confined to the realm of the visual. From such recognition of the multimodality of visual experiences Edensor's studies that re-enchant the mundane and everyday experiences of light and darkness bring attention towards the ways that people experience urban lit spaces in much more embodied ways.

The recognition of the lived and embodied experiences of light and darkness and subsequent rediscovery of the spectacular and enchanting qualities of the urban lit environment is, however, not limited to social scientific research. Literary scholars writing about nocturnal London, such as Sukhdev Sandhu and China Miéville provide compelling critiques of London's night, seemingly lost to the entertainment industry and "24/7-capital" (Sandhu, 2010, p. 13) and where the "artificial light cuts darkness like nowhere else" (Miéville, 2012, p. 8). Both writers provide explorative accounts, by foot, of pedestrian, nocturnal London in poetic prose and ethnographic testimonies from London's night, with an aim to "mainline its covert and shadowy energies" (2010, p. 14). Such aims at re-enchanting the mundane and taken-for-granted latently question the role that lighting provides in shaping experiences and enabling nocturnal life to unfold; their quests are in keeping with Edensor and Millington's rediscovery of the spectacular, at times romantic conviviality of the mundane and vernacular city.

By focussing on the experience of temporary luminous events that, for a limited time, re-enchant the urban setting, Edensor and Millington offer an insight into how routinized experiences are interrupted or suspended, allowing people to distance themselves from their everyday experience. The seasonal repetition of these events—as residents in the Midlands recreate their luminous Christmas landscapes each year and visitors return to the annual Blackpool Illuminations—makes the residents anticipate the event, "looking forward' based on a looking back" (Edensor, 2012, p. 1115). The point here is that past memories play an important role in mediating the immediate experiences of light, and that experience as such cannot be understood as a direct effect of sensory stimuli received through the perceptive organs to our brain, but are mediated by past memories and contingencies.

The role of memory and anticipation in mediating the sensory experience of urban spaces has similarly been recognized by scholars investigating the sensory and embodied experiences of architecture and of practices of walking in the city. In a similar attempt at challenging how architects and planners (c)aim to profoundly change and alter everyday experiences of urban spaces through design, Degen and Rose assert that sensory experiences are not direct effects of design. The claims made to any direct effects of design, they continue, neglect three aspects of sensory experiences, which count “the immediate, *in situ* corporeal *experience* of the multiple urban dwellers...how the city is experienced through *multiple* sensory modalities... [and] how sensory perception is *mediated* by different and shifting spatial and temporal practices” (Degen & Rose, 2012, p. 3273 emphasis in original). Bringing attention to the plurality of situated experiences, the multisensory ways that designed spaces are experienced, and the ways experiences are mediated by perceptual memory and chance encounters with friends, or a sudden phone call, they unveil how designed spaces do not necessarily yield the practice intended. As they write elsewhere, urban design is remodelled, reworked and “continually reproduced through use and everyday life” (Degen, DeSilvey, & Rose, 2008, p. 1909). Considering the “ambiguous nature” (Degen, 2008, p. 54) of power in more depth, Degen claims that “the organization of urban experience can be understood as a constant negotiation between imposed order and individual agency” (2008, p. 55). With this more relational understanding of power—reminiscent of de Certeau’s microphysics of power in everyday life practices—attention is given to the constant negotiation and reconfiguration of urban space, through everyday practices. The manifestation of agency in negotiation suggests that sensory experiences can never be taken as direct effects of the built environment, and instead emerge in continual negotiation with the environment, through embodied practices. Focussing specifically on the practice of walking, Degen and Rose argue that walking is ‘already in relation’ to the surrounding environment through past experiences and memories that come to “mediate significantly sensory encounters with the built environments” (Degen & Rose, 2012, p. 3282). The material environment surrounding the body is not detached from it, but rather emerges through its embodied, perceptive actualisation of its sensory qualities. In Middleton’s (2010a, 2011a, 2011b) study of purposeful walking practices in Hackney, East London, she explores how pedestrians negotiate interruptions of routinized and habituated travels, caused by unforeseen incidents such as missing a bus or a

change in weather. The point is that such interruptions of the habitual walk are negotiated on the go, demonstrating the creative potentiality of people's habits in dealing with their unforeseen interruption. She underlines that the embodied practice of walking "is already in relation to different things and contexts" (Middleton, 2011a, p. 2869), and therefore the pedestrian will 'know' how to adapt their travel to such unanticipated change.

As such, walking practices become heavily embedded in, and related to, the material environment and unforeseen events. This does not mean, however, that design has no role to play in shaping practices and how people see, move and experience the urban. Local government initiatives that aim at accommodating walking in cities are argued to "make walking much more enjoyable—for example, street trees for shade and wind protection, bus shelters for waiting...[while] unique safety concerns...[of pedestrians are alleviated through] street lights or pedestrian crossings" (Forsyth et al., 2008, p. 1978). The ability to affect walking practices through design is well documented elsewhere in debates on geographies of architecture (see for example Adey, 2008b; Allen, 2006; Amin & Thrift, 2013; Krafft & Adey, 2008), yet, not in a deterministic manner but rather emerging through situated embodied practices. This further leads scholars to argue that there is no such thing as walking in itself (Laurier et al., 2016), because people walk in conjunction with the material environment, and their memories of past experiences and anticipation of what they encounter.

With the attention given to perceptual memory, multisensory experiences, unforeseen interruptions and different public amenities in mediating the sensory experience of urban space, I therefore wish to follow in the footsteps of Degen, Rose and Middleton in arguing that sensory experiences are not direct effects of design. While lighting does mediate experiences in ways that potentially condition how residents see, feel and do things in the urban, such 'outcomes' are not linear, but moulded and mediated by a host of factors. Sensory experiences of urban, lit environments are dependent on how people negotiate, adapt to and manipulate lighting to support routine practices or avoid situations. By focussing on how people negotiate this encounter with lighting in everyday life, such as walking to the station, to visit relatives or to the shop, and return again, I therefore wish to pay attention to how the urban, lit environment is configured through mundane practices such as walking.

2.2.2. URBAN DOMESTICS DURING THE HOURS OF DARKNESS: LUMINOUS HOMES

The focus given to everyday experiences of, and engagements with, urban lighting in the public realm should, however, not be restricted to the publicly provided lighting. As argued above, studies of everyday practices and sensory experiences of urban lighting tend to treat the public realm and the domestic interior separately, yet the urban, lit environment is made up of an amalgam of light sources that transcend borders between buildings and streets. Light bounces off sidewalks and reflects in shiny surfaces as it streams from a variety of planned, designed, mobile and vernacular sources. Just as streetlights and functional lighting turn on in the twilight hour, shop signs and storefronts gain luminous presence in the streets. As people start entering their homes lying in semi-shade and turn on the lights in their dining and living rooms, residential buildings gain eyes that open up as luminous entrance portals to people's homes. If we follow Rachel Pain as she argues that "homes, workspaces and other private and semi-private places...are as much a part of 'the urban' as streets, shopping malls and parks" (Pain, 2001, p. 899), the luminous blots that clothe buildings and embrace streets with an ambient, soft and inconsistent patchwork of glowing squares, could be argued to be equally part of the urban, lit environment.

If we look back to early accounts of street lighting in London, the home interestingly figures as an important factor. In 16th century London before street lighting was electrified, watchmen, walking from lamp to lamp, lighting street by street, illuminated the city. However, the responsibility was not only on the watchmen and City authorities, but was passed on to householders in order to "participate in the watch so as 'to keep the peace and apprehend night-walkers'" (Beaumont, 2015, p. 123). Buildings and the home were integral to lighting the city, providing lighting in the public realm, both to create a luminous presence of buildings, but also for light to stream into streets and down alleys. Therefore, it can be argued that prior to the domestication of the night by the increase in leisurely use and consumption, the presence and importance of the luminous home facilitated processes of domesticating the streets of London. Furthermore, when lighting technologies were systematically installed in Victorian London, 'homeless' people 'up to no good', taking residence in the streets, were displaced at the expense of a middle- and upper-middle class residents. According to Beaumont (2015), such domestication tamed urban life. I want to question whether the domestication of the urban night in a contemporary context is helpfully understood as a process of 'taming' the city and its populace, alone. Giving focus to the ways that

people imbue spaces with domestic qualities through everyday practices, I wish to consider the role of vernacular light sources and everyday practices in giving shape to the urban, lit environment.

In Regan Koch and Alan Latham's (2013) study of the redesign and regeneration of the Prince of Wales Junction in West London, they argue that the patterning of mundane, everyday practices in the recently refurbished public space reveals how residents come to inhabit the space on their own terms. They show how the process of domestication also can denote the practices through which residents imbue public spaces with certain 'domestic qualities'. Through four heuristics—foundations, furnishings, invitation and accommodation—they reconsider the process of domestication as the process through which people come to inhabit the city on their own terms, extending the sense of home beyond the home and into the wider neighbourhood (for wider research on the relation between the home and the wider neighbourhood see Blunt & Bonnerjee, 2013; Blunt & Dowling, 2006; Bonnerjee, 2012; Burrell, 2014; Ghosh, 2014). Taking great inspiration from such scholarship that considers the relation between the home and the wider city, and thus reconceptualises the concept of domestication in the city, I consider how lighting mediates how people inhabit the city, in their homes and in the public realm, during the hours of darkness.

In doing so, I want to consider the wider research on the home and the city as it has developed particularly in 'home studies'. The multifarious ways the home is researched as a "highly fluid and contested site of human existence" (Blunt, 2005, p. 512) has challenged the notion of the home as the realm of the private opposed to the public, the intimate opposed to the formal, the safe opposed to the vulnerable, the house opposed to the street. Such reconceptualization of 'the home' and the emotional account of 'feeling at home' challenges the notion that the home should provide the venerable figure of shelter, a place of retreat, providing privacy and intimacy alone (Blunt & Dowling, 2006; Downey, 2013). The home is simultaneously a hideout for potential dangers such as violence, abuse, and discrimination (Pain, 2001; Valentine, 1989). As argued by Alison Blunt and Ann Varley, the notion of 'the home' delineates "a space of belonging *and* alienation, intimacy *and* violence, desire *and* fear, the home is invested with meanings, emotions, experiences and relationships that lie at the heart of human life" (2004, p. 3 emphasis added). Thus, the home as a four-walled container in which private life is lived has been deconstructed and reconceptualised by scholars writing on home and the city, as the fluid site where human existence unfolds. I want

to acknowledge the role of the luminous home as an aesthetic, ambient and functional part of ‘the urban’ by questioning what counts as lighting in the public realm. As light is not given considerable attention in studies of home, I want to pose the questions: What is the role of ‘the luminous home’ to the experience and life of ‘the luminous street’? And what is the role of streetlights, once people regress to the confines of their four-walled, porous spaces called ‘homes’? By following scholarship that reconsiders the relation between the home and wider city, I explore the relations between urban lighting and domestic practices.

Central to such a task is the understanding of the home “as processes of establishing connections with others and creating a sense of order and belonging as part of rather than separate from society” (Blunt & Dowling, 2006, p. 14). The insistence on a relational understanding of home—as a point of connection—allows for a consideration of the ways that homes are made and unmade. The transgressive nature of light that spills, seeps and flows in and out of the home, offers one such route for considering the home as a point of (dis)connection. This is evident in Bille’s (2014) study of Danish residents’ use of light when lighting up their homes in an inner-city neighbourhood in Copenhagen. As Danes turn on lights *without* drawing curtains, Bille argues that they are “welcoming the outside” into the home, as “a way of connecting with people and creating an image of openness” to the external world (Bille, 2014, p. 6). Similarly, Hilje Van Der Horst and Jantine Messing (2006) argue that decoration of windows in Holland varies ethnically and thus functions as “a device for embedding oneself in certain social collectives” (2006, p. 34), thus creating social and ethnical distance and belonging to their neighbours and the wider neighbourhood. Turning towards the seepage of light *into* the home Sarah Pink and Kerstin Leder Mackley’s study of the use of light in the British home shows ways of relying on such excessive lighting. One participant shows how “streetlights were used to sense his way through the home, when navigating his way through semi-lit hallway from stairs to kitchen” (Pink & Leder Mackley, 2014, p. 11). Such everyday creativity is similarly given attention in Phillip Vannini and Jonathan Taggart’s (2013b) study of lighting practices in remote, ‘off-grid’ homes. Their research participants live without the perpetual outlet of Alternating Current through plugs in walls, and therefore come to create comfort by alternative ways of lighting and arranging their lives according to the natural rhythms of sunlight and darkness (Vannini & Taggart, 2015).

So, domestic practices of letting light and views into the home reveal the becoming of 'the home' as darkness falls through negotiations with, and adaptations to, the surrounding environment; the domestic is constituted through practices that relate to and connect with the urban, lit environment. Such urban domestic practices are part of how the residents make homes in the city, through staging the self (van der Horst & Messing, 2006) and/or creating visual boundaries (Garvey, 2005). By focussing on the way such practices constitute meaning, Blunt and Varley argue that the "the ways in which ideas of home invoke a sense of place, belonging or alienation ... is intimately tied to a sense of self" (2004, p. 3). Such ties between urban domestics and 'a sense of self' suggest that the spatial borders and boundaries of the home matter, as they demarcate the starting point for relating to, and connecting with, the city. In their study of older residents' sense of home, Ian Ewart and Rachel Luck show how physical frailty, emotional drain and decreased mobility make their research participants perceive the physical structure of their home as a "place to go *from*, instead of a place to go *to*" (2013, p. 27). Their homes are the starting points for making connections with others, either in the shape of carers visiting residents, as they make connections online, or 'in real life' with neighbouring residents.

The concept of the home as a point of connectivity helps to broaden the understanding of the borders of the home as being porous and constantly negotiated. Georgina Downey contributes to such an understanding, as she argues that the human compulsion to "sort undifferentiated space into parts" (2013, p. 2) is embodied in the practice of home making. In a discussion of the representation of homes, Downey argues that the home is represented as an "artificial fixing of something so fluidly mobile [that] it can change perceptually with the removal of an object or a shift in the light" (2013, p. 4). Changes in light levels, temperature, weather, and activities, during the day and over the course of the year, demand residents adapt to, and negotiate, these changes. By focussing on how residents negotiate and cope with disruptive factors such as noise and intruders 'spilling' into the urban home, Kathy Burrell frames the micro-spatialities of windows, doors and furniture as sites of tension, bringing attention to the "limited power the home has, in reality, to resist unwanted outside forces" (2014, p. 162). Therefore, the home must not simply be understood as a point of reference through which connections and relations to the outside environment are made, but also as a way of relating to the urban in itself, through negotiation of 're-

movals', 'shifts' and 'changes'. Taking inspiration from such studies, I wish to scrutinise how older people in Newham negotiate shifts and changes in the urban, lit environment. While Burrell's study shows no significant difference between the ways that residents cope with, and negotiate, the borders of their home in terms of gender or age, it seems that Ewart and Luck (2013) make a strong case for questioning the role of age in how residents practice and perceive their homes. As shown in studies of the encounter with difference in the city, age is, and has been, a site for contestation (Hopkins & Pain, 2007; Horton & Kraftl, 2008; Vanderbeck, 2007a), and therefore, I wish to consider how older residents negotiate changes in the urban, lit environment, and scrutinise how such practices are part of making a home and inhabiting the city during the hours of darkness.

2.2.3 SUMMARY

In this section I have explored how the urban, lit environment is configured, shaped and controlled not only through the socio-technical lighting infrastructures, but also through everyday experiences and practices where residents engage with the urban, lit environment. By taking everyday practices as the starting point for analysis, I put studies of urban lighting into dialogue with wider debates in social science about the sensory experience of architecture, urban walking and the home and the city as a means of exploring how everyday experiences of urban lighting are played out in streets and in the domestic interior. The aim of doing so has been, partly, to reconsider the significance of the concepts of domestication and enchantment, and my argument is two-fold. First, by reconsidering how the sensory experience of lighting and the urban environment are not direct effects of design and planning, but moulded and mediated through embodied practices, I claim that a more pluralistic understanding of how lighting conditions ways of seeing, feeling and being, is developed. With attention drawn, yet again, to how people negotiate interruptions to their habitual walks, through changes in the urban, lit environment, I argue that we might understand how routinized practices come to pattern spaces in ways that embed spaces with domestic qualities, (re)enchanting spaces. Second, the process of domestication—understood here as the practices through which people come to inhabit the city—brings attention to the work that is invested in making the city homely, and therefore relationally and processually stretches across the borders of the home and the street. Domestication entails constant adaptation to, and negotiation with, 'external forces', and I argue that by investigating how people negotiate shifts and changes in lighting I can investigate

how people inhabit the city after darkness falls. Therefore, I claim that scholars will be better able to understand how the urban, lit environment is configured by considering the multitude of practices that are invested in giving the artificially lit city its luminous presence—counting professional and more everyday practices.

2.4. CONCLUSION: THE URBAN, LIT ENVIRONMENT

This chapter provides a conceptual discussion of how lighting can be argued to configure the city and people's experience of it after darkness falls. Based on a review of past and recent writing on urban lighting and the urban night, I argue for a need to acknowledge and question the role that lighting has had historically in changing ways of seeing, feeling and doing things in the city. I question the technological determinism that such logic insinuates, and therefore call for the need to conceptualise lighting as an embodied phenomenon; a product of embodied practices and sensory engagements as well as a product of light planning and lighting design practices.

Drawing on historical accounts of advances in public lighting, I have shown how lighting has driven processes of urban domestication and disenchantment, conditioning ways of seeing, feeling and doing the city during the hours of darkness. However, with attention given to the role of lighting in exerting power *over* and enabling power *to*, I question how such conditioning of experience might be reconsidered in the light of recent perspectives on processes of domestication and disenchantment. By engaging with literatures on the geographies of architecture, home and the city, and urban walking, I have reconsidered how domestication and disenchantment are not necessarily creating an insipid city, smacking of Crary's indeterminable non-time, which carries with it ruinous implications for everyday life. Rather, I agree with Edensor, Millington, Miéville and Sandhu, in focussing attention towards the ways people adapt to lighting situations, manipulate lit conditions and negotiate changes in lighting in order to make sense of, and create, urban, lit environments that they wish and desire. By understanding domestication as a process of constant adaption to, and negotiation of, 'external forces', I argue that researchers can gain a deeper understanding of how people experience and come to inhabit the urban, lit environment. Experiences are not direct effects of design and planning practice, but rather moulded and mediated through embodied practices, perceptual memory, material design and contingent encounters and interruptions. By recognising the importance of such interruptions and constant mouldable fluctuations to experience, I propose to understand how lighting conditions ways of seeing, feeling and being in the urban, lit environment through a

focus on everyday practices. By foregrounding such a practice-based understanding of lighting, and by rethinking the spatiality of the urban, lit environment as traversing across public and domestic spheres, encompassing vernacular light sources alongside the publicly provisioned lighting, I present an approach that is sensitive to the varied experiences of light and darkness, and allows me to understand how light constitutes and is constituted through everyday practices.

3. A LIGHT PHENOMENOLOGY

This chapter draws upon, and extends, the conceptual framework I developed in the previous chapter. By following Gibson and Gallan's (2011, p. 2514) call for developing approaches that account for the "variegated experiences of lighting", and Bille and Sørensen's appeal to question how different uses of lighting "shape experiences" (2007, p. 266), I argue that light must be understood through the ways it is experienced, felt and used by humans throughout their everyday routinized practices in the city.

In this chapter I develop an understanding of light as embodied, by exploring the potential value of turning towards phenomenology to take seriously the role of the body, social practices and lived experience. I wish to make a significant contribution to the scholarship on urban lighting by (re)considering the potential benefits of turning towards Merleau-Ponty's phenomenology of light.

However, as Bille argues "a phenomenological approach cannot stand alone in understanding social worlds" (Bille, 2015, p. 269) because it tends to present Universalist accounts of experience and embodiment. Acknowledging such critique of a phenomenological approach (see also Anderson, 2009; Wylie, 2006), I recognise the need to address some of the shortcomings of a phenomenological perspective. Therefore, I take inspiration from Kirsten Simonsen's critical humanist geography, which she develops through a re-reading of Merleau-Ponty's phenomenology of the flesh against feminist and post-colonial scholarship. Similarly, Cathryn Vasseleu's (1998) use of Merleau-Ponty in developing an understanding of light as flesh draws on Levinas and Irigaray to address the shortcomings of a pure phenomenological perspective. As I unfold Merleau-Ponty's phenomenology of light in this chapter, I therefore place his philosophy in dialogue with previously discussed literature on how lighting impinges on experience (Benjamin, 1979; Simmel, 1971; Thrift, 1994) and how lighting is used to express social worlds and affect experience (Bille, 2014; Edensor, 2012; Pink & Leder Mackley, 2014) to draw out differences and commonalities. Furthermore, I address the epistemological implications of such ontology by considering how researchers can gain knowledge about lighting.

In the following section, '(Post)phenomenology as ontology', I turn towards Merleau-Ponty's phenomenology of light and propose to conceive of light as embodied. By considering how lighting figures as a "mediating element", a "neutral" "background" phenomenon that "leads the gaze" (Merleau-Ponty, 1962, pp. 360–1) I argue that lighting, on the one hand, is actualised through practice, but, on the other hand, has the ability to invade the body beyond its control. By considering recent debates in cultural geography and anthropology that turn towards phenomenology and criticise it for retaining a Universalist account of experience, I address some of the shortcomings of Merleau-Ponty's thought. In presenting the notion of carnal light, I therefore turn towards to the role of light in invading and (dis)orienting vulnerable bodies, while also acknowledging the agency of subjects in giving shape to the urban, lit environment. Such paradoxical relation is at the core of Merleau-Ponty's phenomenology of light and marks the major contribution to conceptualising light. In the second section, 'Methodologies for researching light in practice', I outline the epistemological shortcomings Wylie identifies in Merleau-Ponty's phenomenology. In order to address these shortcomings, I draw on epistemological debates in lighting studies and particularly non-representational thought in cultural geography, and develop an epistemological approach to studying light in practice.

3.1. (POST)PHENOMENOLOGY AS ONTOLOGY

As I have argued in the previous chapter, I am highly sympathetic towards the concern that Thrift, and writers such as Simmel and Benjamin, expresses for the way lighting technologies accelerated modern city life, impinging on urban everyday life by changing what was seen and, more importantly, how people came to see. By turning attention away from the representative value of particular lighting technologies towards the ways they shape, condition and produce a different kind of vision, gives reason to question how changes in the urban, lit environment are experienced by users. In this section I will engage with this question by unfolding Merleau-Ponty's phenomenology of light and putting it into dialogue with research on illuminated atmospheres and post-phenomenology.

3.1.1. SKELETAL LIGHT: MEDIATION AND NEUTRAL BACKGROUND

In a conceptual discussion of the experience of a change in lighting, Merleau-Ponty considers how people respond to the transition from a world illuminated by natural sunlight to a world revealed by artificial lighting. Once sunlight disappears and the eye

adapts to the ‘artificial’ lighting, he argues that the light will become neutral to us: “Electrical lighting, which appears yellow immediately upon leaving the daylight, soon ceases to have any definite colour for us” (Merleau-Ponty, 1962, p. 362). To understand the significance of this quotation, it is important to know that different light sources have different colours. While daylight holds a bluish colour at noon (5780 Kelvin) and more reddish colour at dawn and dusk (5000 Kelvin), most electrical light sources produce a more yellowish light (the incandescent light bulb is in the range 2700 Kelvin). The point is that, despite these colour differences, they come to appear ‘white’ to the human eye once the subject is enmeshed in either light source. The eye adapts to the condition, and the light becomes neither white nor yellow, as such, but *neutral*: “[t]he lighting is neither colour nor, in itself, even light, it is anterior to the distinction between colours and luminosities. This is why it always tends to become ‘neutral’ for us” (Merleau-Ponty, 1962, p. 362). This does not mean that Merleau-Ponty refutes that light has colour and potentially makes the eye see differently, but rather because light enables the visual world to appear before the body, light ceases to appear before it as an object. As Tim Ingold argues, following Merleau-Ponty, light ceases to be light, as such, and instead becomes the “phenomenon of *experience*, of that very involvement in the world that is a necessary condition for the isolation of the perceiver as a subject with a ‘mind’” (Ingold, 2005, p. 99).²

The understanding of light as ‘neutral’ does not mean that light is not material, experienced as a material phenomenon, or value neutral. As I will show, Merleau-Ponty’s conception of light is inherently materialist and is indeed concerned with how it conditions modes of seeing and being, but to unfold this it is important to understand which ontological position Merleau-Ponty is critiquing. His position emerges out of a critique of cognitive science and naïve realism that understands experience as the working of the mind (see for example Simonsen, 2007; Vasseleu, 1998; Wylie, 2006). From such ‘intellectualist’ perspective it is argued that the brain translates impulses (light, sound, taste, touch, smell) received through the sensuous tools of the body (eyes, ears, tongue, skin and nose) and constructs an inner picture of what the outside world is like (Ingold, 2005, p. 98). Merleau-Ponty’s concern about this perspective is that light

² According to both Merleau-Ponty and Ingold, light is foundational for experience as it allows the subject to emerge through an opening up onto the world—recall from earlier how in writing about the loss of light through darkness, Merleau-Ponty remarks that the subject loses the ability to distinguish itself from the objects that surrounds it, and therefore effectively coincides with the world (1962, p. 330).

(or any sensuous phenomenon) is reduced to an object—a package of electromagnetic impulses existing externally to the body. As he argues, the problem of such an approach is that “a certain patch of light is taken as lighting instead of in its own right” (Merleau-Ponty, 1962, p. 360).³ The problem he alludes to, is that the sensuous phenomenon is considered as an object, graspable and mouldable—a product of the mind—rather than recognised for revealing the world to the human body (see also Bille & Sørensen, 2007). To illustrate this point Merleau-Ponty considers how lighting is “often badly reproduced” in painting, film and photography because it appears “solidified” as “pools of dazzling brightness” on the canvas, photo-paper and the screen (Merleau-Ponty, 1962, pp. 360–1). Such solidification is not how light is experienced, he argues. And therefore, his perspective shares affinity with Benjamin’s point about the neon sign: Benjamin draws attention away from the *sign*, the product on sale, solidified in the light as such, towards the reflection that appears so vividly ‘in real life’, as a phenomenon of experience, as the atmosphere of the urban night, the more-than-representational aspects of experience. Such a shift in attention, from understanding light as object, representation and solidification to understanding light in terms of the sensuous qualities that emerge through lived experience, is essential to Merleau-Ponty’s project, and what he means when referring to light ‘in its own right’.

I want to argue that the value of conceptualising lighting as incidental to experience and emerging through embodied actualisation of the world lies in recognising the reciprocity between experience and materiality. Light opens up the body to the world, and conditions the way it sees, but for any such conditioning to take place the body needs to actualise the situation. In line with this perspective, Ingold argues that the sensuous experience of the world cannot be separated from its materiality, and therefore “[s]eeing *is* the experience of light” (Ingold, 2005, p. 101). The radical reciprocity that Ingold proposes is – no surprise – adopted from Merleau-Ponty who in his writing on seeing, and seeing the sky specifically, goes a step further in arguing that when he sees the sky “I am the sky itself as it is drawn together and unified” (Merleau-Ponty, 1962, p. 214). Not only are sensuous experiences part of the material world, we ourselves are the material world, we are the sensuous and the sensate at the same time exactly because we bring it to life through our embodied actualisation of it (I will return to this point in the discussion of Merleau-Ponty’s notion of flesh in the next section).

³ The distinction between *light* as a noun and *lighting*, which figures both as noun and a gerund serves to distinguish between the sensuous phenomenon of light, and the appearance of such phenomenon.

However, this does *not* mean that light emerges through the body alone, or that the world *is only* produced through an intentional subject. The point is that neither the subject nor the world is produced by the other alone; they emerge reciprocally.

Such reciprocity is further developed through the concepts of mediation and background. Merleau-Ponty argues that when light is understood ‘in its own right’ it becomes a medium: “It is not presented to our perception as an objective, but as an auxiliary or *mediating element*. It is not seen itself, but causes us to see the rest” (Merleau-Ponty, 1962, p. 360 emphasis added). The quotation reiterates the point above, that light is not an isolated object that can be identified in a world ‘out there’ but rather the phenomenon of experience; it is not seen itself but rather “that *with which, according to which, we see*” (Merleau-Ponty, 1968, p. li). However, in figuring as a mediating element he acknowledges that light also exists in and of itself, independent of the human body as if it “anticipates our vision” in a way that “it *knows and sees* the object” before us (Merleau-Ponty, 1962, p. 361 emphasis in original). Therefore, he argues that light has an ability to direct and lead the body before s/he knows of it: “Lighting and reflection, then, play their part only if they remain in the background as discrete intermediaries, and *lead* our gaze instead of arresting it” (Merleau-Ponty, 1962, p. 361 emphasis in original). By leading the gaze and the movement of bodies towards and away from things, lighting not only enables the embodied actualisation, but also potentially disrupts and manipulates bodies in ways that are beyond subjective intentionality. This twofold—both an expression of being and a force beyond intentional subjectivity—is captured in the examples of Lucie, Jackie and Mary, quoted at the head of chapter 1. They all remark how different light sources look different, and how in turn the different types of light make them see differently. Sparked by colour difference and my forced conversation about their experience of the lighting, the lighting ceased to appear as mere medium, and solidified before the women as visual representations of their experiences.

The value of conceptualising light and lighting as a mediating element, a neutral background that leads our gaze, therefore lays in foregrounding the reciprocal relationship between lived experience and the material environment. Such reciprocity has similarly been the focus in recent research on how light is used to shape social life. However, rather than turning towards Merleau-Ponty, scholars enthusiastically embrace the concept of ‘atmosphere’ as it has been developed by Gernot Böhme. The interesting thing here is that Böhme’s conception of atmosphere is rooted in phenomenology (see

for example Bille, 2017), and he even goes to great lengths to develop a “phenomenology of light” (Böhme, 2014, p. 64) that latently locks horns with Merleau-Ponty’s ‘phenomenology of light’. The lack of interest in Merleau-Ponty can therefore be explained by the general scepticism towards a certain kind of phenomenology (or simply lack of interest in French philosophy), which, as Bille argues, focuses “on the individual experience as evidence of an assumed universal experience, ignoring how [for example] atmospheres are dynamic, manipulated, culturally experienced and continually evaluated in people’s lives” (2014, p. 2).

In the essay ‘Light and space. On the phenomenology of light’, Böhme (2014, pp. 64–65) argues that it is absurd to claim that we cannot see light and that we only see light courtesy of the objects illuminated before us. Rather, Böhme argues, light fills spaces with colour, intensity, contrast, diffusiveness, brightness and so on, in ways that tune the space in a certain atmosphere, which is visual and felt: “Light as atmosphere lends an emotive character to things” (Böhme, 2014, p. 73). The (illuminated) atmosphere is that which lies or floats “in-between” subject and the environment and “seems to fill the space with a certain tone of feeling like a haze” (Böhme, 1993, p. 114), shaping how people come to feel when doing things. Scholars following this approach argue that the concept of atmosphere can capture how light is used actively to express and shape people’s moods in homes and in architecture (Bille, 2014, 2017), how light is co-produced by designers and users (Edensor, 2012), and thus recognise the active work that is invested in making and maintaining certain lit environments that extend across borders of the home and the public realm (Pink & Leder Mackley, 2014). When light is understood as atmosphere, it denotes the space in-between subject and object, characterised by a certain vagueness because it is difficult to locate the beginning or end of atmospheres—they are not part of a thing or body, but simply *there* in spaces (Bille, 2015, p. 262). Furthermore, atmospheres are ambiguous because it is difficult to discern and align the experiences and sensibilities that are produced (Anderson, 2009, p. 79).

Anderson argues that atmospheres belong to the subject while also emanating from the ensemble of elements that lie beyond the subject. In developing his concept of ‘affective atmospheres’, Anderson interestingly draws upon the work of phenomenologist Mikel Dufrenne who conceptualises atmospheres as an “intensity that overflows a represented world organized into subjects and objects” (2009, p. 79). Anderson argues that the strength of this conceptualisation lays in acknowledging the reciprocity

of atmospheres—which resonates with Merleau-Ponty’s insistence on an inherent reciprocity of the experience of light—yet, such reciprocity is only expressed in qualities of a singular world. Anderson’s caution towards the limits of Dufrenne’s phenomenological understanding of atmosphere, is echoed in Bille’s (2015, p. 269) dismissal of a (pure) phenomenological perspective, as he argues, it disregards how people feel in contradictory and competing ways. Admittedly, conceptualising light as the medium that allows people to see without being seen itself, reduces the plurality of potentially contradictory experiences of light to a Universalist account of experience: is it certain that a light source will appear as mere medium to different people? Will a street refurbished with a different light source necessarily make residents feel in the same way? Will they even notice it or not? Different factors such as age, gender, class, culture, geography and so on, are shown to play a role in how experience cannot be understood as either Universalist or deterministic. In relation to light, Bille (2013, 2017) has shown that culture-specific ways of using light in Nordic countries differ remarkably from the way light is used in Jordan (see also Jun’ichiro Tanizaki, 1977).

Acknowledging the critique of a ‘pure’ phenomenological approach, I still find Merleau-Ponty’s conceptualisation of light as a medium useful for two purposes: first, while Merleau-Ponty alone might not solve the problem of accounting for experiential difference, I agree with Simonsen that his philosophy can account for some degree of post-humanist difference while remaining a robust sense of experience and agency (Simonsen, 2013, p. 12); and second, leading from this point, Merleau-Ponty opens up for considering experience as a site for tension between intentionality and immanence—a tension that is spelled out in the way Lucie, Jackie, and Mary experience the light in their streets.

In the following, I will unfold how Merleau-Ponty’s notion of the body and the flesh can be used to account for difference and take the tension between different bodies and the environment as a starting point for analysis.

3.1.2. CARNAL LIGHT: DISORIENTATION AND VULNERABILITY

When Lucie, Jackie and Mary all remark that they *see the light*, they realise that the different light sources look different and make them see differently. The lighting in their streets, which normally goes unnoticed, becomes palpable and recognised both for its aesthetic and perceptual qualities. Merleau-Ponty elaborates on this two-fold of seeing a thing while also having a perception of it, through his conceptualisation of orientation and disorientation.

2006)(see also M. Rose & Wylie, 2006)(see also M. Rose & Wylie, 2006)(see also M. Rose & Wylie, 2006)(see also M. Rose & Wylie, 2006)(see also M. Rose & Wylie, 2006)(see also M. Rose & Wylie, 2006)(see also M. Rose & Wylie, 2006)(see also M. Rose & Wylie, 2006)(see also M. Rose & Wylie, 2006)(see also M. Rose & Wylie, 2006)(see also M. Rose & Wylie, 2006)(see also M. Rose & Wylie, 2006, p. 478). While Wylie critiques and ultimately departs from Merleau-Ponty's position he asserts that Merleau-Ponty's understanding the body—not placed *in* the world but being *of* the world—acknowledges how “the visual world always transcends its perception” (Wylie, 2006, p. 526). As he argues, Merleau-Ponty's understanding of visual perception is not restricted to the determinism of the intentional subject—always looking at *something*, listening to *something*, and so on—but rather presents an understanding of the body as existing *alongside* a world. I argue that such transcendence is exactly what Merleau-Ponty hints at when he argues that light anticipates our vision by knowing and seeing the object before the human eye—light reveals a world which is both actualised by, and lying beyond, anybody's perceptual capacities. The point, according to Wylie, is that Merleau-Ponty's work—especially his later unfinished work *The Visible and the Invisible* (1968)—while “skeletal and abbreviated” (2006, p. 527), offers the foundation for a renewed phenomenology. What is important to note is that much critique directed towards Merleau-Ponty stems from his earlier writing in *Phenomenology of Perception* (1962), published some 23 years before *The Visible and the Invisible*. As argued by Wylie (in line with Reynolds, 2004; Simonsen, 2013; Vasseleu, 1998), the posthumously published writings chart “a radical change of direction, a movement, as Deleuze (1988b, page 110) describes it, ‘from intentionality to the fold ... from phenomenology to ontology.’” (Wylie, 2006, p. 525) This movement from taking the intentional subject as a starting point towards the fold is similarly what Simonsen above underlines by arguing that the life world according to Merleau-Ponty is not subjective but intersubjective and intercorporeal. Such intercorporeality, such folding, is captured in Merleau-Ponty's concept of ‘flesh’ (see Ingold, 2000; Vasseleu, 1998).

Flesh does not refer to the material flesh, but rather to the on-going process through which the world emerges as an interworld. Returning to the example above, Merleau-Ponty argues that in seeing the sky he becomes it because it is “drawn together and unified” by his actualisation of it. Through the intertwining of the flesh of the world and the flesh of the body, Merleau-Ponty proposes that the body and world engage in a process of reversibility, making it impossible to distinguish between subject

and object, person and world (Wylie, 2006, p. 526). Exactly because the body is both sensuous—it can perceive and feel things around it—and sensate—it is sensible to others and itself—Simonsen argues that “[t]he flesh of the body becomes part of the flesh of the world” (Simonsen, 2007, p. 172). The flesh does not belong to the subject or the world but denotes the reciprocal process of emergence—a world in formation. As Merleau-Ponty argues:

“What makes the weight, the thickness, the flesh of each colour, of each sound, of each tactile texture, of the present, and of the world is the fact that he who grasps them feels himself emerge from them by a sort of coiling up or redoubling, fundamentally homogenous with them; he feels that he is the sensible itself coming to itself and that in return the sensible is in his eyes as it were his double or an extension of his own flesh” (Merleau-Ponty, 1968, pp. 113–114).

I have already argued that the body and its sensation are not placed *in* the world, but rather are *of* the world as they emerge through the subject’s involvement with the environment. With this quotation, however, Merleau-Ponty suggests more radically that that they exist *alongside* the world. This is where the post-humanist tendencies in Merleau-Ponty become clearer because the subject is not the starting point, and subjective perception does not privilege the subject’s gaze (Wylie, 2006, p. 528). Because the body is always both sensuous and sentient it will always be caught up “in-between two” (Vasseleu, 1998, p. 22) as a visible-seer, tangible-toucher or audible-listener. If we return to the notion of light as the medium that conditions such emergence of a sensuous world, Vasseleu (1998) argues that the ontology of the flesh promotes an understanding of “light as flesh” (1998, p. 48). Carnal light is to be understood as the process of “coiling up or redoubling”, making not the body a starting point, but a hinge—a *chiasm* (Merleau-Ponty, 1968, pp. 130–155)—that does not enclose onto the world, but rather forms “a resistance to closure; a porosity subject to a leakage of meaning between figure and ground” (Vasseleu, 1998, p. 31). When, for instance, we see “moonlight and sunlight”, the light has “certain ways...of invading us and [simultaneously] we have [certain ways] of meeting this invasion” (Merleau-Ponty, 1962, p. 370). The negotiation of such invasion suggests that the content of the world is actualised through embodied involvement, yet it depends on the ability of the world to ‘give’ and the capacity of the body to receive—to be affected. And such capacity to receive is, as Simonsen argues above, unevenly distributed. Mitch Rose argues that there is always *something* which lies beyond the dialectic of giving and receiving (Rose, 2011, p. 120).

That something, which lies beyond the body, is what imperils bodies with invasion of unprecedented and unforeseen force. Merleau-Ponty (1968) labels this something “the invisible” that transcends embodied perception and presents itself as a “being-at-a-distance” (Merleau-Ponty, 1968, p. 207; see also Rose, 2011). This something has the ability to be “further on”, out of sight, touch or any other sensation (Merleau-Ponty, 1968, p. 1 and 217). However, Wylie argues such perceptual transcendence fails to realise that, to Merleau-Ponty, the subject still remains the measure for perception and experience, and thus assumes that the world is always pregiven to a subject (2006, p. 528). While Merleau-Ponty, therefore, takes the chiasm, the intertwining or the fold as a starting point for analysis, critics argue that the fold still reports to subjective experience. James Ash and Paul Simpson raise such concern as they call for geographers to develop post-phenomenological approaches that acknowledge how objects have “capacities for relation that humanistic forms of phenomenology would only assign to human beings” (Ash & Simpson, 2014, p. 12). The capacities for relation are argued to recognise the vulnerability and passivity of bodies (following Harrison, 2008), as the sensate qualities of the world often shape the bodies in ways that are unknown. As they argue in following the thought of Irigaray:

Forces such as air or light can also be understood as some of the actual mediums through which the potentials for human memory (and thus the production of social ‘facts’ such as age, class or gender) are transmitted in ways that are transparent, unreflected upon and often implicit to a situation. (Ash & Simpson, 2014, p. 14)

Memories and social facts are therefore argued to be produced in unreflected ways, implicit to situations, and, importantly, transmitted by forces such as light. The point here is to recognise that forces such as air, light, wind, weather and landscapes are conceived of as existing “before man, in the absence of man” (Deleuze quoted in Wylie, 2006, p. 529). However, in the quest to develop an approach that accounts for the experience of light, I find this post-phenomenological approach giving too much weight to the agency and immanence of light. While it is true that the sun exceeds human control and that the contingency of changes in urban lighting—blackouts, refurbished streets or moving vehicles—overwhelm bodies, such an overwhelming still needs a body to ‘receive’; a body that is both object and subject. Therefore, I find it useful to follow Merleau-Ponty in his insistence on a focus on the fold, the body as a hinge between the world and its sensation. Lighting becomes the medium that figures

as the neutral background leading the gaze *and* the force that invades the body's perceptive organs, calling for greater attention to the slippage between different ways of seeing. If we return to Lucie, Jackie and Mary's experiences of different light sources, the notion of carnal light acknowledges, and takes at its starting point, that these light sources are seen in themselves, as sensuous light *and* as representations of light. A carnal understanding of light therefore follows Benjamin, but rather than calling for the need to not focus on representational values alone, carnal light insists on focussing on both aspects at the same time.

3.1.3 SUMMARY

Having argued for the need to pay greater attention to the ways residents negotiate, adapt to and manipulate lighting in the urban, I have developed an understanding of lighting through a re-reading of Merleau-Ponty's phenomenology of light. The significance of drawing on the work of Merleau-Ponty lies in unfolding the often contradictory ways that light figures as a background medium that neutrally—and seemingly naturally—leads the gaze as if it knew where to lead the human gaze, while also recognising that oft times light invades, disrupts and disorients the body. Light is an expression of being and *is* in, and of, itself, figuring as a medium that enables and is actualised through the fold, the intertwining of the flesh of the body and the flesh of the world. I argue that such an understanding of light, as carnal, inherently material and immaterial allows me to consider how experiences are both the initiation of, and conditioned by, the urban, lit environment. By engaging with scholars that have criticized the phenomenological perspective, I have sought to draw out some of the obvious shortcomings of Merleau-Ponty's philosophy and argue for a revitalised understanding of some of the key concepts, in order to develop a more full bodied, carnal conceptualisation of light and experience.

Therefore, Merleau-Ponty's objection against the understanding of light as that which arrests the gaze is not a refusal of light's ability to invade the body, nor a refusal of people's experience of seeing light. When light leads the gaze it obviously also entails moments where an abrupt invasion or blinding by light *is* the sensory experience of 'light in its own right'. The sensory experience is part of the (im)material world.

The question that remains, however, is how such fold can be researched, and how it can be represented in research. In the following I will therefore turn towards the epistemological endeavour of discussing how Merleau-Ponty's phenomenology of

light can serve to explore how researchers can gain and produce knowledge about the embodied experiences of lighting.

3.2. METHODOLOGIES FOR RESEARCHING LIGHT IN PRACTICE

Epistemologically, the embodied understanding of lighting draws the researcher's attention towards the variety of practices that are invested in lighting up the city or simply carried out in certain lit environments. Particularly, it is a call for considering the ways that people respond and give shape to the urban, lit environment through everyday routines.

However, as Wylie argues, Merleau-Ponty's (1968) "skeletal and abbreviated" treatment and discussion of the notions of folds and flesh leaves epistemological concerns "barely hinted at" (2006, p. 527). And, I agree that while Merleau-Ponty provides a conceptual understanding of the intertwining of social practices and the material environment, the researcher is left in the dark about the epistemological endeavour of exploring how such foldings can be traced, documented and animated in research. Crucial questions are left unanswered: how can researchers explore the ways that light conditions ways of seeing and being in the city when darkness falls? How can research animate the ways that light is taken for granted as the background that enables everyday, routinized practices to unfold? How can research document ways that people respond to changes in lighting? In this section I will briefly address these questions.

3.2.1. BACKGROUNDS AND INTERRUPTIONS

If we follow Merleau-Ponty in understanding lighting, first, as 'that with which we see'—the neutral background that leads the gaze—lighting becomes that taken-for-granted background for our everyday lives. The epistemological concern that follows from this understanding of light is, therefore, how we can research and represent such neutral background that is not necessarily consciously recognised. In cultural geography, attention has been given to such 'backgrounds' of everyday life, and I want to turn towards geographers who, since the early 2000s, have grouped under the umbrella term non-representational theory (Anderson & Harrison, 2010).

Non-representational thought emerged out of a dissatisfaction with the academy's supposed "obsession with representation" in research (Vannini, 2015, p. 1); representation, understood as the "methodological timidity" that finds expression in "the interview and ethnographic data 'nicely packaged up in a few supposedly illustrative quotations'" (Vannini, 2015, p. 13). By challenging the modes by which research is

conducted and subsequently represented, Thrift (2000, 2008) has been particularly instrumental in setting the tone for attending to the ways that embodiment and politics are entangled in ways that are not only discursive and symbolic. Non-representational theory is concerned with the “sites that fall outside common awareness, the atmospheres we take for granted, the places which habitual dispositions regularly unfold” (Vannini, 2015, p. 9). With the aim of attending to the role of pre-personal knowledge (Anderson & Harrison, 2010) and semiconscious practices (Amin & Thrift, 2002; Thrift, 2000) non-representational thinking questions the epistemological challenge of how we can know about the non-verbalised knowledge of social practices. As Thrift famously argues, the aim of the non-representational approach is to better “capture the ‘onflow’ ... of everyday life” (2008, p. 5), and doing so by developing alternative ways of attending to actions, performances, encounters and socio-material entanglements of everyday life. Described as an approach that “is avowedly experimental, perhaps too much” (Thrift, 2008, p. 2) non-representational theory seeks to challenge the ways researchers can know about and represent research on such ‘onflow of everyday life’ (Vannini, 2015). It should be clear how the non-representational approach is in keeping with Benjamin’s concern for exploring how light not only presents itself to residents in the shape of symbols and signs, but also edifies such meaning.

Yet, in paying attention to the onflow of everyday life, non-representational research is not only concerned with the habitual backgrounds of everyday life, but furthermore the events that break with such habituality. Ruptures, implosions and interruptions demand of people to suddenly stop, shift and realign themselves, taking grip of situations unanticipated. As Vannini argues, non-representational research “concentrates on events ... irregular actions that shatter expectations ... Accidents” (Vannini, 2015, p. 7). Kathleen Stewart argues how such preoccupation stems from an interest in how the ordinary and habitual draws attention “because things just don’t *add up*. [because] *Something* throws itself together”, which is beyond the control of the subject (Stewart, 2008, p. 7). Thus, analytically non-representational research is not interested in backgrounds and their interruptions as entities studied separately, but rather the ways that each offers perspectives on the other.

Such relation between backgrounds and their interruptions is clearly in keeping with Merleau-Ponty’s understanding of the fold and how light both leads and disrupts the gaze. However, non-representational theory goes a bit further than Merleau-Ponty, as the events that ‘happen’ and ‘just don’t add up’ necessarily must have a degree of

immanence. While I am not on ontological accord with such recognition of immanence, the point I want to raise is that by paying attention to disruptions, an understanding of the habitual might approximate the background of everyday life (see for example Middleton, 2010b, 2011a). The point of placing otherwise ontologically divergent strands of thought in dialogue, is therefore to find common ground in the interest for exploring the relation between the background of everyday life and its interruptions, and as such further develop how a 'light phenomenology' can account for the way light both leads and disrupts the gaze. Yet, how can this more elusive understanding of light and its role in everyday life be researched?

Vannini disavows the idea that any unique or exclusive method should characterise non-representational research; rather he refers to the unique *style* of non-representational approaches, in the plural. Examples of such style can be found in a range of studies in cultural geography, of which a few count the study of mobile practices of cycling (Brown & Spinney, 2010; Spinney, 2007), walking (Edensor, 2000; Wylie, 2005), island dwelling (Vannini & Taggart, 2012), ordinary events (Stewart, 2008), dancing (McCormack, 2013), air born transport (McCormack, 2009, 2014), teaching and studying urban rhythms (Latham & McCormack, 2007, 2009) home building (Vannini & Taggart, 2013a) and mountain climbing (Vannini, 2016). The methodological 'style' draws on what can be considered commonplace ethnographic immersion in practices of cycling, walking, living, teaching and climbing—making use of commonplace methods such as interviewing, participant observation, photography, video and writing field notes. While the words that the above-cited researchers most commonly use to describe their methodological style are 'experimental', 'animated' and 'performative', they resort to the well-known catalogue of commonplace ethnographic methods.

This is not necessarily a critique. In the pursuit of Thrift's call for tipping the bar towards the 'perhaps too' experimental, non-representational scholars acknowledge the significance of traditional social scientific methods that have been accrued over years of methodological experimentation (in anthropology, sociology, and humanistic as well as cultural geography). As Alan Latham argues, a non-representational approach, yet not exclusively, "should work through how we can imbue traditional research methodologies with a sense of the creative, the practical, and being with practice-ness" (2003, p. 2000). Similarly, Vannini argues there "is nothing wrong in sharing illustrating data", and rather the challenge lies in "making ethnographic and qualitative knowledge...more creative and more performative" (2015, p. 13). The call

for more creative and performative ways of making and presenting data therefore draw on traditional ethnographic methodologies, yet depart from them by seeking to compel and immerse through experimental representation. As Vannini argues, non-representational research aims to “enliven rather than report, to render rather than represent, to resonate rather than validate, to rupture and reimagine rather than to faithfully describe” (2015, p. 15).

Returning to the epistemological shortcomings of Merleau-Ponty’s phenomenology, I want to argue that the non-representational approach offers insights into studying the neutral background of everyday life and the instances where such backgrounds are interrupted.

The notion of background and interruption therefore allows me to unfold an epistemological dimension to Merleau-Ponty’s understanding of light; while light leads the gaze as the unreflected and taken-for-granted background of habitual life, it simultaneously invades the body, blinds it and its ability to see, gaze or move, just as it can arrest the gaze and become an object of gazing.

It should be clear by now that such attention towards the interruptions of backgrounds relates to the previous chapter’s discussion of domestication and re-enchantment. The practice of inhabiting the city through constant negotiation and adaptation of the borders of the home posits the home as a site of tension where the background is constantly reworked and reconfigured. Similarly, as pedestrians move through the city, their experiences are mediated by a host of factors that they respond to, as interruptions to the otherwise habitual practice of movement and mobility.

3.2.2 SUMMARY

In this section I have aimed to address the epistemological shortcomings of an ontology of light, which takes inspiration from Merleau-Ponty in understanding light as embodied. Drawing on debates in cultural geography, I have argued for the need to consider the role of the senses as the mediation of experience, the role of pre-subjective experience and the role of the non-representational dimensions of everyday life. By considering how everyday life figures as a background that is disrupted by forces beyond the control of an intentional subject, the non-representational methodology is in keeping with Merleau-Ponty’s understanding of light as a background phenomenon that leads the gaze while also figuring as the force that invades the sensuous body. The epistemological lesson drawn from this discussion is that light should be researched

both as materiality and as practice, revealed through the embodied engagement with urban, lit environments.

3.3. CONCLUSION: THE URBAN, LIT ENVIRONMENT

In this chapter, I have explored the potential value of turning towards phenomenology in developing an ontological and epistemological understanding of light that takes more seriously the role of the body, social practices and lived experience. The aim of developing this approach has been to account for the diversity of experiences of the urban, lit environment, and therefore contribute to the scholarship on urban lighting by (re)considering the potential benefits of turning towards Merleau-Ponty's phenomenology of light.

In the first section, I unfolded how light Merleau-Ponty conceives of light both as a background medium that neutrally—and seemingly naturally—leads the gaze while also figuring as a material phenomenon that invades, disrupts and disorients the body. By encompassing such dual understanding of light, Merleau-Ponty offers a conceptual framework that acknowledges both the intentional subject and the (degree of) immanence of the material world. I argue that this understanding of light allows me to explain how, for example, Lucie, Jackie and Mary experience the lighting in their streets both as something material, they can see and identify as having a presence, while also tinturing and shaping the way they see and feel. As such, the approach allows me to understand how lighting shapes experience and ways of seeing, while maintaining a robust understanding of social practices and experience. However, by drawing out the shortcomings of Merleau-Ponty's ontology—mainly relating to the universalist account of experience and the subject-centred understanding of the body—I draw on scholars that have criticized the phenomenological perspective. Specifically, I draw on discussions in geography on atmospheres and post-phenomenology and present a revitalised understanding of light as carnal, which seeks to encompass how lighting paradoxically figures as medium and as materiality.

In the second section, I have addressed the epistemological shortcomings of Merleau-Ponty's philosophy and discussed how researchers can study the ways light conditions seeing and being in the city. The main point I draw out from putting Merleau-Ponty into dialogue with non-representational theory is that light should be researched both as materiality and as that medium that emerges as an expression of being. The epistemological approach draws my attention towards everyday practices where people engage with lighting, both in terms of actively lighting up spaces but also

in ways that social practices are formed by lighting as found in places. The practical measures that are needed to study such embodied interaction with the urban, lit environment are spelled out in the next chapter, where I present the methods I have deployed in studying lighting in Newham.

4. RESEARCHING LIGHT IN PRACTICE

Building on the previous chapter's proposal for understanding light as embodied and practiced through mundane routines and habitual engagements with the urban, lit environment, I now turn to the practical measures of studying such practices. The chapter introduces the reader to the case study area and the research participants, explaining the practical measures I have taken in studying everyday engagements and experiences of the urban, lit environment in Newham.

The ethnographic approach I have deployed takes great inspiration in geographical, anthropological and sociological studies of (re)designed urban public spaces (Adey, 2008a; Degen et al., 2008; Degen & Rose, 2012; Degen, 2001; Hall, 2013; Koch & Latham, 2013; Low, 2003a, 2003b, 2003c; Richardson, 2003). The value of drawing on such studies lies in acknowledging the variety of practices that contribute to producing urban public spaces, ranging from urban planning, design and everyday practices. Drawing from such work, I present the methodological approach I have employed in my research, focussing on three main methods: in-depth interviews with planners, architects and lighting designers; the mobile method of walk-along interviews with residents; and finally, collaborative photography projects with residents and subsequent photo-elicitation interviews.

The chapter unfolds in five sections, with the first section, 'Lighting up Newham & Canning Town', giving the reader a brief introduction to the case study area and positioning my research in relation to on-going changes in the neighbourhood. The section gives the reader a sense of how my interest in lighting in this particular part of East London emerged and why it provides a particularly interesting research case. By describing in more detail how different policy-driven initiatives change the lighting across the borough—with the aim of making people feel safer when going out during the hours of darkness—the section situates my study of everyday experiences of light across the borough in relation to such change. In the second section, 'Methodology: between light planning and everyday life', I consider the methodological setup of researching everyday life within a context of policy-driven urban change. The section provides a conceptual framework for the subsequent two sections that introduce in more detail the three main methods I have deployed in researching the role of light

to experience. The first method addresses the planning and design of the urban, lit environment and is presented in the section ‘Light planning & design: policy documents and in-depth interviews’. Drawing on research on urban planning (Flyvbjerg, 2004) and design processes (Ash, 2010; Rose, Degen, & Melhuish, 2014; Yaneva, 2009a) I describe how I identified relevant designers and planners and interviewed them about their role in the redesign of the urban, lit environment in Newham. In the following section, ‘Everyday life routines: walking and the home’, I turn towards the ethnographic fieldwork I have carried out with older residents in Newham. The section introduces the reader to the practical measures taken in crafting and designing my methodological approach, focussing on two different types of methods, the walk-along interview and the photography project, both with older residents. In the following section, I briefly mention the omissions of data before concluding the chapter.

4.1. LIGHTING UP NEWHAM & CANNING TOWN

Newham provides an interesting case for exploring the variegated and diverse practices that contribute to the production of the urban, lit environment. While Newham might not receive international acclaim for hosting light festivals such as those of Lyon or Melbourne, or for introducing smart lighting technologies such as those found in Eindhoven, or for developing lighting masterplans such as those of Paris or Copenhagen, Newham is unique for two reasons. As briefly explained in chapter 1, Newham is currently undergoing rapid redevelopment, changing all light fittings to LEDs and hosting some of the biggest current regeneration projects in the UK—projects that will bring a host of newly designed, and therefore newly lit, urban public and semi-public spaces to the borough. The redevelopment of Newham’s urban, lit environment is driven by a desire to improve and ameliorate the urban environment—a desire that can be traced back to the post-war rebuilding of the borough, which the Council argues never really brought this part of East London out of degeneration.

Throughout the 19th and 20th centuries, London’s industrial heartland stretched along the River Thames from Tower Bridge, eastwards. Car manufacturing, light industries and dockland activities made the East End—and Royal London Docks and the industrial sites dispersed around Newham in particular—a thriving industrious hub that served the rest of the city and wider country. Built mainly, in the mid-19th century, Canning Town and Custom House provided Edwardian and Victorian residencies for the dock and industry workers, but slowly these decayed into what the Council describe as “slum dwellings” (London Borough of Newham, 2012, p. 63). Suffering extensive

damage during the Second World War, large parts of Newham had fallen into ruin, and the Edwardian and Victorian housing stock in Canning Town and Custom House erased from the surface. The subsequent phase of post-war regeneration and rebuilding provided the standing terraced houses with a mixture of walk-up maisonette blocks, and precast tower blocks. As the Council writes in its description of Canning Town and Custom House:

the area has declined since its post-war reconstruction, its residents suffering from the demise of dock-related industry by the late 1970s and a legacy of poor urban design (including poor connectivity) poor quality, monotonous housing and intrusive infrastructure which create significant barriers and visual impacts. (London Borough of Newham, 2012, p. 63)

According to the Council, Newham currently yields an abundance of alleyways, fences, gardens, parking spaces, landing areas, and spaces in-between buildings—transitional spaces and no-man’s lands that provide shortcuts and hideouts. As the Council writes: “moving around Canning Town and Custom House is often extremely difficult. People travelling around the area are faced by cul-de-sacs, dead ends and a confusing street layout” (London Borough of Newham, 2003, p. 4). The Council is dedicated to improving connectivity and movement throughout the borough, both at day and at night. Lighting is argued to play a central role in alleviating the ‘significant barriers and visual impacts’ of the urban landscape by increasing transparency of and visibility in the public realm, providing clearer lines of sight and alleviating dark spaces as potential covers for crime (London Borough of Newham, 2003, p. 4).

Related to the increase of visibility and transparency in the public realm, the Council is devoted to improve the perception and reality of safety in the borough (London Borough of Newham, 2007a, p. 29). Over the past decade, the Council has been carrying out Household Panel Surveys, monitoring residents’ satisfaction with life in the borough. These surveys show that in 2011 a remarkable 53% of the residents felt unsafe walking alone in the streets after dark—in 2013 the figure rose to 55% and in 2015 it decreased to 43% (London Borough of Newham, 2016b, p. 112). When asked about the root cause for such fear of walking alone, residents in Newham refer to their experience and perception of anti-social behaviour with the most frequent incidents being “Teenagers hanging around streets” (81%) and “People being drunk and rowdy in public” (66%) (London Borough of Newham, 2016b, p. 116). Taking such fear seriously, the Council is committed to eliminate spaces for such people to

'hang around', de-cluttering the public realm, providing easier and smoother movement, while also promoting transparency and visibility.

By engaging critically with the way that the Council's policies and initiatives identify certain types of people and specific types of behaviour as symptomatic of disorder, I wish to pay particular attention to the role the Council ascribe to lighting. The specific initiatives for improving the lighting across the borough reveal how the Council aims at strategically ameliorating the experience and use of the public realm during the hours of darkness in two ways.

First, the Council is upgrading all of the borough's 19,000 streetlights to LEDs, changing the basic luminous infrastructure across the borough. This overhaul of the public lighting infrastructure is argued to "make Newham look better and feel safer" as it is cast in "brighter" light (London Borough of Newham, 2016a). As mentioned in chapter 1, only 10% of the street lights in Newham were LED in 2015, but by the end of 2016 this number should rise to 35%, and by the end of 2018 every single light should be replaced, supposedly improving "security and safety" (Interview John Biden, 23 February, 2016). The Council's vision of improving the borough's aesthetic appearance and people's sensory experiences when darkness falls threads through the planning guidelines for all new developments, which are initiated as part of the wider regeneration of the borough.

A second strategic use of lighting is therefore foregrounded in attempts to ensure transparency and visibility in newly designed areas. In comparison to the refurbishment of Newham's streetlights across the borough, the regeneration projects are geographically limited to the town centres of Stratford, Canning Town and Custom House, and the Royal London Docks (as seen on figure 1). In Canning Town and Custom House, an extensive £3.7 billion regeneration project was rolled out in 2004 with completion expected in 2023. The masterplan for the regeneration—which is marked with red on figure 2—states that the aim is to create a completely "new heart for the area...contributing to its identity as a key town centre for the borough", laying ground to the construction of some of the "tallest buildings in the borough" (Core strategy, 2012, p. 60). The newly constructed Rathbone Market – seen as slots 1a and 1b on figure 2 – comprise the Vermillion, Aurelia and Lumire buildings which edge up to slot 7, comprising the Hallsville's quarter and Fife Road (East City Point). These centrally lying parts (will) provide a mix of high- and low-rise buildings for commercial



Figure 1. Map of Newham divided into wards, with the areas undergoing severe regeneration marked with pink, showing the identified 'Arc of Opportunity'. Source (London Borough of Newham, 2012, p. 18)

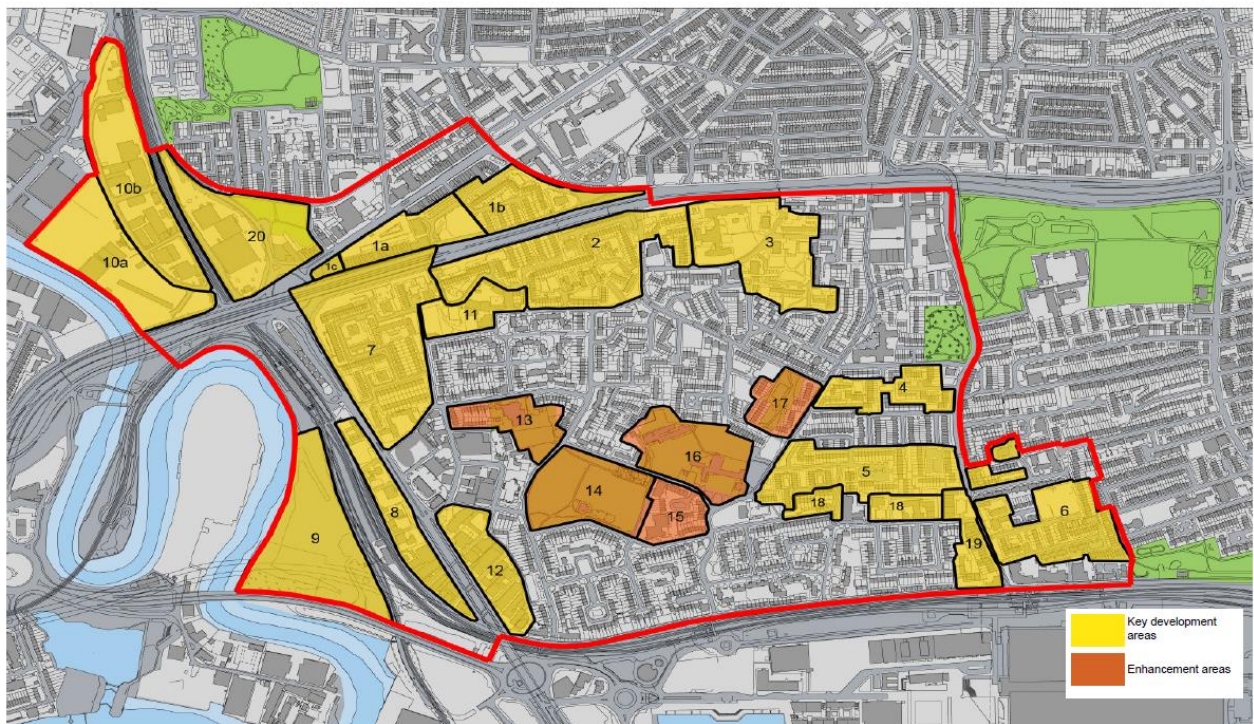


Figure 2. Map of Canning Town and Custom House, designating key development areas that currently are, or will be, under regeneration. Source: (London Borough of Newham, 2008, p. 40)

and residential use, connected by a range of open spaces, plazas and walkways. At night, these spaces are lit in a uniform light with the same crisp, bluish brightness as the LEDs gradually introduced in the streets. This part of Canning Town does not yield the same chaotic and sporadic heterogeneity that the residential, and more peripheral parts of the borough, currently do.

Yet, the Council acknowledges that design is not enough in alleviating the fear of going out. With anti-social behaviour and solitude ranking highly in causing fear among residents when going out after dark, the Council identifies the need to get people out in greater numbers to provide busier streets, as a means of combating fear. As argued by the Night-Time Economy Scrutiny Commission, the perceived level of crime in the borough may be improved through “the development of a busier and more vibrant street scene after 6pm” (London Borough of Newham, 2007a, p. 15). Such increase in everyday activity is argued to be encouraged by improving “open spaces, residential and business areas”, addressing the seeming lack of opportunities for “going out”, while also providing safety (Night-time Economy Scrutiny Commission, 2007, p. 13). As part of encouraging and fostering a culture of going out, not only for leisure consumption but as part of everyday routines as well, the lighting strategy, therefore, plays a role in shaping different ways of using the public.

In an attempt to encourage such activity in the area, the Council commissioned artistic events to make use of areas 1a, 1b, 1c, 7, 8 and 12 in the interim period of construction. The aim of this initiative was to “animate and activate two areas of Canning Town, the area down by the docks and the A13 underpass.” (Freeman, 2014). The winning proposal from event makers, The Brick Box, entailed an eight-week long festival underneath the A13 flyover, the A13 Green, and a one night lighting festival, Light Night Canning Town, which aimed at creating a night that would “entertain and illuminate, inspire and celebrate” (The Brick Box, 2013a) Canning Town like never before. Both projects ran for three consecutive years from 2013 to 2015 in August and November respectively. By placing these events underneath the A13 flyover—a space which, in the near future, will provide a crucial public space connecting the Rathbone Market and the Hallsville Quarter, redesigned for the “establishment of a new arrival space” (Churchman Landscape Architects, 2012) in Canning Town—it is clear that these lighting events are used as a catalyst for spurring change. By changing the aesthetic appearance and use of the space, the events deliberately aim at addressing and

changing the negative perception of the areas: “[Canning Town is] an area which suffers from negative perceptions and which truly benefits from the transformative power of the arts” (The Brick Box, 2013b).

These initiatives illustrate how changes in the urban, lit environment are aimed at improving the experience and everyday life in the borough: on the one hand, by creating ease of movement through the borough and making public spaces visible, and on the other hand, by encouraging activity and increased use of the public realm at night. While I am not interested in studying the experiential ‘effects’ of these initiatives, they provide an interesting context for exploring everyday experiences of, and engagements with, urban lighting, because they often provide a very visible and sensory break with the lighting that is shone in the more peripheral, residential areas. This is best illustrated by referring back to the experiences of Lucie, Jackie and Mary quoted in chapter 1. But not all residents notice a change (see for example Besecke & Hansch, 2015). By focussing on the everyday lives in the borough, I craft a study that cuts across areas that have been completely redesigned, areas where only a single street or street corners have been refurbished, or areas where the luminous upgrade is impending, but not yet begun. From my fieldwork commenced in the autumn of 2013, until it came to a close in the autumn of 2015, I have seen changes taking place throughout the borough—changes that some residents feel every day, and others will not see before another two years. The study therefore cuts across different neighbourhoods and streets in the borough taking the experience and the practices in residential streets as a starting point, rather than the regeneration and redesign as such.

4.2. METHODOLOGY: BETWEEN LIGHT PLANNING AND EVERYDAY LIFE

As argued in chapter 2, recent studies of urban lighting in social sciences have contributed greatly to understanding how lit spaces are experienced and how they are planned and designed. Bille (2014) and Pink and Leder Mackley (2014) deploy a mix of methods, counting participant observation, photography, and in-depth interviews in their studies of lighting up the urban home. Following residents as they re-enact everyday, routinized practices, Pink and Leder Mackley deploy a “collaborative video tour method”, which they argue allows them “to explore the sensory dimensions of their [the participants’] homes...and the tacit ways of knowing and practical skills participants used to perceive and make home.” (2014, pp. 2–3) Within geography, Vannini and Taggart (2013b) and Edensor and Millington (2009, 2010, 2012) all experiment with ethnographic methods, combining archival and desk-based research with in situ

interviews, immersive participant observation and photographic representation. Edensor argues that the ethnographically inspired mix of methods “provide[s] a sense of the flow of affect and emotion and the mingled apprehension of the representational and nonrepresentational qualities of light.” (Edensor, 2012, pp. 1103–1104) While these approaches offer crucial insights into the embodied, experiential dimensions of engagements with lighting in the city and other environments, I need to develop a methodology that enables me to explore how lighting is experienced and used across differently lit spaces, thus connecting specific locales to wider neighbourhoods. Furthermore, I wish to develop an approach that can account for how on-going processes of urban change and development impinge on everyday life experiences.

To explore how residents experience the varied and changing lightscapes across Newham, I have taken inspiration in anthropologists and geographers that deploy a mix of classic ethnographic methods in studying everyday life in urban public spaces. Worth mentioning here is the work of Miles Richardson (2003 [1982]) who investigates how people on a market square in Cartago, Costa Rica, incorporate the material culture of the market in their social lifeworlds. Similarly, Setha Low’s (2003c, 2009) exploration of the contested meanings over two very different plazas in San José, Costa Rica reveals how redesign and foreign capital can change the lifeworlds of public spaces, but moreover how the users of the plazas respond to such changes. Both Richardson and Low combine participant observation, photography, archival research, and interviews with people using the plazas, store owners, local organisations and institutions, local politicians, planners and designers. In doing so, they provide not only rich ethnographic accounts of the lived experiences and life in these spaces, but of the material culture and the life of the plazas themselves, through planning and (re)design. In a similar style, Degen’s (2008) study of the regeneration projects in Barcelona and Manchester puts under scrutiny “the power of the senses in framing urban planning discourses and practices” (Degen, 2008, p. 66). She explores the link between the level of urban policy making and everyday life sensations by conducting archival research, interviews with planners and architects, and detailed ethnographic studies of the places in question, using participant observation and in situ interview methods. Such ethnographic approach, she claims, allows her to study how spatial practices are “embodied in both the production and daily uses of public spaces” (Degen, 2008, p. 77). Like many geographers that study the production of urban space (see for example Harvey, 2008), Degen’s conceptual approach is inspired by Henri Lefebvre’s (1991) trialectic

conception of space. Lefebvre aims to capture the intersections of the imaginaries and visions for public spaces conceived by planners, architects and citizens (conceived space), and the immediate, sensory experience of the city perceived through embodied engagement (perceived space). As he argues, the intersections between conceived and perceived space—‘imagined’ and ‘real’ spaces—are expressed in the conflicted realm of ‘lived space’: “the dominated – and hence passively experienced – space which the imagination seeks to change and appropriate” (Lefebvre, 1991, p. 39). Thus, lived space is a site of struggle and contestation and, as Degen argues, where “the micro-relations of power are played out in everyday life, the space of domination and resistance” (Degen, 2001, p. 133). Such recognition of everyday life as a site for struggle leads David Harvey to argue that the production of space is “inextricably connected with the production of the body” (2000, p. 100), suggesting that the body provides an entry into researching the intertwining of urban planning practices and everyday life experiences.

With attention given to everyday life in the city and the body as the site of struggle and contestation, I find common ground in Lefebvre and Harvey’s understanding of ‘lived space’ and Merleau-Ponty’s concept of the flesh. Recognizing the obvious ontological discrepancies between Lefebvre and Harvey’s understanding of struggle as a political fight over the ‘right to the city’ (see Harvey, 2008; Lefebvre, 1991) and Merleau-Ponty’s concern with the sensibilities and sensualities of how people negotiate encounters with things and people, the commonality lies in taking the body and its doings as the starting point for critical analysis. In each of their ways, Degen, Richardson and Low focus on such transactions and everyday struggles in urban spaces, making use of ethnographic methods such as participant observation, interviews with planners and designers, walk-along interviews with residents, and photography and photo-elicitation interviews with residents. In the following three sections, I will unfold each step of this methodological approach, commencing with the study of the planning and design practices, which draws mainly on interviews with planners and designers and readings of policy and planning documents. The two following sections turn towards the everyday life of older residents in Newham, explaining how I came to choose methods for interviewing residents along their routine walks through the urban, lit environment—the walk-along interview method (Degen et al., 2008; Kusenbach,

2003)—and using photography as a probe for sparking reflection in the interview situation, over an extended period of time (Ewart & Luck, 2013; Rolph, Johnson, & Smith, 2009).

4.3. URBAN PLANNING & DESIGN: POLICY DOCUMENTS & IN-DEPTH INTERVIEWS

The policy-driven change of the urban, lit environment in Newham has brought me to question how, and why planners and designers claim to change experiences through lighting the city. By unfolding how the urban, lit environment is produced through planning and design practices, I therefore aim to scrutinise the potentialities of light planning and design practices. And then by putting the ideas and principles these planners and designers profess into dialogue with everyday life experiences of residents, I aim at identifying some of the limits to light planning and design practice. While considering the wider changes in street lighting across the borough, I narrowed my focus down to the use of lighting in new developments to the area marked out on figure 2, the master planning area for regenerating Canning Town and Custom House.

As seen in figure 3, I gathered an overview over the different parties involved in the development of Canning Town and Custom House, and identified those relevant in terms of lighting design. Focussing on the relevant actors that directly influence the lighting design process—the regeneration office, the highway maintenance team, and designers comprising architects, landscape architects and lighting designers—I traced the relations making up a network of decision makers. Additionally, I gathered the relevant planning documents online, including plans, guidelines, applications, Cabinet meeting minutes, news articles and web-page descriptions. Through the desk-based research I identified the relevant interviewees as seen on figure 4. During initial interviews with Sarah Dodd (Neighbourhood Regeneration Manager) and a telephone interview with John Biden (head of Highways and Traffic team, and the Highway Maintenance & Street Lighting units) I gained an idea of the distribution of responsibility and tasks across the network in relation to lighting. While the Council maintains the lighting in the public realm, counting streetlights and traffic lighting, it has limited responsibility for new the developments in Canning Town and Custom House, which are funded through private-public partnerships. In these developments, developers and the design team, comprising architects, landscape architects and lighting designers, take decisions concerning lighting design.

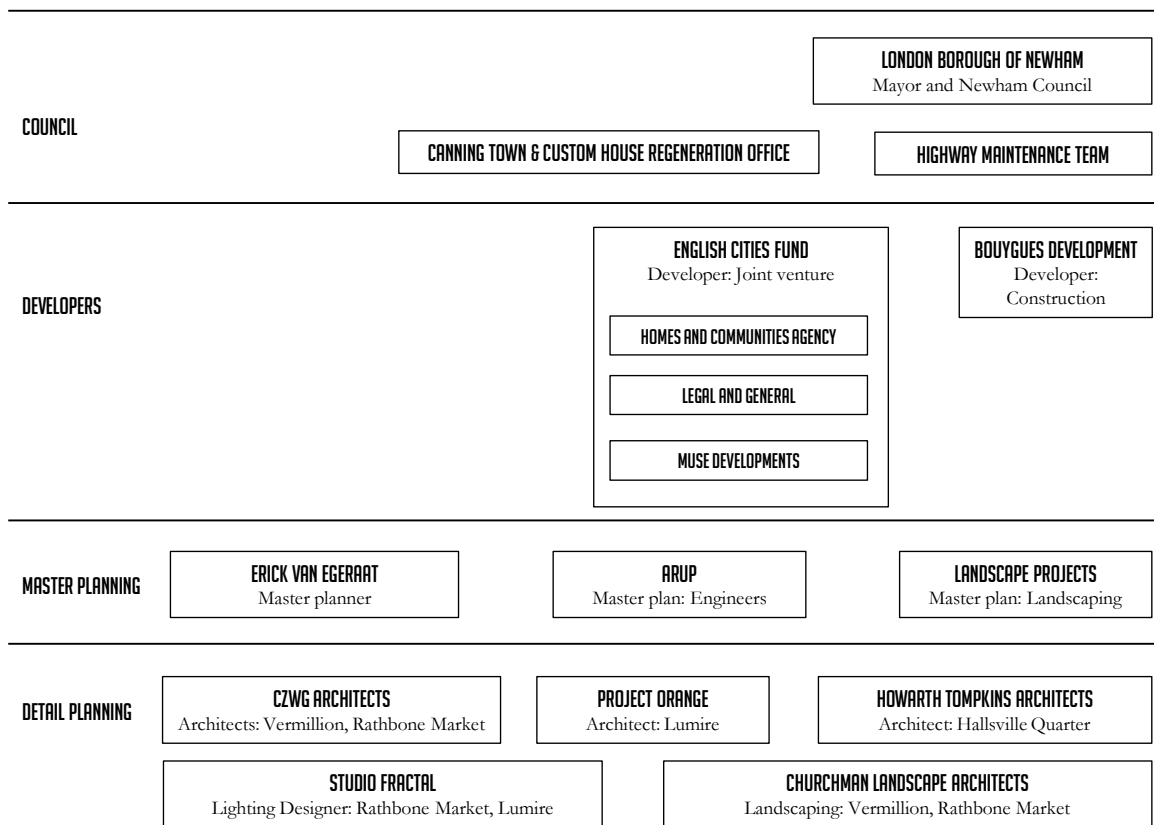


Figure 3. Stakeholder map of regeneration projects in Canning Town and Custom House.

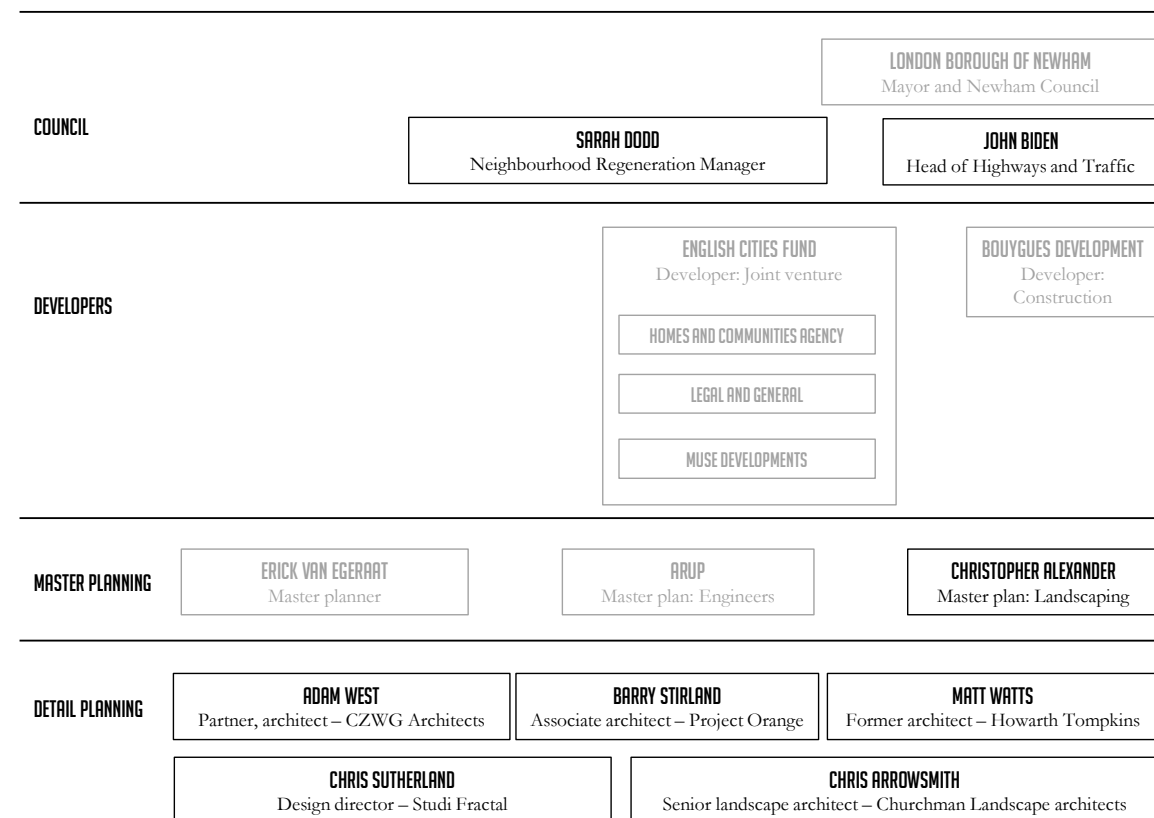


Figure 4. Interviewees involved in the regeneration projects in Canning Town and Custom House.

The mapping and selection of interviewees takes inspiration from recent ethnographic research on design processes and the making of the built environment. Studies of the design process differ from research on geographies of architecture (Adey, 2008b; Degen, 2008; Jacobs, 2006; Lees & Baxter, 2011; Lees, 2001) by focussing on the processes through which architects and designers shape buildings through gradually changing and adjusting visualisations (Rose et al., 2014), mock-ups and prototypes (Yaneva, 2009a), or testing workshops (Ash, 2010). For example, Rose, Degen and Claire Melhuish trace the how Computer Generated Images (CGIs), showing glossy representations of future buildings, “circulate around a network of offices and computer screens” (2014, p. 387), continuously changed and transformed to the wishes of different agents involved in their development. Their approach follows Bruno Latour and Alben Yaneva’s studies of architectural design processes, as they explore how a building comes into being through “flow of transformations” (Latour & Yaneva, 2008) of the design drawings and building prototypes. The point here is that they aim to investigate “the blind spot between architectural drawings, models and diagrams and their object” (Yaneva, 2009b, p. 26), meaning the ways that information and knowledge is transferred from a drawing into a building. While it is not my aim to investigate the design process as such, the methodological point I take from these studies is the attention that is given to the relation between different ‘actors’ in shaping the urban, lit environment.

I therefore identified the different actors, such as architects, landscape architects and lighting designers that were involved in lighting design of Canning Town and Custom House, and arranged interviews with each of the relevant parties, seen in figure 4 and Table 1. To establish an understanding of what Bent Flyvbjerg calls the “actual daily practices” (2004, p. 296) in urban planning and design processes, I asked the designers to describe their roles and contributions. Through seven semi-structured interviews and two informal meetings at the construction site on Rathbone Market, I focused on three main aspects in the interview: 1) description of the planning and design processes; 2) description of their role in this process, including how they use light in shaping particular sensibilities and spatialities; and 3) their reflection upon the role of lighting in the wider regeneration. Flyvbjerg argues that urban planning research should “focus on values and, especially, evaluative judgements” (2004, p. 291) and tirelessly question the power relations by asking “who governs?” (2004, p. 293). While

I am sympathetic towards such concern for values and power relations, the aim of the interviews with the designers is not to unveil unequal power dynamics in the design or planning process; rather the aim is to understand how lighting is used to inscribe supposed value into objects and spaces. Elizabeth Shove et al. have explored how designers *can* add value to objects and spaces, but without certainty of the design actually shaping how people use objects and how they feel when using them (2007, p. 134).

NAME	TITLE	COMPANY	DATE	DURATION
Sarah Dodd	Neighbourhood Regeneration Manager	Newham Council	02.06.2014	48m
John Biden	Head of Highways and Traffic	Newham Council	05.07.2014	15m
			05.08.2015	5m
Fergus Alexander	Landscape designer	Landscape Projects	05.06.2014	1h06m
Adam West	Partner	CZWG Architects	09.11.2015	52m
Barry Stirland	Associate Architect	Project Orange	31.03.2016	55m
Matt Watts	Former Architect	Howarth Tompkins	28.10.2015	1h02m
Chris Sutherland	Design Director	Studio Fractal	14.05.2014	1h28m
			11.02.2015	2h45m
			28.10.2015	52m
Chris Arrowsmith	Senior Landscape Architect	Churchman Landscape	11.02.2015	2h45m

Table 1. List of interviewed planners, architects and designers and affiliations.

This role of potentially being decisive in shaping practices and experiences resonates with similar debates around urban planning (Borden, 2001; Lefebvre, 1991, 2013) and particularly how public spaces are designed through the “engineering of affects” (Adey, 2008a, p. 441; Thrift, 2004b, p. 57). By interweaving in-depth interviews with airport planners, management and staff, with ethnographic observation of passenger behaviour and archival material, Adey uncovers how the design of airports is intended to produce certain affects, shaping experiences and practices. While these studies pledge allegiance to ontological approaches as diverse as ANT (Rose et al., 2014; Yaneva, 2009a), social practice theory (Shove et al., 2007) and affect theory (Adey, 2008a, 2008b; Thrift, 2004b), the common ground lies in questioning how values that impinge on everyday life and experiences are inscribed into the materiality of urban spaces. This concern inspires my approach, as I seek to scrutinise how lighting is used to inscribe values into spaces. In Lees’ study of a Vancouver library building, she explains how the statements of architects and designers can be difficult to decipher as they “seem to speak in riddles”, making “confusing and contradictory claims” (2001,

pp. 63–64). She suggests that research of buildings and the experience of buildings should not rely on designers' descriptions of their own practice and intentions, as presented in interviews, magazines and manifestos. In following a non-representational methodology, she calls for the need to deploy an ethnographic method of participant observation and interviews with users in situ *as well*, in order to get a deeper understanding of the situatedness of the designer's values and intentions. Lees is not claiming that researchers gain a better understanding of design intentions and values by interviewing users, but that such values and intentions cannot be understood only through the designer's or architect's expression, and must be situated in relation to its spatial context, use and feel. I find this particular methodological mix useful, as it insists on considering urban planning and design practices, and the decisions and intentions that underpin the policies and initiatives, within a context of situated experiences. Planning and design practices are not to be considered in isolation, but in relation to the experiences and practices they aim to give shape. Therefore, my research on the light planning and design processes takes shape as a critical engagement with the policies, plans, drawings and practices that give shape to the (experiences of) the urban, lit environment in Newham.

4.4 EVERYDAY LIFE ROUTINES: WALKING AND THE HOME

As briefly argued in chapter 1, there are two main reasons for focussing my research on the experience of older residents. First, within studies of urban lighting, no dedicated attempt has been made to take account of how older people experience changes in lighting or cope with artificial lighting in an urban context. While it has been argued that age does not necessarily play a factor in differentiating experience (Burrell, 2014), age does unmistakably deteriorate the body's perceptive organs in ways that call for researchers to show sensitivity towards the diversity of abilities or capacities for sense experience (see for example Ewart & Luck, 2013; Stjernborg, Wretstrand, & Tesfahuney, 2014). I wish to consider how the experience of the urban, lit environment is not universal, and not uniformly spread across the city, but rather varies with the heterogeneity of older residents' experience of urban lighting. Leading from such experiential diversity I also wish to speak to the policy-driven changes of the urban, lit environment and the supposed experiential 'effects'. The second reason for focussing on older residents therefore lies in challenging the claims and putting such a Universalist lighting strategy under scrutiny.

In Newham's "Core Strategy" for spatial development of the borough, the Council expresses a concern for older residents. Under a section that lists poor housing, infrastructure, unemployment, and depravity⁴, the Council also mentions the "significant number of older" people as a challenge that gives "Reasoned Justification" for initiating the £3.7 billion Regeneration Program of Canning Town and Custom House, (London Borough of Newham, 2012, p. 63). While in 2016 Newham holds the joint second lowest proportion of residents above the age of 65 of all of London's 32 boroughs (7% compared to highest 19%) (Greater London Authority, 2015, p. 3) population projections forecast that Newham will have the steepest increase in older residents between 2015 and 2025 (31pct) (Greater London Authority, 2015, p. 23). Adding to the ageing of the population, 36 % of residents between 16 and 44 (Newham, 2010, p. 157) have a desire to move out of the borough, whereas only 17 % of residents older than 65 want to move out. With the changes in the urban, lit environment, I therefore find 'reasoned justification' in exploring how older residents in Newham experience the city during the hours of darkness amid the redesign of public lighting.

Gaining access to the research field is a commonly discussed issue among ethnographers—and with good reason, as it can be very difficult to be accepted into a local culture (Feldman, Bell, & Berger, 2003; Maanen, 1988; Peticca-Harris, DeGama, & Elias, 2016; Wanat, 2008). Yet, in my case it was not *that* challenging to gain access to the field and informants. Rather than contacting people face to face on the streets, I decided to target local community centres, libraries and meeting groups, where older residents congregate. After contacting various institutions, I attended: eight Coffee Mornings at Canning Town Library and Custom House Library through July 2014 to July 2015; the Canning Town Bingo club in Canning Town Community Links Centre four times; and also a Community Panel meeting with the community safety team in Canning Town. I also tried to gain access to a range of churches and homeless shelters.

⁴ Since 1996 Newham has produced some of the highest rates of unemployment in London (London Borough of Newham, 2011, p. 7), especially youth unemployment, and youths hold lower levels of education than the national and London average. Newham is in the top five of London boroughs hosting benefit claimants; and 25% of households are registered to live in full poverty, 41% in relative poverty (both figures are double national average) while 55% of children are living in poverty, compared to 17% nationally (London Borough of Newham, 2013, p. 9). Therefore, it could be argued that it is of little surprise that over 30% of residents in Beckton and Canning Town want to move out of the borough, and almost 40% of those living in Plaistow and the Royal Docks desire pastures anew (Newham, 2010, p. 192).

By attending these Coffee Mornings, I got a deeper sense of how particularly older residents organise themselves and socialise through institutions. I used these situations to ignite a very general conversation with attendees about lighting in their local areas, a topic to which most residents had a lot to say about, negative and positive. As an icebreaker the conversation therefore spurred talk of how the residents engaged with this lighting, with responses being that people would notice it when walking home from somewhere, or when heading out somewhere. Therefore, an underlying premise for the conversations about light turned out to be that the residents would be walking. As such, I arranged meetings with residents to show me the lighting they were referring to on their routine walks, and used this situation as the interview situation. And so came the obvious choice of method: the walk-along interview.

4.4.1 WALK-ALONG INTERVIEWS

From the Coffee Mornings I arranged 12 walk-along interviews with 18 residents between 58 and 79 years of age. The participants were selected based on their willingness to take me along a walk that would effectively begin or end at their home, resulting in an interview over a cup of tea or coffee in their home. Some residents were not interested, and of the ones that were interested I accepted all but one, who seemed somewhat uncomfortable by the situation. Six of the walk-along interviews were undertaken within the area marked out with red on figure 2, and the remaining six were carried out in Custom House, Plaistow and Beckton, further east, as seen on figure 1. The diversity in the nature of these walks spans from walking a dog, walking to the office, to a local restaurant, to visiting nearby relatives (see table 2).

The main aim of deploying a mobile interview is to explore how meaning is produced through movement. As Pink suggests, researchers should apply a method that “does not need to seek to ‘capture’ or ‘arrest’ the flow of everyday life, but to follow it, and to gain a sense of it” (Pink, 2012, p. 33). The practical way of doing this, she purports, is through deploying a “method of purposefully walking around and exploring” (Pink, 2012, p. 38) spaces with research participants. Similarly, by giving attention to the “moving materialities” of embodied experiences in designed environments, Degen, Rose and DeSilvey draw on ethnographic and phenomenological methods, specifically walk-along interviews and photo-elicitation interviews (2008, p. 1909). Thus in such approaches, attention is given to the flow of everyday life; an approach that while not sharing the same ontological ground bears similarity to the non-representational approach to researching the ‘onflow of everyday life’ (Thrift, 2008).

NAME	AGE	NEIGHBOURHOOD	WALK	DATE	DURATION
Lily and Norman	62 & 68	Beckton	Bus stop and park	10.06.2015	09.45-10.40pm
Lucie and Jackie	69 & 67	Canning Town	Friends and relatives	24.09.2014	07.30-09.15pm
Lory + 3	-	Canning Town	To neighbours and park	13.08.2014	08.30-10.30pm
Brian	60	Canning Town	To shop and station	09.11.2015	05.00-06.00pm
Marlie	63	Canning Town	To restaurant and station	09.11.2015	06.00-07.00pm
			<i>repeat</i>	16.11.2015	06.00-07.00pm
Rachel	-	Canning Town	Station and Barking Road	16.11.2015	06.00-07.00pm
Eugene	73	Custom House	Bus stop, shops and doctor	03.08.2015	08.45-10.00pm
Ruth	58	Custom House	Station and around alleyways	10.06.2015	09.00-10.15pm
Charlie	78	Custom House	To library and brother's house	29.07.2015	08.45-10.30pm
Al and Marge	-	Custom House	To station and shops	05.08.2015	08.45-10.30pm
Mary and Richard	75 & 66	Plaistow	Dog walk and to shops	11.08.2014	08.30-10.15pm
			<i>repeat</i>	19.08.2014	08.45-10.15pm
Lesley and Jan	72 & 77	Plaistow	Bingo club and car park	15.11.2014	08.30-10.15pm

Table 2. Walk-along interviewees.

Margarethe Kusenbach (2003) first coined the walk-along interview, which entails walking with research participants as they carry out, or re-enact, mobile everyday practices. Kusenbach argues that the method brings greater phenomenological sensitivity to the study of social practice, as it offers access to the “transcendent and reflexive aspects of everyday life in situ” (Kusenbach, 2003, p. 455). Not only does she argue that the researcher is able to observe what people do in situ, but it also allows for the participant and the researcher to highlight and identify certain practices in action, and to question these while they are enacted. In following Kusenbach’s reasoning, Degen and Rose argue that the walk-along method grants “access [to] the individual and immediate experiencing” (Degen & Rose, 2012, p. 3275) of urban spaces. Degen, Rose and Basdas argue that engaging in conversation with people while they are carrying out their practices “allows immediate and intensive access to very detailed ways of seeing, talking, touching, hearing – thus accessing the feel of place to participants” (Rose et al., 2010, p. 340).

With such claims made about the benefits of talking to residents while walking as they carry out their routinized practices, I deploy the walk-along interview with the hope to “access the feel of place to participants”. Prior to the walks, I instructed the research participants to choose one or several routine walks or practices that they carry out on a daily, or at least weekly, basis, and then asked of them to take me along. Some re-enacted walks from their home to a shop, a bus stop or to see a neighbour. Others

took me on a guided tour of particular places in their neighbourhood—places that, for example, were chosen because they were badly lit, keeping the participant from going there, or places that were particularly well lit, although this only occurred on three occasions. Along these walks I found it useful to interrupt the flow and conversation by asking the participants to stop up and describe a particular space and consider its qualities. In keeping with Degen, Rose and Basdas’s proliferation of such interaction and reflection on the go, I intentionally broke up the routine to spark a moment of reflection.

Furthermore, I used the opportunity to photograph the spaces we passed through and the particular features the participant would notice and single out, thus using the camera to produce visual field notes. Mia Hunt explores what geographical research on the experience of urban space might gain from using photography as a way of doing research, and she argues that one potential benefit lies in how photography can be used to evoke the feeling of a place, as a way to “make photographs *with* places, not *of* them” (Hunt, 2014, p. 156). The point here is that rather than documenting places, photography can be used by geographers to evoke their feeling, and in my case the feeling that the participants expressed about the places. However, while capturing the evocative and (im)material qualities of urban, lit space, as expressed by the residents, my visual field notes can also be argued to illustrate what Rose (2016) labels ‘photo-documentation’. Rose argues that photo documentation is an attempt at capturing a precise record of materiality, in order to “capture something of the sensory richness and human inhabitation of urban environments” (2016, p. 308). The photographs I took on the walk-alongs aim to evoke the feel of a particular place to the participants, thus documenting the participant’s feel of a place and aiming to produce the images with the spatial features.

This methodological reciprocity between following the flow of everyday life through mobile methods, and interrupting such flow with conversation and photography, is therefore in keeping with the ontological point raised by Merleau-Ponty in relation to lighting. The walk-along interview can be argued to lead the gaze rather than arrest it, bringing participants to awareness of their own practice as they can “access, recall and show the physicality, materiality and sensoriality ... of everyday life that are normally unspoken (about) and unshown” (Pink & Leder Mackley, 2014, p. 4). However, in bringing research participants to reflect upon particular aspects of the ‘onflow of everyday life’—the background—along their re-enacted walks, it should be

clear that the interview disrupts the otherwise mundane practice of walking. Therefore, the ‘interruptions’ should not be understood as a hindrance for following the onflow of everyday life. Asking people to comment on, reflect upon and describe particular environments or events that occur can be argued to allow researchers to access “the feel of place to participants” (Rose et al., 2010, p. 340), as they are given the opportunity to distance themselves from the practice in which they are immersed. Middleton supports such concerns, as she argues that the routinized walks of her research participants in Hackney, London, were interrupted by events that provided moments of reflection in the research participants (2011a, pp. 2867–2868). The methodological point is therefore that ruptures in the everyday routine can provide useful and insightful catalysts for reflection in the research participants about how a routine is, or becomes, habitual. Taking from this point, I pay attention to the ways the participants respond to changes in the lit environment, and furthermore intentionally spark conversation about such changes by asking residents to stop and comment on specific environments.

Recognising the benefits of inducing such interruption through conversation and by stopping up and taking photographs, I want to briefly consider the potential ‘field-effects’ my presence and active participation in the walks have had on the conversations and the participants’ testimonies. It is absurd to claim or strive for a neutral presence in any field work; the whole set up of the walk-along interview and the re-enactment of the walk is in itself artificial. However, rather than seeing such ‘field-effects’ as problems, I have aimed at turning them into analytical strengths.

It is important to acknowledge that during the interviews, I was in my late 20s, thus remarkably younger than any of the residents, let alone any of the interviewed designers. As a white, western, well educated, male, relative tall, well-dressed and with an expensive camera, Dictaphone, smart phone and at times computer in hand, there is no doubt that my presence and ‘cultural capital’ was on parade. There is no escaping such ‘presence’ and I didn’t try to hide who I was and what my intentions were. A number of the participants warned me to be careful walking around the streets alone, especially with such an expensive camera. In such instances, I tried to acknowledge their concern and ask why that was the case, if they had experienced events themselves to cause such concern. The response from residents was mostly anecdotal referring to media representations and stories heard from friends and relatives, although some had first-hand accounts of robberies or muggings. Furthermore I assured them that I had

been walking the streets alone at night on a number of occasions without experiencing any problems. Mostly, this was laughed off with an 'as you wish'-attitude.

During some of the walk-along interviews residents chose to go places that, for example, were badly lit, that made them feel uncomfortable, or that they wouldn't pay much attention to as they would simply pass through them. As I tried to understand why such (lack of) feelings were induced when walking through these particular places I oft times suggested to go to the place, have a look and talk about their experience. The outcome of these interventionist experiences was startling, as in some cases the experience of the spaces did not match their initial perception of it. It is clear, that such discrepancy between the perception and actual experience of a place could have been induced by my presence. However, by acknowledging and making explicit that I could see why they would find the place uncomfortable, and in some instances reveal that I might also myself be afraid of walking alone, I tried to create an environment where the participant was allowed to reflect upon why spaces sometimes are uncomfortable and sometimes not. I therefore sought to make my presence very explicit, my personal experiences heard, and use this to discuss with the residents how they would feel at different points in time.

Finally, it is important to note, that when carrying out research with older people, and accompanying them along walks in the public realm, additional precautions are expected of an ethical researcher. Therefore during all walk-along interviews, the participant was asked to notify a friend or relative about the walk along, but in most cases, they were accompanied by a partner, friend or relative. I also made sure to notify at least one relative, friend or partner of my whereabouts, and made sure to make contact once the interview was over and on my way home.

4.4.2 VISUALISATION AND PHOTOGRAPHY: TRACING TACIT KNOWLEDGE

The Coffee Mornings at Canning Town and Custom House Libraries not only proved useful in terms of recruiting participants for walk-along interviews. The Community Neighbourhood Senior Officer at Canning Town Library put me in contact with the staff at Chargeable Lane Resource Centre in Plaistow. The Resource Centre is a day-care centre for older residents in Newham with the clients coming from across the borough, including Stratford, Forest Gate, Manor Park, East and West Ham, Canning Town, Plaistow and Beckton. The clients range from those with disabilities and mental health problems to older residents of varying degrees of ability, both mentally and

physically. Initial discussions with the staff were helpful in designing a series of discussion groups with the older, mentally able clients to discuss the lighting in their neighbourhoods. Throughout the autumn of 2014 I arranged 10 focus-group-like discussions...on Tuesdays and Wednesdays (and one Monday) from 11am to 12pm, and were held on 19th and 20th August, 2nd, 3rd, 10th, 15th, 16th and 17th September, and finally on 7th and 8th October. At the discussion groups I hosted 26 residents between 68 and 96 years of age. These residents are, on average, 17.5 years older than the residents I recruited for walk-along interviews, and less physically able; some use wheelchairs while others use sticks and braces. They are therefore remarkably less active in the public realm after the hours of darkness. I strategically selected the clients at the Resource Centre to provide a different perspective on how older residents experience lighting—lived experiences of much more vulnerable and physically frail bodies. Acknowledging the need to take additional precautions in undertaking research with more vulnerable residents, was therefore cleared through the ethics approval at Queen Mary University of London. I will discuss the particular precautions and measures at later in this section.

The difference in the way these clients experienced and structured everyday routines came through in the focus group discussions. The conversations about lighting were less rooted in everyday life routines in the public realm, and more about issues around safety, crime, the feeling of vulnerability, frailty and insecurity of being outside during the hours of darkness. As Valentine (2008) argues, the strength of a focus group interview can be for less vocal participants to find support in others' statements and thus find an outlet for making their opinions heard. Recognising the concurrent risk of silencing the voices of less vocal participants as more vocal participants take a lead in discussions, I made a point of making everyone's opinions, experiences and memories heard, thus taking an active chairing role in the discussions. By asking people to describe their engagement with the urban, lit environment through their everyday life, 23 of these residents remarked they would never go out at night and only engage with the lighting in the streets *through* their homes. This point was crucial to choosing these research participants as they offered a very different perspective on the experience of the urban, lit environment, compared to the walk-along interviewees. The descriptions of everyday practices in the focus groups were centred on putting objects such as curtains, windows, doors and self-mounted lights in motion to negotiate the changes in light and darkness in the public realm. Through the focus-group discussions, all of the

residents' stories were transcribed into personalised stories that were subsequently presented to the individual and the group. A substantial number of these stories proved banal, with little detail. For some participants it proved almost impossible to advance descriptions beyond a couple of sentences. Therefore, in order to activate and enliven the residents' memories and add further nuance to the stories, I took inspiration from visual ethnographic research on the use of images and photography in research with older people. For example, Ewart and Luck (2013) describe how the frailty of their research participants made in-depth interviewing difficult, limiting their interviews with participants to a few minutes. By leaving disposable cameras with the residents they were allowed to think about and reflect upon experiences and issues at their own pace, and photograph these to create a visual diary of their lives that were later used in photo-elicitation interviews (see also Rolph et al., 2009; Stjernborg et al., 2014).

Introducing photography as a means of developing the residents' stories further resulted in 14 out of the 26 residents agreeing to create a series of photographs to visualise their everyday practice (see table 3). Prior to taking the photographs, we discussed how to frame their practices, what should be in focus, which angles would add interest, and at what times the images should be taken. As Hodgetts et al. argue such processes of "Looking at one's world with a view to making photographs orientates participants to material aspects of their everyday lives, to artifacts important to them, and to the relationships that give meaning to these places and things" (2007, p. 256). Therefore, these discussions led to the 14 participants identifying the importance of objects such as curtains, the bedside lamp, particular street lamps or particular trees, peep holes, coloured glass in doors, or the landing area in front of their home, and so on. More than simply identifying these objects, the participants were able to explain in more detail the practices associated with putting these objects to use in negotiating with, and adapting to, the lighting in the street. The exercise of making the participants reflect upon how to visualise their everyday life therefore proved valuable in adding nuance to their stories: it made them reflect upon the materiality of their home and their everyday practices. As Rose argues, images can be very productive in research processes as they can bring out "the agency of material objects... evoke its brute thingness, there-ness, that words cannot convey" (Rose, 2008, p. 156). This was exactly what my use of photography as a method for researching everyday routines provided; it materialised practices and enlivened the material environment.

NAME	AGE	NEIGHBOURHOOD	PRACTICE	PHOTOGRAPHY		ELICITATION INTERVIEW	
Cassandra	85	Manor Park	Drawing curtains, moving room	28.01.2015	6.50-7.15pm	10.02.2015	30 min
Jeranda	81	Forest Gate	Drawing curtains	20.01.2015	5.30-6.00pm	10.02.2015	23 min
Vera	82	East Ham	Exploiting seepage into home	14.01.2015	6.00-6.30pm	17.02.2015	42 min
Nelqueisha	86	East Ham	Adjusting to natural light	14.01.2015	5.15-5.50pm	12.02.2015	27 min
Daphanie	91	Forest Gate	Peeking through curtains	20.01.2015	4.50-5.20pm	10.02.2015	26 min
			<i>repeat</i>	03.02.2015	6.00-6.20pm		
Charlene	72	Upton Park	Drawing curtains, exploiting seepage	14.01.2015	4.30-5.00pm	12.02.2015	43 min
Sussie	75	Forest Gate	Walking to the shops	28.01.2015	5.50-6.15pm	17.02.2015	24 min
Malcolm	68	Manor Park	Walking to shops	28.01.2015	5.15-5.35pm	12.02.2015	21 min
Kenniesha	85	West Ham	Sensor light, looking through curtains	03.02.2015	5.15-5.45pm	10.02.2015	40 min
Sanaya	70	Forest Gate	Drawing curtains but looking out	28.01.2015	6.20-6.40pm	17.02.2015	27 min
Reggie	91	Manor Park	Adjusting to natural light changes	03.02.2015	6.40-7.10pm	10.02.2015	22 min
Judith	96	Manor Park	Seeing light streaming from hallway	20.01.2015	6.15-7.50pm	17.02.2015	20 min

Table 3. Photography project participants at Chargeable Lane Resource Centre.

This visual approach finds support in the tradition of using photography and photographs in anthropology (see Bourdieu et al., 1990; Pink, 2007; Rose, 2012). Geographers, however, do not boast the same long and proud tradition for using photography. As Rose argues, running parallel to the increased interest in the senses, social practices and the non-representational in the 2000s, an “increasing numbers of geographers are thinking about the ways that photographs can be active players in the construction of a range of different kinds of geographical knowledge” (Rose, 2008, p. 151). Such a concern for the production of “geographical knowledge” lies in using images as a methodological vehicle to explore phenomena. As Hunt argues, for geographers “photography offers a way of *doing* research to open city spaces, objects and events, so we can better reflect on the complex textures, feelings, and experiences of urban place” (2014, p. 165 emphasis in original). Conversely, as Rose notes, the increased interest in the senses, emotion, affect and non-representational suggest that visual media, including photography, are useful in evoking the fleeting aspects of experience and affects, and therefore “it seems logical that images should also be used when the research findings are being presented” (Rose, 2016, p. 331). Therefore a second concern for using photography in research lies in its use as representation in published research, to enliven the text and produce different kinds of knowledge.

One way of using images as both analytical and evocative elements in research dissemination is in photo-essays. Providing a combination of writing and photographs, Rose argues that photo-essays can “offer an analysis of a particular social situation” (2016, p. 340) and in particular “the subjective experiencing of a social situation” (2016, p. 341). Illustrative of such work in geography, Edensor’s (2008; 2007) caption-less images of industrial ruins in Britain and the Lea Valley in London evoke a sense of haunted urban space. As Edensor argues, his photographs (and any photographs for that matter) are never only visual, but “conjure up synaesthetic and kinaesthetic effects, for the visual provokes other sensory responses ... textures, and tactilities, smells, atmospheres and sounds” (Edensor quoted in Rose, 2016, p. 341). Similarly, Vannini and Taggart’s photo-essays of island dwelling can be argued to tune in to the textures and materialities of mobile encounters, by providing photographs that “render sense of place and movement in a way in which words would fail” (2012, p. 228). Such claims that photographs contribute to the dissemination of meaning that is not sufficiently captured in writing, follows Thrift’s appeal for non-representational research to explore the ambiguous, undefined and treacherous, to the very tipping point where “clarity should not necessarily be counted as a good thing” (2008, p. 2). Following Thrift’s dismissal of representational clarity, Latham and Derek McCormack investigate the potential qualities of using photographs to produce “affective archives”, which they argue enable the researcher to go beyond thinking about representation of phenomena, and instead “thinking through rhythms of everyday sociality” (2009, p. 257). In fact, they claim that photo-diaries, photo-montages and video can succeed in “producing a certain affective resonance between somatic, visual, sonic and semantic rhythms, without necessarily reducing these to the terms of an interpretive narrative.” (Latham & McCormack, 2009, p. 260). Similarly, Hunt argues experimentation with filters, different technologies, and ways of taking photographs can challenge and “create new spaces of interpretation in urban research” (Hunt, 2014, p. 165) by rendering spaces with softness and vagueness, sometimes blurry, out of focus, and up close, rather than with visual clarity.

My approach to using photography as a method for exploring everyday life takes great inspiration in these works, yet, I want to stress that I use images primarily as a vehicle for residents to talk about their experiences, rather than making a point about their representative quality in dissemination of the research. As Hodgetts, Cham-

berlain and Radley argue, photographs can provide “a vehicle for invoking and considering situations, events and issues” (2007, p. 267), which enables research participants to “reflect upon taken-for-granted aspects of everyday life” (2007, p. 266). This is because the photograph is argued to allow the research participants to create “a distance from what they are usually immersed in and allows them to articulate thoughts and feelings that usually remain implicit” (Rose, 2012, p. 306). As such, I use the photographs to document and represent the onflow of everyday life specifically for the purpose of using them to spur reflection, enabling participants to distance themselves from this very same onflow.

In developing his idea of lighting as that which leads the gaze instead of arresting it, Merleau-Ponty argues that visual media such as paintings, photographs and video transform light into a thing because the gaze is arrested towards seeing light as a shape on a surface. As he argues, in photographic representation “the beam...becomes solidified” (1962, p. 360), thus evading how he conceives of light as an expression of being, as carnal. However, I argue that such rupture is exactly what allows residents to realise and reflect upon the ways that light is implicit to their lived experience. In the discussions with the clients at the Resource Centre, the photographs were used as vehicles for exploring everyday life in a manner that replicates what others have called photo-production projects (Dwyer, 2014; Hodgetts et al., 2007). Furthermore, the photographs are reproduced in the empirical chapters (chapter 6 and 7) as part of the text. While Rose (2008b) argues that images should never take precedence over text in research, Pink (2007) encourages researchers to let images take more prominent roles, making up half of the manuscript in photo-essays. The empirical chapters therefore present photographs intermittently, serving two main purposes. As Hunt (2014, p. 255) argues, geographers tend to use photography in three distinct ways: 1) as evocation; 2) as a means to challenge and play with hierarchies of objects and matter; and 3) as a means for capturing fleeting moments and events. My use of photographs serves mainly the second way of using images, by representing the participants’ ‘views’ and challenging the hierarchies of different luminous objects and lit conditions. As Hunt argues, such focus on challenging material hierarchies can “destabilise our understandings of place and question established hierarchies...[because the photographs] elevate objects, granting them status” (2014, p. 161). The point here is to use the photographs to make the research participants aware of the different layers of light

that are taken for granted, and represent such sensibility of the lit environment by visualising and challenging the hierarchies of different light layers in the city.

I therefore want to make a contribution to research on urban illumination by proposing photography as a method for researching and representing everyday experiences with lighting. In research on urban lighting, the use of visual methods varies greatly, and is not a given. In Bille's (2014) study of Danes' use of light to shape atmospheres of the home, he uses images as illustrations. In Pink and Leder Mackley's (2014) study, they use video as a method for recording and interviewing people as the re-enact routinized practice, but the footage is not reproduced in publications; in Edensor's (2012; 2015) study of light festivals and art, and in Vannini and Taggart's study of light in the off-grid home, they both use images as illustration and evocation of the phenomena under scrutiny in their publications. It should be said that a substantial amount of the research on urban lighting is conducted and reproduced without any explicit discussion of the limits and advantages of using visual methodology (Bille, 2015; Edensor & Millington, 2009; McQuire, 2005; Shaw, 2014). My aim, therefore, is to contribute to the methodological experimentation within studies of urban lighting by encouraging photography as method for researching everyday life.

The crucial insight comes from the way the photographs enabled the residents to think about the role of different lighting in everyday life practices and their materiality. Returning to the photography project, I grouped the 14 participants into two groups of five and one of four that lived close to each other, and visited them on different days accompanied by a care worker who took me from home to home. The care worker served as chauffeur and gate keeper for me to enter the intimate realm of the home. In visiting each of the participants in their homes, I needed to take a number of precautions and additional measures, as expected of an ethical researcher. The visits to each participant were planned and the participant was notified of our arrival. The care worker knew the addresses, and upon arrival would knock on the door and call out the participants' name. The participant would on all occasions respond well knowing about our arrival and welcome us inside. In the case of any event, the care worker was prepared to follow proper procedure to take action, and the Resource Centre was standing by until we finished our trip.

As we arrived at each home we discussed the different pictures and angles we had decided on, and I started photographing, showing the pictures to the participant as I took them. As seen in table 3, I took all the photographs in January and February

2015 in collaboration with the residents. As I set up the camera and prepared to take the photographs, I discussed angle and framing with the participants. Once the picture was taken, I asked them their opinion on the results viewed on the camera screen before agreeing to the sufficiency of their representation. Once the images were satisfactory to the participant, the care worker and I drove off to the next home. These photographs were not retouched in post-production until the residents were given a chance to look at them the following week on my computer screen back at the Resource Centre.

Guided by the insight that photographs not only show, but can allow people to talk about what is shown, and consequently what is not shown (Hodgetts et al., 2007) the images were discussed for the photographic quality, representing the residents view on their home and domestic practices but furthermore used as prompts, sparking conversation about what was seen and what we might not be able to 'see' in the photographs.

The use of images to prompt conversation in interviews was pioneered as a method by John Collier and Malcom Collier (1986) and later developed in a range of disciplines. The overarching claim is that such interviews bring out another type of data and knowledge than semi-structured interviews based on a set of questions, alone. As Douglas Harper (2002) argues, this is the case as the interview is anchored in an image that is understood by both interviewer and interviewee (at least if successful). The shared understanding and common ground of reference is argued to ease the interview situation, but furthermore he argues that a larger brain capacity is used when discussing images rather than pure conversation, suggesting that conversation over images "evoke deeper elements of human consciousness" (Harper, 2002, p. 13). While I am not entirely convinced by this argument (the increased brain activity could as well stem from bewilderment over the meaning of the image or its disturbing representation) an important point lies in how this increased consciousness can be used productively. In two different photography projects where Harper photographed farmers and mechanical workers, respectively, he experienced that the interviewees did not identify with his representations in the photo-elicitation interview. The images he had taken to represent their practice turned out to 'badly' represent the research participants' self-perception or lived experience, making Harper experiment with other frames, foci and angles, to 'get the representation right'.

My use of photo-elicitation interviews is very much guided by such interaction between the research participant and me as a researcher. Throughout the photo elicitation interviews, I asked the participant to comment on the photographs as we flicked through them. Naturally, conversations started out with discussions of the practices that the photos represented, and in quite a few cases the participants noticed details that added further nuance to their stories. Thus, by spotting aspects in the photographs, the participants were allowed to further elucidate aspects of their everyday practices and how this bore significance to their experience. Therefore, I argue that in researching light, photography as practice and representation allows research participants to see how they see in their everyday environments. This ability to see one's own vision, materialised before the self on a two dimensional surface, rightfully puts an end to light as a lived phenomenon—in keeping with Merleau-Ponty's critique of the intellectualist perspective where light is understood as a phenomenon 'out there'. The photograph (re)produces light as an object 'out there' enabling the research participant to take a step back and reflect. In such situations, where research participants either take their own photographs or collaboratively with a photographer, Rose argues that "interviewees can reflect on why they photographed what they did and what the photo means to them. In that context, the photographs become powerful representations of how the interviewees see their world" (Rose, 2008a, p. 154).

The photographs that the research participants selected were chosen because they were argued to represent and support the participants' self-perception of their home and everyday practices. The photographs can therefore be argued to provide the reader with a visual witness to the everyday life of the research participants, bringing out the material and embodied feel of their places and routines.

4.5. DATA MANAGEMENT

A note should be added regarding the handling and storage of data, including the anonymization of participants, the storage and management of potentially sensitive data, and the handling of images and photographs showing personal details.

All interviews, transcripts and photographs have been collected and put on a secure hard-drive accessible with password only, stored in a locked off location. All resident names have been anonymised, while names of persons in professional positions have been used according to their public profile. Once anonymization was secured, the key was stored on the local hard-drive, and the anonymised version transferred to a secure cloud, accessible only with password. A potential intrusion in this

cloud, would therefore have been without a link to original dates, names and specific locations. For images showing identifiable house numbers or domestic details, these have been erased using Photoshop, saved in *.jpeg format to make any retracing of a potential layer file impossible.

The data has been analysed through tried and trusted methods of themed analysis, making use of the qualitative data managing software NVivo. In practical terms, all transcripts of interviews have been uploaded to NVivo, and coded thematically, starting out with a theory informed thematisation. However, squaring empirically rich and often contradictory circles seemed to lose some of the richness of the testimonies, and did little in bringing out the nuances of the participants' testimonies. In his seminal work *Personal Knowledge*, Michael Polanyi (2005) argues that the scientific researchers and artists alike often base their choices on common sense, guided by passions and desires, rather than rational choices. The point here is, that choice making rests on an instinctive and sometimes corporeal type of intelligence, which is guided by passionate engagements, a form of tacit intellect, revealing that "we can know more than we can tell" (Polanyi, 1966, p. 4); that a tacit knowledge of practices and corporeal engagement supersede what we are able to perceive (see also Lynch, 2001). Following along such lines of thought, I coded the interviews into groups, following the directions the data took me, guided by what I found interesting, what residents emphasised, but moreover, and probably most importantly what they didn't seem to find important. I tried to pick out the aspects of their stories that seemed commonplace and mundane to themselves, to unravel the role lighting played to such practices. As such the themes that emerged from the interviews with planners and designers, from the walk-along interviews and from the photo-elicitation interviews were grouped into broad themes, respectively. These broader themes are what have shaped the structure of each of the empirical chapters.

4.6 OMISSIONS

It is important to briefly consider some of the research I carried out alongside the interviews with designers, walk-along interviews and the photo project. Initially, I had focussed on a range of different lighting practices and events in different parts of London but in Newham specifically, that I later came to omit from the thesis.

First, the light festival 'Light Night Canning Town' provided a series of events that I studied ethnographically over three consecutive years. In November 2013 I set out to experience what to my knowledge was the first progressive use of light art in

London. Inspired by Edensor and Millington's (2012) study of similar light events in Blackpool—combining interviews with users, observation of practices, and photography, I attended the events as they ran over the following three years, repeated in 2014 and 2015. During these events I carried out 38 vox-pop or survey style interviews, systematic participant observation of people's movements and practices, and I interviewed six of the artists involved as well as the two curators from The Brick Box. For the Light Night in 2014, I took part in setting up three different installations, helping out four different lighting designers as a kind of work-along interview, gaining an understanding of how the lighting designers work with light in relation to the specific theme of the light night and the space. This approach was inspired by ethnographic studies of design processes, which claim that through attending to the process of production, a richer detail is obtained about the values inscribed in designed products (Ash, 2010; Rose, 2013; Yaneva, 2009b). While I acknowledge the potential quality of studying everyday experiences of urban lighting through a focus on how such events suspend the everyday, making residents reflect upon their everyday as they are suddenly allowed to see spaces lit in a new light, I also found that my empirical data did little more than what is already established in research on light festivals. What started to intrigue me about the interviews and conversations with residents attending these events was, rather, their everyday experiences of lighting through mundane practices. Therefore, I chose to focus solely on everyday, routinized practices, rather than including the spectacular and eventful.

Second, I took an active role in organising a light event, 'Playful is the night' in the Olympic Park in Stratford. Teaming up with two light artists and two lighting designers we arranged an evening of lighting games, play and entertainment, inviting 120 residents to participate in creating an evening of play. Similar to the Light Night Canning Town events, this event aimed at changing people's everyday perception and use of a space, and, furthermore, by educating participants about renewable light sources such as solar power-driven light and LEDs, the event had an ulterior motive to educate people about more sustainable ways of illuminating cities. The project, however, was omitted because the participants were less focussed on how the event related to the park and their everyday experience and use of the park—instead they focussed on the conviviality, atmosphere and the intrigue of using light to play with their children. And while this itself could prove an interesting point of entry to question and critique the role of such lighting events in mediating and making participants reflect upon everyday

engagements with light, my data seemed to add little nuance or novelty to existing research.

Third, I have also omitted a photography project that I designed and delivered with 14 Albanian youths living in Newham. The photography project was similar to the collaboration with the Resource Centre, but served a more educational purpose by teaching the youths attending the Shpresa youth club in Plaistow how to use a DSLR camera to take high quality pictures at night. Each participant was asked to create a photo diary of one of his or her weekly practices. These images were presented to the group and discussed before being used in a photo-elicitation interview. Finally, each participant presented their photo-essay at a small exhibition for friends and family. Although the project produced very interesting results and provided in-depth understanding of the youths' self-perception and lived experiences of the city during the hours of darkness, I chose to omit the project from this study in order to narrow down my empirical focus to older residents. I acknowledge the potential significance of developing the focus of my research into an intergenerational study (see Vanderbeck, 2007b), however, themes around intergenerational relations never came up in work with either older people or the youths. As such, the intention of producing an intergenerational study was quickly dismissed.

NAME	TITLE	COMPANY	DATE	DURATION
Satu Streatfield	Lighting designer	Speirs and Major	24.01.2014	1h45m
			28.10.2015	51m
Rosie Freeman & Eleanor Barrett	Arts regeneration	The Brick Box	23.01.2014	1h07m
			05.08.2014	37m
Inessa Demidova	Lighting Designer	GIA Equations	26.01.2014	48m
Martin Lupton & Sharon Stammers	Lighting Designers	Light Collective	05.02.2015	25m
Elettra Bordonaro	Former Lighting Designer	Light Bureau	19.02.2014	1h15m
<i>with</i> Neven Kovacevic	Partners	Light Follows Behaviour	31.07.2014	2h15m
Mark Ridler	Lighting designer and VP	BNP and ILP	18.03.2014	50m
Laurent Louyer	Light artist	Creatmosfera	11.08.2014	53m
			24.11.2015	1h14m
			07.01.2015	1h32m
Andy D'Cruz & Jonathan Hogg	Audio Visual Artists	Output Arts	10.02.2014	1h36m

Table 4. Interviews with designers and artists omitted from the thesis.

As seen in table 4, I have omitted nine interviews with lighting designers working for different companies and projects across London because they weren't directly related to the regeneration of Newham. However, these interviews have given me a

broader and more general idea of how designers work and therefore serve to underpin my general knowledge on urban lighting.

And finally, I unsuccessfully tried to interview more planners from the planning department, include a study of the practices of the lighting engineers working with the refitting of LED lights in Newham, and the Neighbourhood Safety Team (NST). Despite following up with Sarah Dodd, I never got through to have more meetings. Similarly, after uncountable emails, phone calls, and the two conversations with John Biden the prospect of meeting up with the engineers never happened. Similarly, the community safety team officers from the Metropolitan police were present at every other coffee morning I attended, and I tried to set up a meeting with them as they worked their shift. Despite numerous emails and face-to-face meetings discussing the possibility, it never materialised.

4.6. CONCLUSION

In this chapter, I have introduced the reader to the case study area and the research subjects and explained the practical measures I have taken in studying their everyday engagements and experiences of the urban, lit environment in Newham. As the wider aim of my research is to explore how the urban, lit environment is produced through various practices, cutting across light planning and design and everyday life, this chapter has provided a methodological apparatus for researching and representing such diverse practices. My methodological approach introduces three methods: 1) in-depth interviews with planners, architects and lighting designers; 2) walk-along interviews with residents; and 3) a collaborative photography project with residents using photo-elicitation interviews. The choice and use of these methods has been pragmatic, as I have adapted my choice of method according to the requirements of the residents and the practical challenges that surfaced throughout the fieldwork. The older residents I recruited through Coffee Mornings were, on average, 17.5 years younger than the older residents attending the Resource Centre, requiring of me to develop very different methodological approaches to studying each group's routinized engagements with urban lighting. The youngest group took me along walks through the public realm, from their homes to somewhere else, suggesting the appropriateness of using the walk-along interview method. The relatively older group of residents, however, only engaged with the public realm through their homes. As some were unable to deliver descriptive accounts of their everyday practices, I deployed a method using photography as a means of evoking the aspects of their everyday routines and lives that otherwise did not occur

through conversation alone. Finally, I have discussed how the photographs I took on walk-along interviews and as part of the photo projects can be used as representation, evoking the residents' experiences and bringing the reader along on a journey to their homes, their neighbourhoods and the streets of Newham. The wider aim of this chapter has been to contribute to the development of methods for studying urban lighting, and in particular older people's experience of urban lighting.

5. NEWHAM: THE BOROUGH OF (B)LIGHT

In this chapter I question the claims that light planners and lighting designers make to the supposed effects of lighting. The aim is to scrutinise the ways light planners and designers conceive of their roles in shaping experiences and encouraging particular practices in the city once darkness falls. Turning towards specific instances of lighting design in Canning Town and light planning across the borough of Newham, the chapter provides examples of how lighting is used as part of a wider regeneration of the borough in an effort to shape human practices and experiences in very particular ways. The chapter traces and links together the different types of knowledge that inform choices made when giving shape to the urban, lit environment, ranging from numerical measures in guidelines that stipulate ‘adequate levels’ of lighting, to technology preferences and aesthetic, psychological and conceptual concerns. I show how light is used in an attempt to increase numbers of pedestrians, providing ‘eyes on the streets’ and ‘eyes from the windows’ of buildings by making spaces more transparent; how light is used to guide flows of people through particular areas by creating and smoothing contrasts in the urban environment; and lastly, how light is used as an incipient medium to guide people by luminous objects rather than light poles and visible fittings.

These attempts at shaping experiences, I argue, reveal how planners and designers use lighting to prepare the urban environment as a stage for habituated and routinized everyday practices in very different ways. As light planning aims at prescribing practices for very specific ends, lighting design accommodates spatial practices in ways that are performative and incidental to lived experience. The value of recognising this difference lies in developing an understanding of how light not only shapes practices and experiences, but how the lit environment is actualised through users’ practices and responses to different lit spaces. Furthermore, an interesting difference emerges in how light planning and lighting design practices recognise the importance of vernacular light sources in giving shape to the urban, lit environment—planners acknowledge luminous homes as part of ensuring natural surveillance, while lighting designers see such vernacular luminosity as part of breaking down spatial boundaries in, and adding life to the urban environment.

In the following section, ‘Newham at a glance’, I take the reader on a journey along the trajectory of one of NASA’s satellites overlooking nocturnal London. Such a bird’s eye view of the luminous city is used to question the socio-spatial distribution of light across the borough within a context on-going change. In the following section, ‘Polishing the Borough... with light’, I unravel the ways in which lighting is used by planners and designers as an instrument for shaping the urban, lit environment. In the first subsection, ‘Elusive standards: “relevant levels” for “adequate lighting”’, I trace how planners and policy makers prescribe certain levels of lighting through policy and planning documents that follow National Standards and regulations. By turning towards two different case studies in Canning Town, the following two subsections, ‘Master planning and the A13 flyover’, and ‘Rathbone Market’, explore how architects, landscape architects and lighting designers respond to such standards and regulations. In each of the two subsections I show how designers use lighting to give presence to places in particular ways. These sections draw on interviews with designers and therefore aim at uncovering the actual daily practices of the design profession (Flyvbjerg, 2004, p. 296). The following section, ‘A question of design?’ engages more critically with the values and evaluative judgments of lighting designers, who promote a way of thinking about the urban, lit environment as emerging through design as well as through everyday practices and vernacular light sources. This is explored by considering how designers respond to the indeterminacy of future use and the relation between the space the designer is designated to work on and adjacent spaces. Finally, I conclude the chapter by drawing out the main findings of the chapter. With light planners and designers both giving attention to the role of everyday practices and vernacular light sources in producing the urban, lit environment, I call for greater attention to how people feel when carrying out such everyday practices in the urban, lit environment, and how they respond to, and experience, the play between different planned and vernacular light sources.

5.1. NEWHAM AT A GLANCE

The Borough of Newham is responsible for providing and maintaining the lighting along streets and parks in each of its 16 wards. Once darkness falls, the lighting grid is rolled out as a carpet of luminous nodes, clothing roads, squares, pathways and sidewalks in a variety of light sources. In late 2015, the 19,000 streetlights were made up of three main technologies: 2,050 Light Emitting Diodes (LEDs), 1,850 Philips’ Cosmopolis Metal Halide (MH) lights, and the remaining 15,100 lights were a variation of

High Pressure Sodium lights (SON) (London Borough of Newham, 2015). Whereas SON lights were introduced in the 1970s and have been the preferred light source throughout most of the second half of the 20th century, LEDs and MH lights have (only) gained prominence within the last decade. For all new developments and improvements in lighting to existing buildings it is LEDs and MH that are the preferred luminaires alongside Halogen—not SON. In fact, under the British Standards' guidelines, sodium lights are banned from new developments (Secured by Design, 2014, p. 25). While the Council follows the British Standards' recommendations for light *levels* on roads and buildings, giving a uniform dispersion of intensities across the borough, the different light sources vary greatly in their *colour*. SON lights emit a yellowish light—the colour temperature around 2,700K, while LEDs and MH give off a more bluish white light in the spectrum 3,000 to 6,000K, and 3,000 to 4,000K, respectively.

As seen on figure 5, the satellite photo of nocturnal London beautifully captures the colour distribution across the city with the icy, white lights of the Square Mile and the West End clearly sticking out against the large swaths of yellow lights in North, South and East London. By zooming in on Newham in figure 6, it becomes evident how the golden carpet of SON lit streets is punctured by silvery nodes, marking out the presence of Canary Wharf, Canning Town, Stratford and the Olympic city—all places that have undergone severe regeneration over the past 10 to 20 years, showcasing LEDs, MH and Halogen lit spaces.⁵ The geographical distribution of light technologies therefore reveals a socio-spatial division of the city and the borough—a division that can be traced back to the very emergence of street lighting in London, as Beaumont argues that the “endless, complicated, and convoluted spaces” (2015, p. 135) of London's poorer outposts were left in darkness and the “obscurity of the hotch-potch of half moon” light (2015, p. 121). While Newham's residential streets are not left in darkness as such, they are embellished in light that, according to the British Standards, belongs to a former century.

The colour distribution therefore changes the aesthetic *appearance* of the city, which further changes the sensory and emotional *experience* of its lit streets. Light colour

⁵ The images reveal urban development through different colour temperatures: a tale of places in progress and those in regress. Or maybe not regress as such, but rather the streets that aren't identified for luminous upgrade, redevelopment and refurbishment. However, such symbolic reading of light colour as representing urban development 1:1 severely simplifies the matter. For instance, the West End seems purely bright bluish, yet around Westminster 14,000 gaslights are still in function, preserved for heritage reasons, which create an island of yellowish lights within the sea of bright bluish lights. This spatial lighting divide is not a tale of regress; however, the one in Newham is.



Figure 5: London at night. Source: Daily Mail⁶



Figure 6: Newham at night. Source: Daily Mail⁷

⁶ <http://www.dailymail.co.uk/news/article-3339211/NASA-astronaut-snaps-incredible-view-London-night.html> (accessed Friday 4 December 10pm)

⁷ <http://www.dailymail.co.uk/news/article-3339211/NASA-astronaut-snaps-incredible-view-London-night.html> (accessed Friday 4 December 10pm)

affects the ability of a light source to accurately render the colours of objects as they would appear under a familiar reference light source, say, as sunlight. Graded on a scale from zero to 100, the Colour Rendition Index (CRI) designates the perceptive performance of light sources; scores below 50 make it difficult to distinguish colours from each other and sense depth, scores around 70 are acceptable, 80 good, and 90 excellent (US Department of Energy, 2012). For SON lights the CRI is around 25, compared to 70 to 80 for LEDs and 60 to 70 for MH (Philips, 2012).⁸ With recommendations for values above CRI 60 (Secured by Design, 2014, p. 24), 80% of the lit spaces in Newham fail to meet recommendations at the time of writing.

However, such a technological deficit was recognised by the Council as it pushed through a plan to upgrade the 19,000 streetlights by replacing all columns with LED fittings by 2018. According to John Biden, Head of Highways and Traffic (supervising the Highway Maintenance & Street Lighting unit) the streetlights will gradually be replaced: 700 columns were taken down in 2014/15; 2,000 columns in 2015/16; 4,000 in 2016/17, and the remaining in the following year(s). The motive behind this change is to create a ‘greener’ Borough as LEDs consume an estimated 50% less energy, and only need replacing every 20 years compared to every four years for other technologies. But furthermore, LEDs are argued to give off much “better and brighter light” to benefit “safety and security” in the borough (Interview John Biden, 23 February, 2016).

As discussed in chapter 2, such claims about technological change improving the feeling of safety and security are not only common in urban planning and design practices, but also confirmed in research that measures and evaluates the ‘effects’ of different lit conditions. As this chapter aims at scrutinising how values are embedded in light planning and lighting design practices, I turn attention away from such causal reasoning, and instead towards the process through which spaces are claimed to be inscribed with particular values. In doing so, I take inspiration from Bruno Latour and Emilie Hermant’s study of Paris, where they show how planning and design practices give shape to the city, by tracing the connections between drawings, plans and regulatory systems that are used “to capture the city” or “to ‘dominate it at a glance’” (Latour & Hermant, 1998, p. 2 and 4). Such attempts at capturing and dominating the city through design and planning tools, they argue, allows the researcher (or reader) to

⁸ <https://www.redcar-cleveland.gov.uk/Lighting.nsf/Web-List/FC71F8919BBE38B680256CA80039F752?OpenDocument>

follow how the designers and planners move between scales when giving shape to the city. By providing satellite images of nocturnal London, I have attempted to visualise how this process of scaling and rescaling the city into graspable models, figures, drawings and pictures begins. Starting out with the ‘big picture’, I follow Latour and Hermant as they argue that to understand how planners and designers seek to control the city, it “has to become small” (Latour & Hermant, 1998, p. 4), meaning that I turn towards the policies and plans that aim to control the lighting in the streets of Newham.

5.2. POLISHING THE BOROUGH...WITH LIGHT

Newham’s expansion of LED lighting can be seen and felt as white, crisp lights, wash over the Borough’s yellow swaths of SON-lit streets. In addition to the plan for replacing and refitting street lighting, the Council stresses the importance of two aspects of lighting when projecting new developments. First, new developments have to provide ‘adequate lighting’ in line with standards and regulations, providing clear lines of sight and unobstructed movement through areas. Second, lighting is used to actively change people’s perception of areas, thus adding value that prior to development was absent in to the public realm. In the following, I will focus on the role of standards and guidelines in stipulating the conditions under which designers work, and in the following two sections I turn to two specific developments to follow how designers incorporate the stipulations into their designs.

5.2.1. ELUSIVE STANDARDS: ‘RELEVANT LEVELS’ FOR ‘ADEQUATE LIGHTING’

In the Core Strategy for the future development of Canning Town, a key focus is on creating “activity both during the day and into the evening” (London Borough of Newham, 2012, p. 60). Activity around the clock is seen as an essential part of ensuring a safer and more secure environment where residents feel encouraged to, and comfortable, walking around the area both day and night. In an attempt to “promote the ease of movement and navigation across the area” a strong case is made in planning documents to reinforce and improve “the distinctive character and safety of routes ... through improved street lighting, paving, finishes, street furniture and public art” (London Borough of Newham, 2008, p. 22). While the appeal can seem commonplace, it reveals how the visual and visceral comfort of movement is (attempted) accommodated through design. As an essential part of promoting such ease of movement in the public realm, the Council gives importance to the residents’ ability to see, navigate, *and*

be seen. As further decreed in the Supplementary Planning Documents, “streets should be designed to maximize natural surveillance over routes” (London Borough of Newham, 2008, p. 22), thus underlining that the council promote clear vision in and over spaces to encourage natural surveillance. Along the lines of Foucault’s notion of disindividualised power presented in chapter 2, people who move through the luminous city are not only conceived as objects but also as subjects of surveillance; lighting is instated not to control and produce surveillance as such, but to provide residents with lines of sight that enables them to see what goes on. The design guideline is intended to breed a culture of ‘natural surveillance’, rather than providing ‘un-natural’ CCTV surveillance systems. Effectively, the presence of people as objects and instruments of their (own) gaze is claimed to create a ‘natural’, humanized surveillance. The rationale behind such planning ideal echoes a theory of ‘eyes on the street’, as Jane Jacobs’s developed when arguing for ways of deterring crime and anti-social behaviour in neighbourhoods by providing streets that can “handle strangers” (1961, p. 35). The point is that “people are using and most enjoying the city streets voluntarily and are least conscious, normally, that they are policing” (Jacobs, 1961, p. 36). The unconscious policing, she argues, is obtained through people’s casual and voluntary use of the streets, which only emerges once people are given a reason to be outside and feel comfortable doing so. Such reasons should be facilitated by ensuring that “stores and other public spaces are sprinkled along the sidewalks” (Jacobs, 1961, p. 36). Therefore, the Council’s attempt to increase activity through enabling visibility in spaces is in line with Jacobs’ notion of eyes on the street. While in the final section I will return to the point of encouraging everyday activity in the streets through ‘sprinkling’ amenities along streets, the point for now is that the role of lighting is to provide lines of sight, aimed to attract and encourage people to exert natural policing.

The “improved street lighting” is specified in planning documents through references to the national standards and regulations. Specifically, the ‘Secured by Design’ (SBD) guide issued by the Metropolitan Police and in the Unitary Development Plan (UDP) Policy EQ26 of 2001 (which now is adopted in the SPD from 2008 and the Core Strategy of 2016). The SBD initiative is important to all new developments across the UK, as it stipulates the levels of required security for spatial elements such as doors, locks, gates and for open spaces by providing lines of sight and avoiding seclusion. In a design process, an officer representing SBD will join the design team to review particular aspects early in the design phase with the aim of ensuring that specific places

and spatial details live up to standards.⁹ As Neighbourhood Regeneration Manager Sarah Dodd explains: “‘Secured by Design’ is very important in the new developments... [in order to ensure that they do not emulate] the negative design in the past or design that hasn’t been thought out in that way” (Sarah Dodd, 2014). In the SBD guidelines for new and refurbished developments it is stated that:

lighting of a footpath is generally only effective in reducing crime levels (or preventing them from rising) if it is matched with a high degree of natural surveillance from surrounding buildings where reaction to an identified incident can be expected i.e. a witness calls the police, or the footpath is well used. (Secured by Design, 2014, p. 14)

The success of a street or footpath in reducing crime and providing a safe environment is therefore measure by its visibility for people in the streets, but furthermore, for residents inside buildings, surrounding the path. On the one hand, people are encouraged to provide ‘eyes on the street’ by being present *in* the street, and on the other by providing what we could call ‘eyes from the windows’ of buildings, overlooking streets. Such visibility *in* and *over* spaces therefore shows how the council and the SBD authorities believe and attempt to make the urban populace objects, as well as subjects, of surveillance, and this, through design. Again, the design ideal aligns with Jacobs’ philosophy, as she argues that building facades need to face onto the street and avoid to “turn their backs or blank sides on it and leave it blind” (Jacobs, 1961, p. 35). If streets are to be safe people need to walk with rightful purpose, providing ‘eyes on the street’, buildings need to turn onto and enable residents to overlook streets providing ‘eyes from the windows’ of buildings. In addition to the design ideal, this marks out a moral encouragement to residents to take part in surveillance; a moral encouragement which can be traced back to the times before urban lighting developed into public street lighting. As shown in chapter 2, householders in 16th century London were encouraged to contribute to the lighting of the public realm, by placing lamps outside their homes (Beaumont, 2015, p. 123). Such appeal to a moral order designed through preventive

⁹ The designers fill out a form—an application for SBD—to ensure that the design can become SBD certified, effectively approved by the SBD police officer. As such, the specifics of the design are decided and regulated through a collaborative process between developer (client), the design team and the SBD, with the local planning office granting supervision through the planning application process. Therefore, the planners are not directly implicated in the private developments and detail design but “obviously the planners influence [the design] through the planning—plans get accepted or not” (Sarah Dodd, 2014).

measures can be argued to form a paradoxical relation between provision of safe environments and the instigation against crime. As argued by Jon Bannister and Nick Fyfe, design initiatives to create safety in cities, while surely contributing to some people feeling safer, are paradoxically self-perpetuating as they “no doubt also contribute to accentuating fear by increasing paranoia and distrust among people” (Bannister & Fyfe, 2001, p. 811; see also Davis, 1990). As the aim of the SBD is to reduce the fear of crime by creating transparency in the public realm and by encouraging people to exert surveillance, I argue that some degree of self-perpetuating paranoia is potentially at play in light planning.

In terms of design, the SBD acknowledges the need for “the landscape architect and lighting engineer [to] co-ordinate their plans to avoid conflict between lighting and tree canopies” (Secured by Design, 2014, p. 14). This awareness towards avoiding clutter and obstructing clear lines of sight bears great resemblance to Modernist attempts of opening up the city to circulation of air and light (see for example Pinder, 2005). Such attempts are particularly visible in the UDP Policy EQ26, as weight is given to avoiding the creation of dark spaces:

Policy EQ26: new developments and refurbishments should be designated to promote safety and security and minimise misuse of the environment. To this end, the council will assess all development proposals to ensure that satisfactory safety and security are achieved by:

- A) increasing overlooking of public areas;
- B) *preventing the creation of dark* or secluded areas, or enclosed public areas;
- C) eliminating left-over pockets of land with no clear purpose;
- D) the provision of *adequate lighting*; and
- E) increasing the use of public areas by promoting a variety of land uses in their vicinities. (London Borough of Newham, 2001, pp. 114–115 emphasis added).

The policy can be broken down into two main points. The first is to ensure a spatial layout that “eliminates left-over pockets”, “secluded areas” and “enclosed public areas”. Spaces should not ‘turn their back’ to the street, but rather open up towards streets and public spaces. The spatial de-cluttering resonates with the aim of eliminating the confusing street layout and opening up the area for ease of movement as stated in the Council’s regeneration masterplan (London Borough of Newham, 2007b, p. 3). Second, the provision of “adequate lighting” is not only argued to help prevent “the creation of dark” areas, but enables “overlooking of public areas” and increases the number of people in the public realm. Thus, the guidelines set out ways of eliminating non-purposeful spaces that can appear dark and obstruct or conflict with clear lines of sight, and do so by installing “adequate lighting” that allows for views and appeals to

increased use. Such reference to “adequate lighting” is similarly mentioned in the SBD guideline where it is argued that the design of “Footpaths that are to include lighting should be lit to the *relevant levels* as defined in BS 5489:2013” (Secured by Design, 2014, p. 14 emphasis added). By “adequate lighting” and “relevant levels” both documents refer to the British Standards Index, BS-5489-1—the National Code of practice for the design of road lighting (see British Standards 5489-1:2013, 2013).¹⁰ The BS designates the required lux levels based on the standardised measurement for the amount of lighting needed to light up a square metre surface, thus designating the surface of floors, roads, sidewalks and building facades. According to the standards, the required lux levels vary across different types of roads; for roads for vehicular traffic, the minimum required lux levels vary between 50 and 7.5 lux, for cycle paths and pedestrian paths between 15 and 1 lux, and for vertical surfaces such as building facades the minimum requirement varies between 50 and 0.5 (European Standards EN 13201-2, 2003).¹¹

By adhering to such “relevant levels” for “adequate lighting” all new designs are evaluated by the SBD team and the planning department on their sensitivity towards these standards. I want to argue that the approach to shaping experiences through adhering to the SBD guidelines and the national standards reveal a prescriptive approach to lighting design. However, it is important to note that the planning department have limited power and effectively are reduced to evaluating proposals through the planning application process for new developments. In these instances, as Major (2015) rightfully argues the local council are not in charge of what types of lighting are put up and how they are programmed, this responsibility rests with private estates and institutions. Similarly, as argued in chapter 2, research has shown that local govern-

¹⁰ The BS-4989-1 follows the European standards developed in 2003, the EN 13201-2. The EN 13201-2 lays out different measures for light levels applied to different spatial classes. Of interest for this study the “horizontal illuminance averaged over a road area” and the “minimum illuminance”, designating the “lowest illuminance on a road area” (EN 13201-2, 2003, p. 6), as these are adopted in the BS-5489-1. These classes are divided into three main groups: 1) roads intended for motorised vehicles; 2) roads intended for pedestrians and cyclists; and 3) additional classes where special needs as specified for vertical illuminance on, for instance, buildings. It is argued that “lighting classes have been defined with consideration of road lighting standards in [CEN countries] aiming at harmonization of requirements where possible” (European Standards, 2003, p. 4). The standards therefore aim at ensuring a more “harmonized” level of lighting guidelines across Europe.

¹¹ In order to give such figures meaning, a clear night sky gives 0.25 lux, 40 lux equals the light on a fully overcast day, and bright sunlight on a clear day is about 110,000 lux. In that case, 50 lux on a lit road, equals a bit more than overcast daylight, and the 15 to 1 lux for side roads and pathways is somewhere between moonlight and a fully overcast sky.

ments have little space for manoeuvre due to a lack of legislative backing, lack of government funding and a lack of knowledge, especially the sharing of knowledge across different fields of expertise (Köhler, 2015; Krause, 2015; Shaw, 2014). Therefore, I wish to acknowledge that the planning department's adherence to SBD guidance and National and European Standards, rather than demonstrating a lack of sensitivity towards lived experience, reveals the constraints under which they work. The planners are forced to develop a prescriptive approach to lighting their borough.

The standards are therefore part of ensuring that lighting design can provide 'eyes on the street' and 'eyes from the windows', 'acting' as intermediaries between planners and designers by suggestion. Returning to Latour and Hermant's writing on the role of standards in planning practice, they argue that standards ensure a uniformity across large spaces, not as organising principles altogether, but as they enable or disable other actors to act in specific ways (Latour & Hermant, 1998, p. 84). The different designers involved in specific developments can therefore be understood to respond to the agency of these elusive standards. The question that remains is how designers respond when translating such standards into designs? In the following sections, I turn towards translation.

5.2.2. MASTER PLANNING AND THE A13 FLYOVER

By returning to the satellite images of Newham, the bright, icy nodal points provide the sparkling stars of "London's regeneration SUPERNOVA".¹² If you take a trip to Canning Town you will witness "the UK's 6th largest regeneration scheme" (London Thames Gateway Development Corporation, 2012, p. 11) which has the overall aim of creating a new town centre for the area – "new hearts for Canning Town and Custom House" (London Borough of Newham, 2007b, p. 20). The development in Canning Town has been planned since the late 1990s, and, in 2008, was given planning permission to go ahead with major constructions, particularly in and around the central station. In this section I want to focus on the master planning of the area seen on figure 2, in chapter 4.

At the time the master plan was conceived, the neighbourhood was split in two by the A13 running through the borough. The A13 lifts traffic via a flyover over the river Lee and through central Canning Town, providing access to Canning Town via a major roundabout beneath it. Lamented as a "major physical barrier" by the planning

¹² http://www.vice.com/en_uk/read/dan-hancox-regeneration-supernove

office (London Borough of Newham, 2008, p. 48), an executive member for the regeneration of Newham, Cllr. Conor McAuley, stated that “[t]he A13 roundabout, slip roads and flyover are a major obstacle to regenerating the area. Removing the roundabout will change the area’s dynamics, attract private investment and reconnect communities divided by the A13.”¹³ Central to the master plan, therefore, are the elimination of the roundabout and the creation of a more legible environment that connects the neighbourhood. As stated in the master plan, the aim is to provide:

a re-modelled junction and public realm, a new food store south of the Barking Road, a modernised market space, better links to the station and bus station, and a better quality and mix of shops and other uses, will be a new heart for the area, as an employment hub and broader focus for activity both during the day and into the evening. (London Borough of Newham, 2012, p. 60)

The spaces that are identified in the quote are seen as the “key development areas” in figure 2: area 7 (the space beneath the A13 flyover and the Hallsville Quarter), area 1a (phase one and two of Rathbone Market, comprising the Vermillion and the Aurelia) and area 1b (phase three of Rathbone Market, comprising the Lumire). The master plan for the whole area was developed in 2008 by Erick Van Egeraat Architects, with Ringway Jacobs commissioned to undertake the detailed planning of the area in collaboration with Arup. While the master plan set out the wider aims and plans, the landscape architects, Landscape Projects, were commissioned “to create a more pleasant environment for pedestrians and other road users” (London Thames Gateway Development Corporation, 2009, p. 4).

Leading the project for Landscape Projects is the landscape architect, Fergus Alexander. He explains how they were commissioned to advise the team “on making this a better pedestrian environment, dealing with... design from a quality point of view rather than from an engineering perspective” (Alexander, 2015). By ‘quality’ he refers to the way that landscaping is implemented to open up the space, by making “sure you have got direct lines of sight to the crossing here... and make it feel like when you come out of the train station you know... where you are going” (Alexander, 2015).

Eliminating the confusing layout and ensuring direct lines of sight therefore ensures the process of calming the place down, making it legible, and making sure that

¹³ <http://www.planningresource.co.uk/article/915427/corporation-backs-realignment-junction-integrate-centre>

people intuitively know where to go. The spatial rationalisation echoes a Baroque fascination with uninterrupted vistas (see Schivelbusch, 1995, pp. 84–85) or a Modernist concern “with clearing and cleansing to attain an ‘essential’ that was assessed by a steady gaze” (Pinder, 2005, p. 71). Such modernist concerns seems to ring clear through the language, as the “rationalisation” and attempt to “de-clutter that space” (Alexander, 2015) requires more than “just following the guidelines” and more rigorously minimising the amount of “poles and stuff everywhere” (Alexander, 2015).

From a lighting perspective this resulted in a functional separation where Alexander and his team tried “to get the lighting to be building mounted...fairly functional lighting uncluttered, as uncluttered as possible running down the main high-street” (see figure 7) and underneath the flyover installing “a little bit more decorative lighting” (Alexander, 2015) (see figure 8). The different types of lighting are therefore chosen to accentuate and support the functional differentiation of the area where “you have got these sort of special locations at regular intervals along, through the network” that are more “informal”, “less rigid” and “playful”, inviting for *mooring* and spending time. These informal spaces are intended to break up with the formal and “reserved” spaces that are meant to accentuate *movement*:

You have got the high-street which is very formal, the new town square which is fairly formal...and then a kind of more playful space under there, so we started to use the full lighting columns for the rest of the space and they kind of go up and got cracked arms and stuff. And you could focus the, you could focus the attention on different things. (Alexander, 2015)

Thus, by changing the light fitting, the luminaires and the design of the pole, it is argued that focus can be directed towards different functionalities, feelings and everyday practices. The experiential dimension that light and design is argued to add to the space, becomes clearer as Alexander explains how they approached the design of the space underneath the flyover:

We recognised that there are dark shadows as you go under here [the flyover], and it feels like there is quite a sharp transition between being on the edge, and being under and then out again. So, part of the reason we put in the pine trees, which will grow quite big and be evergreen, is to get a kind of dappled shadiness before you go under the flyover, to sort of soften that transition. (Alexander, 2015)

Alexander explained that the specific light levels, angles, brightness and choice of luminaire were made to avoid the creation of a “sharp transition”, creating instead a smooth transition.



Figures 7 and 8. Barking Road looking west towards Canning Town station (above), and flyover space

with the variety of lights, comprising the decorative sculptural lighting, street lamps and uplights (below). Source: author's photographs.

Rather than following the SDB and UDP guidelines for avoiding dark spaces and flood-lighting or increasing the light levels underneath the flyover, the “dark shadows” are accommodated by smoothing the transition through planting trees. The playful lighting and creation of shades therefore adds an experiential layer to the space—an experiential layer, which is deliberately chosen to counter past negative conceptions and undesirable uses of the space. Having been characterised as a “dead space” by the Council where the presence of “homeless people, cars and kids smoking” had given grounds for concern with anti-social behaviour, Alexander expressed the need of the lighting program to meet such challenges. However, instead of floodlighting or increasing the light levels underneath the flyover, Alexander argued for a program, that in line with Jacobs’ (1961) theory of ‘eyes on the street’, could increase the flow of people while maintaining its spatial qualities. Therefore, by maintaining the relative darkness underneath the flyover, and smoothing the transition when moving through the space, the aim of the design is to function as an incipient medium that appeals to people’s sensory and emotional registers, by making them feel welcome:

we needed to make this...feel like this is sort of a safe place where kids can play and run around and parents don't feel like they are going to get run over or mugged or whatever. So, but we didn't want to make it, we didn't want to make it a formal, you know, 'oh you must sit around this formal seating' so we tried to find some kind of middle ground ... giving the feeling of that space being opened and being able to use them, safe to go, to start with. And when it started, when the perceptions are changed people will understand more what this space will do, then a proper design can come in that actually addresses how to use it. (Alexander, 2015)

As such, the redesign of the space is intended to ignite a change of people’s perception and use of it, by arranging different elements (lighting, landscape and furniture) in ways to facilitate a smooth movement through the space of contrasts in light and darkness. By ensuring “relevant levels” of “adequate lighting” along the public realm, the design program is made to adapt to certain spatial features in ways that differ slightly from official guidelines. As such, the design of the space shows how Alexander and his team aimed at adding quality to the space, by installing lighting that adapts to local conditions, negotiating with the material features as well as past and future practices. To

further investigate such use of light as an incipient medium, I turn toward the development of Rathbone Market in phases 1, 2 and 3.

5.2.3. LIGHT “BOUNCING AROUND” RATHBONE MARKET

In key development areas 1a, 1b and 1c, figure 2, the contractor, Bouygues, and the developers English Cities Fund (a joint venture between Muse Developments, the Homes and Community Agency and Legal and General) are responsible for delivering each of three phases of Rathbone Market: phase one, comprising the high rise building the Vermillion, completed in 2012 and offering 271 new homes; phase two, comprising the Aurelia, completed in 2015 and comprising 123 apartments; and phase three, the Lumire, delivering 216 new homes by 2017. Rathbone Market delivers a range of public realm spaces, comprising two private gardens, walkways, a subway and the centrally lying market square.

The developer brought a design team together at the very early development phase in 2008, to think through a plan for each of the three phases: CZWG Architects designing the Vermillion and the Aurelia, Project Orange designing the Lumire, and Churchman Landscape Architects designing the spaces in-between the buildings in collaboration with lighting designers Studio Fractal. Partner of CZWG Architects, Adam West, states that the first phase was “quite a protracted planning process because the planners didn’t really know what they wanted until they could see it” (West, 2014). The initial proposal, developed by CZWG architect, had, as West describes it “more brick on it and ehm, it was kind of more, kid of simple, robust, more knitted into the fabric in a way, I suppose, of the surroundings” (West, 2014). Interestingly, this design was scrapped by the developer and the Council, and it was only once they saw the second proposal that they “realised they wanted something that looked shiny and new...something that people would notice” (West, 2014). The result, West argues, presents “quite a beacon” which adds “all those landmark’y things that the Council wanted it to do” (West, 2014), cementing the status of a new and improved neighbourhood.

Such emphasis on shine and novelty plays a huge role in the general development, setting the tone for the development of lots 1a and 1b. With the limits imposed by the elevated A13 running along the border to the south, it was recognised that the buildings would have to turn their backs on the noise and traffic, and compensate for this by building upwards and opening up onto the north side onto Barking Road. The architects and designers recognised that the physical layout of the buildings would cast

the public realm spaces in shadow, making it “a quite dark space...in the daytime” (West, 2014). The designers responded by adding some “vibrancy” and “warmth” to the façade as they were “thinking about, you know, a grey day...about light bouncing around in the terra cotta, the glazed terracotta” (West, 2014).



Figure 9: CGI of Rathbone Market, 2012, prior to development. Source: CZWG Architects.

Choosing red, yellow and orange coloured terracotta, as seen on figure 9, the aim is “that it feels like there is sun in there even when there isn’t” (West, 2014). In terms of natural light, the design program therefore seeks to compensate for the lack of light by creating a presence of light, through colour and through reflection or shine even when light is absent. This approach is interesting as it challenges the notion of light as a medium that allows people to see. By creating a presence of a particular type of light, even when it is absent, the designers are not simply revealing the space for viewers to see, but making them feel the presence of light. This presence is more visceral than merely seeing, and therefore interestingly allows us to think of light as a material phenomenon that is present, “bouncing around” in the space.

For the design of the public realm spaces, Churchman Landscape Architects brought lighting designers Studio Fractal on board in order to develop a lighting concept. Building on the lighting scheme developed by Landscape Projects, one of the

central ideas was to accommodate the unobstructed movement of residents through the area, while also adding interest at less formal ‘special locations’.

The Director of Studio Fractal, Chris Sutherland explains how they put together a proposal which “does challenge some of the uniformity” in the area, creating something “interesting... that makes people want to go there...spend time there, something that stands out as different in that space” (Sutherland, 2014). Adding interest and attraction to a space, he argues, can be created by building the “psychological aspect, so things like colour temperature” into the design (Sutherland, 2014). Such ability to build a psychological response into a design was further explained by comparing this design to the lighting in an airport or a tube station where the “cool, white light in the spectrum 4,000 to 5,000K” psychologically makes people move faster through the space. Yet, what became evident was that the choice of luminaire, light level, colour, angle and shape, all comprise measures that define *what* kind of light the designer uses. When discussing *how* he would light a space, the conversation turned towards layers.

The differentiation between layers of light was originally defined by Kelly—briefly introduced in chapter 2—and is important to decipher some of the different ways that Sutherland talks about his design. Kelly acknowledges that the layers of focal glow, ambient luminescence and the play of brilliance can distinguish most places. While focal glow designates a luminous feature that catches the eye’s attention, ambient luminescence denotes the diffuse light in a space, which people do not necessarily notice. Focal glow comprises of the navigational points that guide visual orientation – signs, illuminated statues or building features, light poles, etc. – whereas the ambient luminescence is the light that surrounds us – emitted from the sky on an overcast or foggy day or the light in streets that seems to stem from no particular source. The third layer denotes specific light features that draw attention for the sake of experiencing the feature in itself. By adding ambience beyond mere functional measure, the play of brilliance denotes an experiential dimension of a luminous space, like chandeliers, light art, light columns and so on.

Such attention to the distribution of light in separate layers, affording different practice and serving different functions is similarly recognised by Major. Major distinguishes between the “private light” that emanates from architecture, constituting the “unconscious contribution to the nightscape through them illumination of interior

space” (2015, p. 155). As a second layer “street and amenity lighting” counts the publicly provided lighting by local authorities, but furthermore, by housing estates, private companies and universities. The piecemeal lighting of parks, buildings, monuments and the often privately installed “security lighting” makes out Major’s third layer, which within the context of London, Major argues, are “illuminated with no reference to context or hierarchy” (2015, p. 156). Finally, adding to the piecemeal and chaotic luminous environment, Major identifies the layer that informs the night-time economy counting advertising, signage, media screens, light art and events.

By dissecting the different layers of light in the city, and getting an understanding for how designers structure and organise these layer when redesigning urban spaces with light, I want to turn towards the way that Studio Fractal use light in Canning Town. As Sutherland unfolded the lighting scheme that Studio Fractal developed for Rathbone Market, it became clear how such layers are structured to give shape to the space in particular ways.

First, by shedding light towards, rather than placing light in, a space, Sutherland aimed to build up coherence between different layers attuned to specific functions or experiential features. In similar fashion to how Landscape Projects rationalised and decluttered the public realm, he explained they “wanted to limit the amount of physical lighting equipment columns, bollards all that kind of stuff” (Sutherland, 2014). Recognising the need to provide ‘adequate lighting’ in the space, while keeping it free of ‘lighting equipment’, Sutherland explained they decided to provide “light from the building, [to] give a certain amount of illumination towards the centre, leaving probably this kind of chunk [the centre] a little bit darker” (Sutherland, 2014). As seen on figure 10, the lighting from the building provides 20 to 30 lux creating a subtle change in light levels across the square. The centre is occupied by two big trees and, as the design team acknowledges the space is “too big a space for the fittings you mount on the building to light out” (Sutherland, 2014), they introduced projectors in the trees, providing ambient lighting to shine onto the square, creating a “dappled leaf effect” (see figures 11 and 13). To supplement this ambient light while maintaining the low levels of light, two 12 metre tall iron cast columns were placed along the southern part of the square as seen on figures 12.

The columns add to this layer of ambient light by providing a soft glow onto the square, but in addition they add brilliance as gobo projectors are mounted on them to supplement the dappled leaf effect from the trees with a pattern projected onto the

ground. The different layers therefore come together in shedding light *towards* the centre, rather than placing it *in* the square. The task of providing “adequate lighting” at sufficient and relevant levels is done by adding layer after layer, creating a heterogeneous landscape where pools of light add interest and play of shades across spaces. As seen on figure 10, the light levels change across the space, accentuating the places of importance (entrances to buildings and shops along the façade) and the desired directions for movement through the space (towards Barking Road or the subway to the east).

The second aspect relates to how such layers of light are used as an incipient medium to draw people’s attention *towards* certain places. In similar fashion to Landscape Projects’ use of light to differentiate spaces and accentuate movement between informal and formal realms, Studio Fractal uses the gradual increase or decrease in light levels across the square and through the alleyway to accentuate movement:

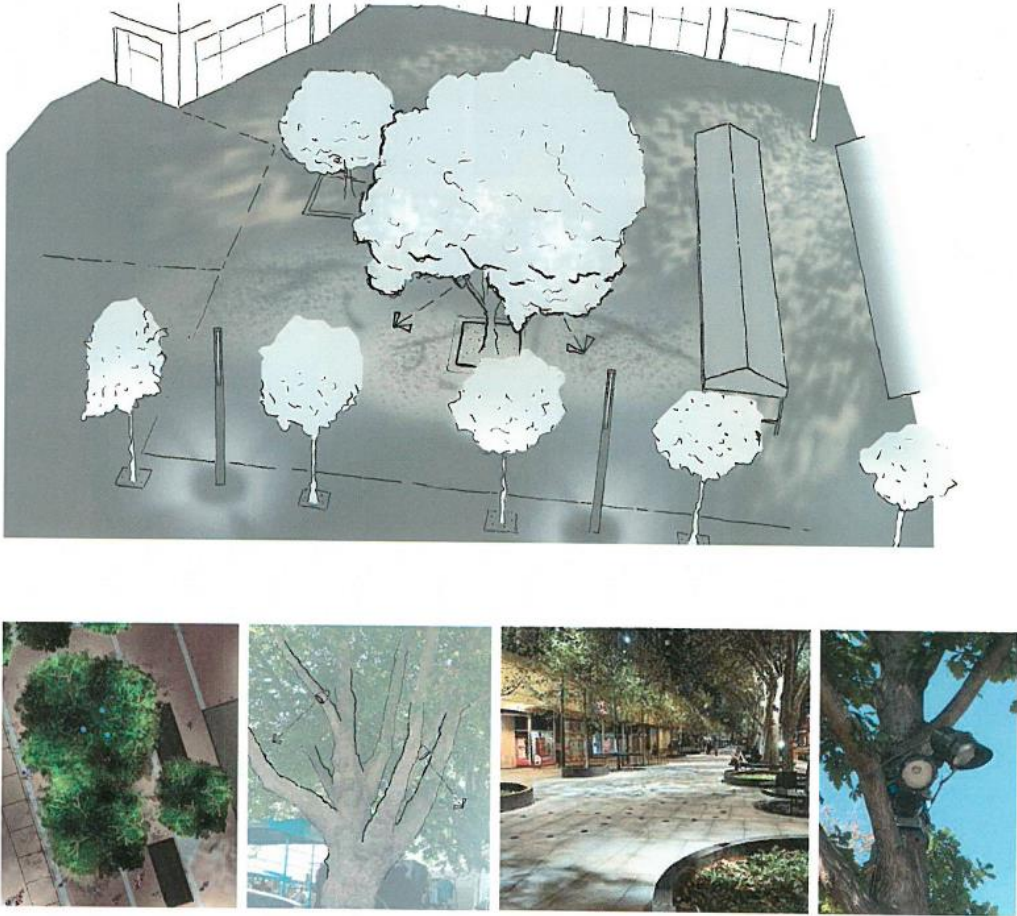
we then got a route through here, which is important—what we are trying is to use the trees in this project, to be able to direct people around, and they are basically things you are moving towards, instead of “there is a subway”! Now, a subway in Canning Town could be potentially disastrous spaces to hang out in the evening. Ehm... so it needs a better level of illumination, and a lot of it was how we could light this surface as well as how we could get a functional amount of light in there.

We then went and did some sketches of the subway entrance...we put stuff in the ground to light up this surface, you are walking towards there. Again where are we moving towards? Does that make it feel like I want to walk down that subway? (Sutherland, 2014)

In addition to the strategy of limiting ‘the amount of physical lighting’ in the space, the design program identifies objects that provide navigational, focal points for residents. As Sutherland argues, the creation of focal glow by illuminating elements such as trees and surfaces makes people feel like they “are walking towards” *somewhere*, rather than, for instance, down a subway (see figure 14). The “potentially disastrous” connotations that a subway could conjure—with the psychological alarm that would make people avoid using it—are countered by the *way* it is lit. The careful selection of elements for illumination, and the gradual increase and decrease in light levels, can draw attention towards a more elusive *somewhere* rather than a subway. With the play of light and shadow adding a layer of interest towards certain places



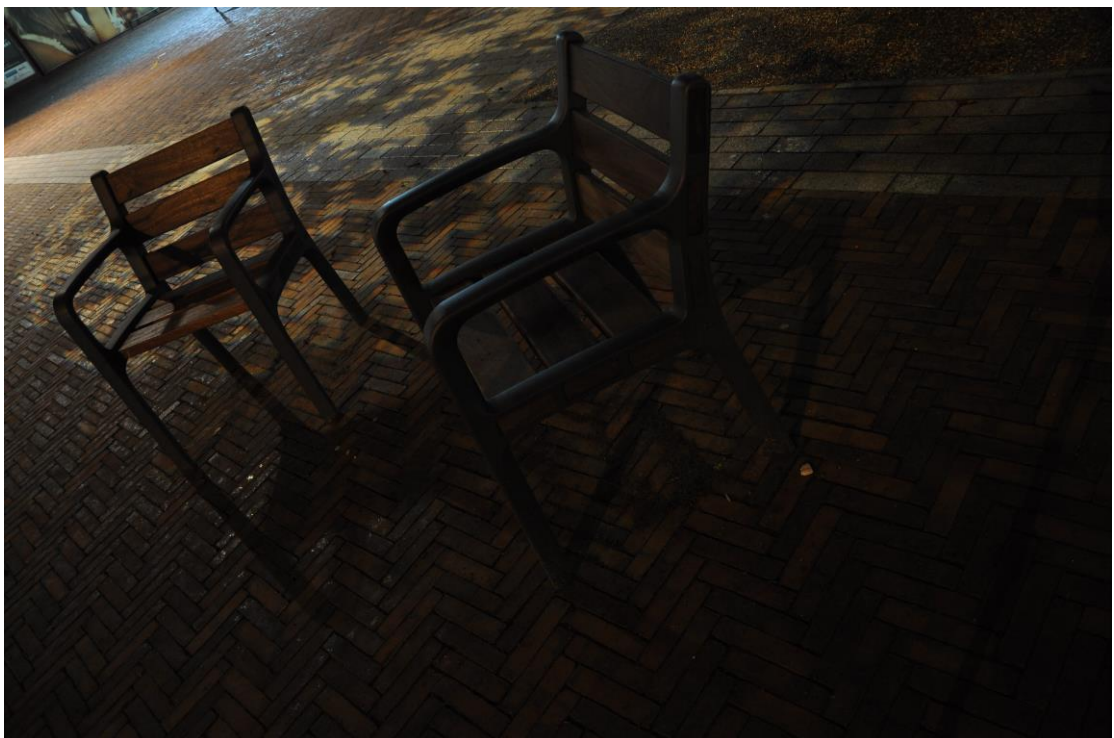
Figure 10: Light levels across Rathbone Market. Source: (Studio Fractal, 2012)



Figures 11: Lighting approach for Square Trees. Source: (Studio Fractal, 2012)



Figure 12: Rathbone Market seen from Barking Road. Source: Author's photographs.



Figures 13: Rathbone Market seen from the darker “chunk” underneath the trees. Source: Author's photographs.

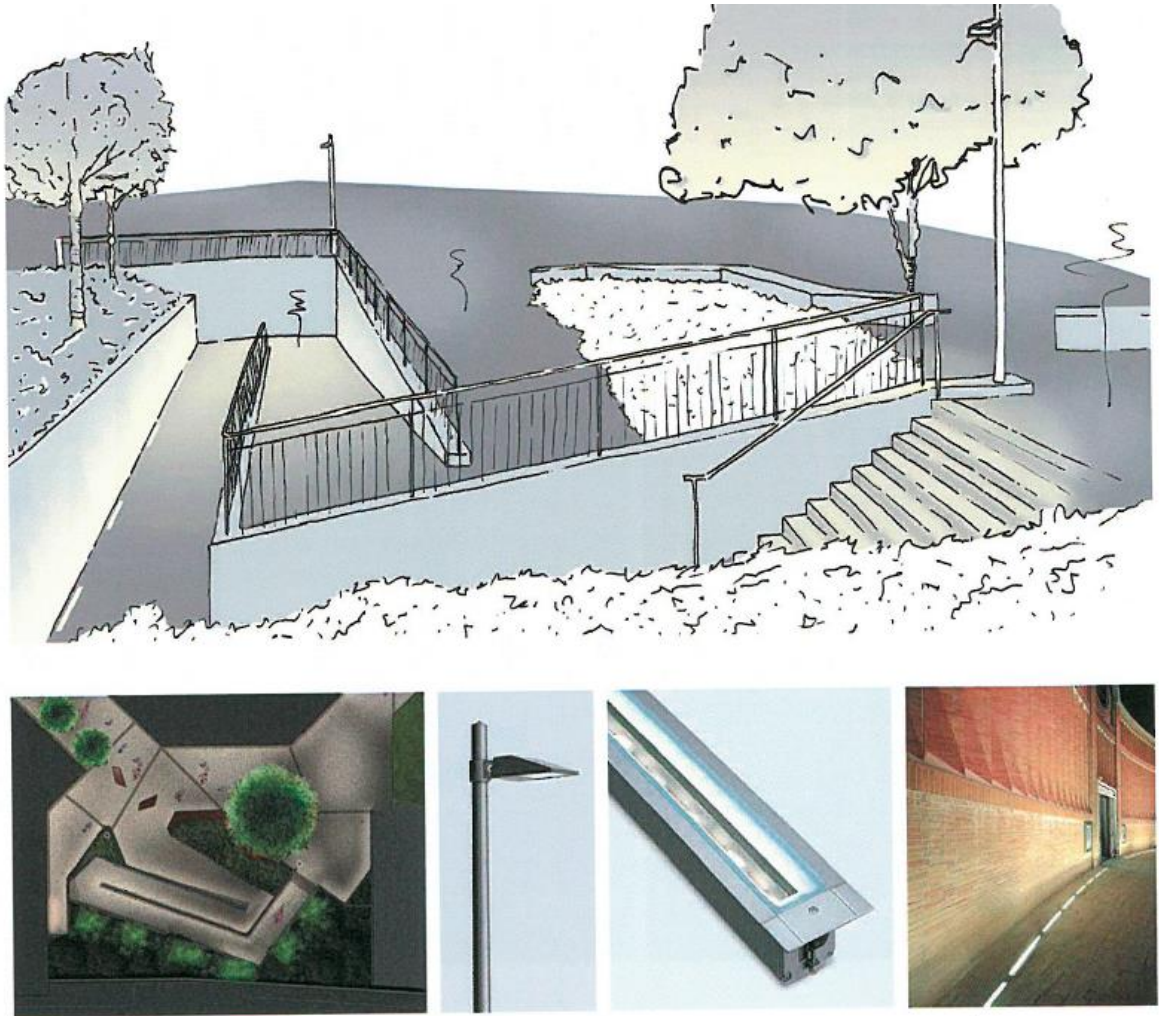


Figure 14: Subway lighting sketches. Source: (Studio Fractal, 2012)

and objects, rather than boldly stating ‘there is a subway’ makes light incipient. Similar to the way Landscape Projects accentuate, yet smoothen transitions between different types of spaces, Sutherland uses light to create and sustain transitions and movement between places of function; by accentuating features, creating contrasts, and differentiation, light leads movements towards *somewhere*, rather than to a predefined locality. This approach once again speaks to Jacob’s normative appeal to designing streets that “draw people along the sidewalks past places which have no attractions to public use themselves but which become travelled and peopled as routes to somewhere else” (Jacobs, 1961, p. 36). The subway is not meant to do anything other than lead people ‘somewhere else’, similar to setting a stage for something to unfold, and the lighting functions as an incidental preparation of the grounds for passage *through* the space. The way light is used to make this particular spatial feature take a subdued role, as mere transitional space, makes the purpose of its design *seem* superfluous. Yet, as Thrift re-

minds us, such seemingly superfluous transitional spaces might provide a mere “passage-way, perhaps, but one that is not going anywhere” (Thrift, 2012, p. 123). It is leading people *somewhere*, and that particular somewhere is meaningful to the pedestrian. As such, the use of light as incidental bears similarity to Merleau-Ponty’s notion of light as that which leads the body, leads the gaze in a subtle, seductive way, enabling the pedestrian to fulfil the purpose of their walk with a reduced need for negotiation.

Such incipiency leads to the third and last point, which relates to the way light is used not as ornament in itself, but as an incidental element that emerges through the spatial or architectural features themselves. This is particularly prevalent in Studio Fractal’s collaboration with Project Orange on the public realm and private garden spaces for the third phase, Lumire. The lead architect for Lumire – Barry Stirland from Project Orange – highlighted Studio Fractal’s ability to create a design that was integrated into the building as well as the landscape architecture, not simply as an add-on feature, but supporting and accentuating the design features and thus the everyday use of the building and the space. The lighting strategy that Project Orange developed together with Studio Fractal devised a plan for the public and private realm that achieves the required levels, but allows a “very low level of lighting” (Stirland, 2016) in the private courtyard. By integrating lighting into already existing benches and pre-cast concrete curbs as seen on figure 15, the hidden lighting reveals the landscape and design elements, rather than introducing the light fitting as an ornament in itself:

it is more about the quality of the light rather than you are looking at a nice fitting. You know, you’re using the light, you’re not thinking about it, it is kind of an indirect enjoyment, it is just helping you to enjoy that space or find your way but you are not thinking about it in the same way that ‘there is a light’ ... actually what you are celebrating is the landscape, and that you don’t just have a number of you know bollard fittings. (Stirland, 2016)

Stirland claims that the integration of light into features directs people’s attention away from “looking at a nice fitting” towards “the quality of light”, allowing people to “enjoy that space or find your way”, but in an effortless way, where “you don’t think about it”. The lighting is not an object to be seen, and “you don’t think about it”, but it

enables practices; it is practiced in, and of, itself; “you are using the light, not thinking about it”.¹⁴

This notion of an intuitive way of revealing features and functions of the environment is extended into the design of the building façade turning onto the public realm spaces. While the brickwork is the same for the whole façade, the ground floor is separated from the storeys above by a Flemish bond, creating a plinth zone, where the architects have rusticated the façade by turning every header in some areas and removing them altogether in others. This rustication of the façade creates interest as the removed headers create a perforation of the façade, as seen on figure 17. As Studio Fractal brought attention to the potential quality of having light streaming through the holes onto the street, the perforation gained multiple purposes, providing “natural ventilation [for] bike and bin stores”, creating “indirect light” streaming on the street, while also allowing for people to sense the presence of others through the building. Such exploitation of the architectural features of the building as part of a lighting scheme therefore allows the building to appear as “part of this, sort of like seepage” (Stirland, 2016). The building leaks as light seeps through the holes and spills on the street while also allowing for ‘eyes in the street’ and ‘eyes from the windows’ to integrate seamlessly into the building and urban public realm.

This collapse of the barrier dividing the public and private realms is the result of the designers working together and interpreting specific guidelines from the SBD and the local planning office. While the local planning office requires natural ventilation in bike and bin stores, the SBD review panel is concerned with creating dead-end alleys on either side of the building. The response from Sutherland and Stirland was to turn these potential dead-end alleyways into luminous architectural features that encourage a level of everyday activity. This is where Jacobs’ idea of inducing voluntary use of public spaces by sprinkling everyday amenities along streets is visible in the design; by ways of these amenities a certain level of everyday activity is encouraged, creating places that “become travelled and peopled as routes to somewhere else”. As seen on figure 16, the eastern side of the building—which faces a range of old buildings

¹⁴ It should be mentioned that such talk of light as incidental, as background and provision of grounds for enjoying and experiencing landscape and architecture, is not a generalist observation. It relates to the type of lighting that is hidden, indirect, and aims at taking an unobtrusive role. Plenty of Studio Fractal’s designs are signaling presence and using exactly the visibility of the fitting for particular purposes, the same goes for Project Orange’s designs, where they also work with more obvious signaling. However, for this particular project, the seamless integration was part of the design, and therefore of importance to understand how Rathbone Market, in its three phases, comes into being.

before the pending and potential development of site 1b commences (figure 2), with a proposed pedestrian bridge crossing over the A13 towards the Hallsville Quarter—was identified by the review panel as potentially problematic. The design had to avoid creating a secluded alleyway with “air conditioning like mechanical ventilation” as found in metropolitan back-alleys. Therefore the provision of functions was used to ensure that “the sort of movement behind and the bikes stores, the lighting, would be a way of creating interest on this façade...[and] create a certain amount of footfall” (Stirland, 2016).

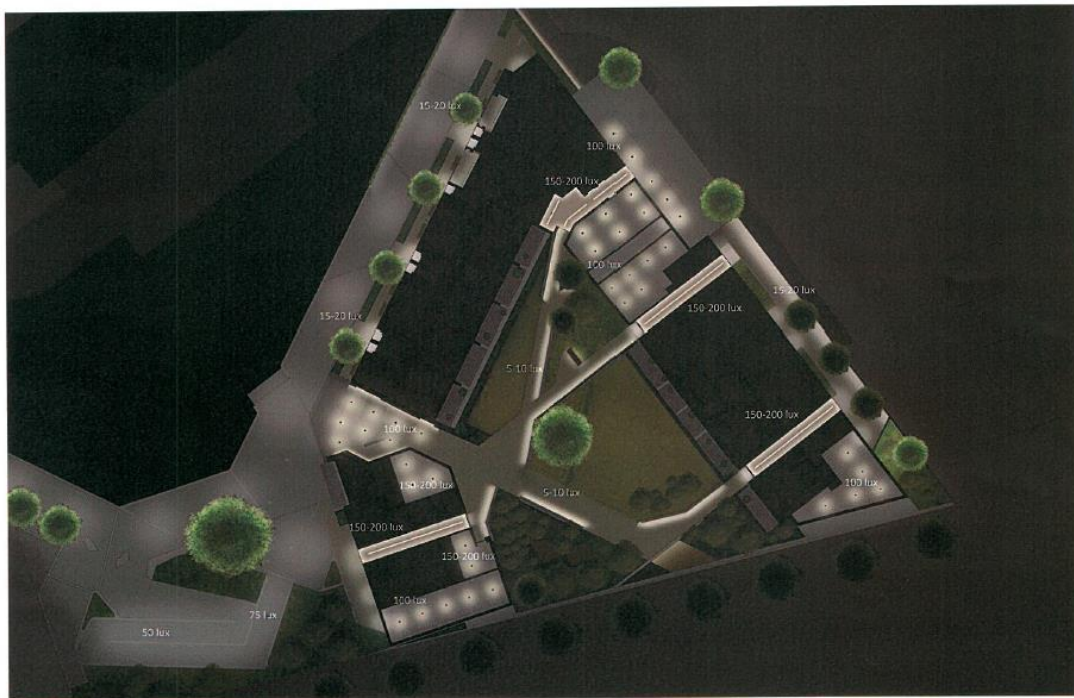
Therefore in the design of the public spaces at Rathbone Market and the incorporation of lighting in and around the Lumire building, lighting is used to encourage everyday use of the spaces, and so in a way where the lighting design subtly leads people through the spaces. Incidentally and incipiently lighting accommodates practices, and in doing so, aims to allow for a voluntary use of the spaces.

Rathbone Market 3 | Courtyard Lighting



Figure 15: Lighting plan for Phase 3, with lighting embedded in benches and precast concrete curbs in private garden. Source: (Studio Fractal, 2012)

Rathbone Market 3 | Lighting Levels

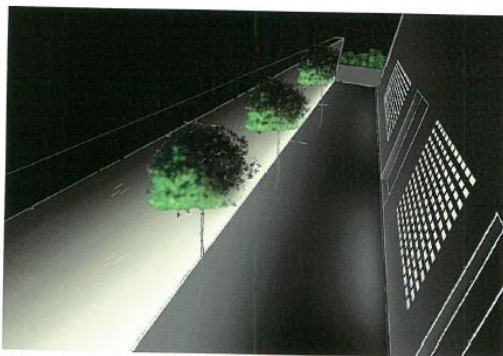


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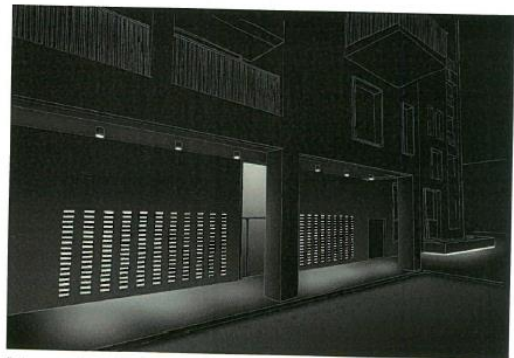
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Figure 16: Lighting plan for the C-shaped building with levels for public realm set at 15 to 20 lux and the garden at 5 to 10 lux (levels at and above 100 lux are for interior spaces, but seen from the street). Source: (Studio Fractal, 2012)

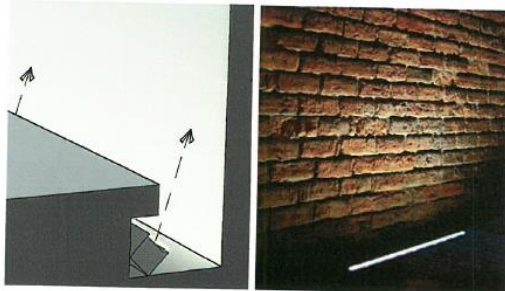
Rathbone Market 3 | Retaining Wall Option and Eastern Approach



Recessed in-ground uplighter to wash light up surface of wall, this will enhance the narrow path creating a bright safe space for the residents, we will also highlight the foliage/planters at the end so that they are not walking towards a dark space.



Eastern approach to cars and bike shed entrances, Colonnade / covered walkway lighting to be the same as main entrance - surface downlights or linear luminaires, internal lighting to bleed light through 'miss brick' openings to enable views directly inside.



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Figure 17: Perforated brick façade with light seepage adding interest and texture to the façade. Source: (Studio Fractal, 2012)

5.3. A QUESTION OF DESIGN?

In the above, I have shown how lighting designers interpret and translate design briefs, planning guidelines and light standards, into design programs that afford already existing practices. Yet, the use of lighting to facilitate mundane practices is done with a particular attention to the way lighting contributes to shaping the feel or the atmosphere of the place. I will briefly revisit three examples where this is evident in the case study.

In the case of the redesign of the A13 flyover space, Landscape Projects accommodate movement through the space by smoothing transitions between light and darkness. The aim is to change negative perceptions and make people feel safe. By introducing light poles that add interest and break visually with the generic lighting along streets and sidewalks, and planting trees to smoothen the transition in light levels, it is claimed that the flyover space is made more informal, encourages leisurely practices and makes people feel more welcome to do what they wish. Rather than focussing on dictating what people should do and how they should feel, the design aims at holding fear, anxiety and insecurity at bay.

In the case of Rathbone Market, Studio Fractal deliberately use the decrease and increase in light levels—some above and others below prescribed guidelines—to create a layered space where pools of light draw attention and give direction to people, accentuating and encouraging movement through the space. As Sutherland argues in relation to the lighting design of the subway, it is crucial to make spaces feel like you want to move towards them. Again, negative perceptions are challenged by using different light levels and by lighting different elements such as trees, benches and railings, to facilitate movement towards somewhere, rather than a predefined destination, potentially loaded with negative perceptions, such as a subway. The point I want to make, is that in both cases lighting is used to render spaces transparent, but furthermore to direct the gaze of pedestrians towards specific places and in particular ways. Lighting is not only designed to create visibility, but to make people see in particular ambient ways that challenges negative perceptions and guide people incidentally.

In the case of the Lumire building, the need to provide natural ventilation and openness in the façade is exploited to break down the barrier between public and private realms. By letting light spill and leak between building and street, it is argued that everyday practices such as parking a bike or taking down garbage are encouraged, providing larger footfall around, and through, the building. Again the use of light to

support everyday practices to unfold, rather than prescribing them to have certain objectives (providing surveillance), shows how the lighting design is developed based on already existing physical features of the environment (subways, trees, amenities) and accommodate the practices in these spaces.

What the examples suggest is that lighting design is part and parcel of the social practices it aims and intends to shape. Rather than being prescriptive, in the sense that it shapes predefined practices in a direct causal manner, it is performative. This way of reasoning is in keeping with some of the sociological studies of design, which claim that in order to understand a design object – in this case a specific lighting design – it is not helpful to focus solely on the design object alone, but must take into account the “complex of material artefacts and practices of which isolated artefacts are a part” (Shove et al., 2007, p. 134). This includes the social practices that are carried out in a space, as people walk towards and through a subway, enter and exit buildings, or under a flyover, as well as the designer’s solutions and ways of using light to facilitate such practices. Such perspective broadens the analytical scope and reconceptualises the role of design as potentiality. As Shove et al. argue in relation to product design, “designers have an indirect but *potentially* decisive hand in the constitution of what people do” (2007, p. 134 emphasis added). The designer’s influence *can* be decisive, but there is no assurance that it *will* be. Such potentiality of design is similarly noted by Peter Kraftl and Peter Adey who argue that designers “attempt to stabilize affect, to generate the *possibility* of pre-circumscribed situations” (Kraftl & Adey, 2008, p. 228 emphasis added). The ‘potentially decisive hand’ that designers have when they attempt to ‘stabilize affect’ therefore rests on an indeterminacy and uncertainty of how people will respond. In keeping with such writing on the potentiality of design, I have shown how lighting design is used to stabilize the affects in the public realm, not by prescribing practices, but by acknowledging the limits of design. Yet, where does this leave lighting design practice in terms of its ability to shape practices?

The point is that the rationale underpinning light planning is the creation of surveillance in the streets and from buildings to the benefit of safety and security. It is not that lighting designers are not concerned with safety and security, but in acknowledging the limits to design, lighting designers foreground the importance of everyday practices in shaping how spaces come to function and feel. The lesson I wish to draw from such a use of lighting is twofold: first, lighting designers claim to lead practices in open-ended ways; and second, lighting design complicates the way that light is used

to see things in particular ways, marking out a difference between what, and how, people see.

5.3.1. LIMITS TO DESIGN 1: “DESIGN CAN ONLY DO SO MUCH”

In relation to the first point, it seems valid to argue that the play between focal glow and ambient luminescence shapes *what* people can see, because the “luminous reduction” (Ebbensgaard, 2015b, p. 122) of the urban, lit environment focuses attention towards particular features. Even in the urban, lit environment, which is made up of a variety of lit sources that each compete for attention, lighting design is characterised by peeling off existing layers of light and subsequently adding layers, gradually, to compose an environment that incidentally shapes social practices. People are supposed to notice the illuminated tree, railing or the staircase, rather than objects or spaces that aren’t lit up.

By revisiting Merleau-Ponty’s distinction between a patch of light—the focal points of the urban, lit environment; *what* people see—and lighting in its own right—the ambient luminescence; *how* people see—I wish to bring attention towards the ways designers use different layers of light. In the case of the flyover or the subway, both Alexander and Sutherland are aware of the negative connotations that such spaces have, and therefore develop a lighting design that allows them to claim that their design directs attention away from the thing itself towards the smooth passage through it—as a transition space that allows people to head towards their destination. Thus, the designers are concerned with *what* people see, and develop a solution that shapes how people see it. The same goes for the brilliance of light that is added to both spaces through the light columns with crooked arms under the flyover, and the dappled leaf effect on Rathbone Market Square. These lights could be understood as ‘patches of light’ that ‘arrest our gaze’, and therefore add interest to certain spaces in order to attract and guide people. The layering of the lit environment accommodates ways of practicing the lit environment, but moreover does so by making such practicing done in a particular way. Such recognition – of lighting a space not simply to see but to carry out a practice in a particular way – is in keeping with Bille’s (2014) study of how people use lighting to create atmospheres for carrying out practices in particular ways. In the case of the redesign of the public spaces in Canning Town, however, the use of lighting to support ways of seeing are not created intentionally by the user walking through the street, but by the designer who tries to accommodate the user as the one who creates it by doing it.

When the designers were questioned about the conclusiveness of lighting design's ability to produce affects, all the lighting designers therefore also argued that outcomes are limited. As Alexander argued "design can only do so much", and should not be considered a power which forces people into doing things. They can always chose to do something else—a point that Edensor (2012) also makes, as he argues that not all people find the Blackpool illuminations dazzling or convivial. Therefore, it makes sense that Sutherland recognised that while lighting suggests certain ways of moving through spaces, effectively it cannot singlehandedly overthrow, for instance, negative perceptions of places. Such changes rely on the social composition of the neighbourhood and structural forces out of the designer's hands.

5.3.2. LIMITS TO DESIGN 2: "YOU'RE EMPLOYED TO DO THAT BIT"

Turning towards the second point, the case study has shown that the lighting designers are very aware of using light to spill from place to place in order to create luminous and visual connections across different spaces. Lighting is orchestrated in pools and layers to create contrasts, but smooth contrasts that connect across different spatial boundaries. This is most evident in the passage under the A13 flyover and in the design of the Lumire building. The interesting point, however, is that such provision of visibility across spaces is not argued to be serving the principle of surveillance, but again rather to serve the practices, whatever they might be, that people carry out.

All of Sutherland, Stirland, West and Alexander argue that the changes in lighting across a space can be used to focus attention and guide practices, and that any design therefore should accommodate the changes in intensity, colour and contrast. Such adaptation of the design to the environmental features extends beyond the designated area to adjacent buildings, streets and areas. Reflecting upon this, Sutherland argues "anybody, whoever, a lighting designer or whatever, you are employed to do *that* bit. You are not employed to do *that*" (Sutherland, 2014). The designer has to stick to the area or the specific task they are appointed to do—Studio Fractal was commissioned to redesign Rathbone Market, not the A13—yet, they still take adjacent spaces into consideration. The case of the eastern façade of the Lumire building demonstrates this, as Project Orange and Studio Fractal opened up the building façade to future, possible use, creating a dialogue across private and public realms and ensuring a degree of footfall. Similarly, Rathbone Market edges onto Barking Road, lit in more than 50 lux, almost twice the levels achieved in the square. To account for light spill, Studio

Fractal included these levels in their calculations and lowered the light levels in the square accordingly.

In discussing such adaptation to, and incorporation of, adjacent luminosity, Sutherland explains that the aesthetic expression of their designs will differ from other spaces, not simply because they are interested in marking out a spatial difference but because “practical reasons says it has to, good reasons says it has to...[A]ctually the town would look quite bland, indifferent if everything was the same”. This does not mean that he disregards the aesthetic expression and sensation of adjacent spaces. He explains how the design is always concerned with “a bigger picture” because his design team needs to “make sure that they approach it in the right way from a night time, *where* you light things, *where* you need all the illumination and *where* you don’t.” (Sutherland, 2014). This attention towards what to illuminate, and how to do it, seems like common sense, but is highly important in order to ensure that the design of the night-time city adapts to its use. As he further explains, some spaces, such as football pitches, need a certain amount of light to be bright enough to fulfil their purpose, whereas other environments such as parks might not need to be lit up—the path leading through the park, maybe, but not the grass or trees.

5.3. CONCLUSION

The aim of this chapter has been to scrutinise the ways that light planners and designers conceive of their roles in shaping experiences and encouraging particular practices in the city during the hours of darkness. By questioning the claims that light planners and lighting designers make to the supposed effects of lighting, I argue that planners and designers use lighting in very different ways.

Accountable for providing certain ‘standards’ of lighting in the public realm, and ensuring such standards are met evenly across large spaces, the Council’s planning department follows and encourages light levels, colours and technologies as stipulated in guidelines and regulations. Taking from such standardised measure the Council have initiated an overhaul of the street lighting infrastructure and set guidelines for all future developments in the borough. The approach aims to prescribe social practices and experiences in causal ways: lighting is changed to improve the perception and reality of safety and security in the borough by providing clear lines of sight. Second, such lighting strategy encourages larger footfall during the hours of darkness and thus entices ‘eyes on the streets’ and ‘eyes from the windows’ of buildings to provide natural surveillance. I argue that such an approach is prescriptive and reveals how lighting is

used as a means for providing sights through spaces and encouraging natural surveillance. However, I also recognise that the planning department's adherence to guidelines and standards, rather than demonstrating a lack of sensitivity towards lived experience reveals the constraints under which they work.

By turning towards the lighting design of the central area in Canning Town, I show how lighting designers respond to both the Council's and national guidelines. Lighting designers acknowledge the need to meet standards and ensure a certain level of accountable quality of lighting, yet also challenge some of these guidelines in order to accommodate practices and experiences. The practice of lighting design differs from light planning by accommodating spatial practices in ways that are performative and incidental to lived experience. Lighting design aims to make people see in particular ways, while conceding the limits to shaping such visibility and practice. The importance of acknowledging the mismatch between light planning and lighting design practices lies in realising the limits to what lighting can do. Light does not shape experience in a causal manner, but accommodates to the everyday practices and supports, challenges and manipulates these in particular ways. Furthermore, the mismatch reveals the importance of acknowledging the limited manoeuvring space that each of the implied actors have, as planners and designers are caught up in a complex web of power relations. Having considered the way light planning and lighting design responds to and aims at shaping everyday practices, from the perspective of planners and designers themselves, I now want to turn towards the way residents respond to the lighting. The following two chapters examine the practices of walking through illuminated streets in Newham, and the domestic practices that engage with the urban lit environment with the aim of exploring how the urban lit environment emerges through the everyday life practices of older residents.

6. MOVING THROUGH THE ILLUMINATED NIGHT

This chapter turns from light planning and design practices to consider the everyday practices of residents in Newham, during the hours of darkness. The Council's bid to ensure safe and secure environments when darkness falls puts emphasis on the role of residents in providing 'natural surveillance' in the shape of 'eyes on the street' and 'eyes from the windows' of buildings. To question the Council's claims to such supposed effects of a luminous upgrade, I now wish to explore the lived experiences of the urban, lit environment by turning towards the practices of walking through the artificially lit streets of Newham, providing the so-called 'eyes on the street'. With attention given to how residents see and feel as they move through the illuminated night, I therefore give attention to the practices of walking as a means of exploring the everyday experience of lighting, bringing the reader along sidewalks into the illuminated streets, parks, and alleyways of Newham. I follow older residents along their re-enacted routine trips by foot as they go to visit friends or relatives, to restaurants, to the bingo, exercising or for a walk, alone or with a dog.

As explained in the methods discussion, this chapter follows the group of 22 older residents between 58 and 79 years of age, on average 17.5 years younger than the clients of the Resource Centre. The age difference means that these residents walk the streets in their neighbourhood daily. While some have grown up and lived in Newham all their lives, others have just recently moved to the borough, into the new housing at Rathbone Market. They all live in the areas Canning Town, Custom House, Plaistow and Beckton, and are familiar with the changes the Council are initiating across their neighbourhoods. As some live in the recently upgraded neighbourhoods, some will have a single street or street crossing recently upgraded, while others won't have seen any change in their neighbourhood yet. Therefore, the walks that I present take the reader across a variety of differently lit spaces equipped with different lighting technologies.

Taking inspiration in Sandhu's (2010) walks through the London night and Sharman and Sharman's (2008) ethnographic explorations of the New York City nights, I explore walking as a mundane, everyday practice that serves people to go somewhere or to do something. I do not, therefore, consider walking in and of itself,

but the way such practice engages in relation with the urban, lit environment. By focussing on the role of lighting to such movement, I question how older residents are affected by the way the urban environment is lit, but furthermore how the urban, lit environment is produced through social practices.

The chapter unfolds in four sections, with the first ‘Beyond movement: mediation of sensory experiences’, positioning the study within the wider literatures on walking at night and as an everyday practice. I call for the need to consider how lighting mediates people’s experience, and therefore set up the study that I unfold in the following three sections. The section ‘Navigating: Mediation of the well-known’ gives attention to multi-sensory dimensions of routinized walking, which is explained by the residents as purposeful and functional means of getting from A to B. Through three vignettes, I explore how lighting mediates such seemingly functional travel. By turning to the sensations and embodiment of such travel, the third section, ‘Seeing (in) urban, lit spaces’, raises the question: how do residents feel in, and about, changes in lighting technology? Provoked by changes in lighting, the section pays attention to how the sensory experience of seeing through different types of light in the urban come to shape the way people move and feel while walking about. With these two sections focussing on how lighting mediates experiences and shapes ways of seeing and feeling, the final section, ‘Seeing people: loneliness and presence’, hones in on *what* lighting reveals—that is, the ‘the other’ that residents meet along their walks, either in shape of people, animals or things. The section questions how light can mediate this meeting with the other, and the ways that older residents experience and negotiate this meeting through deploying different coping strategies. The conclusion sums up the main findings of the chapter, and discusses them in relation to the lighting design and planning practices in Newham.

6.1. BEYOND MOVEMENT: MEDIATION OF SENSATION

As argued in chapter 5 the satellite images of nocturnal London show the distribution of lighting technologies across Newham, revealing the areas that have been redeveloped over the past decade, cast in bluish white light, pitted against the residential SON lit areas. The spatial divide that such colour difference suggests will be all but eliminated by 2018, as LED lighting will embellish the streets in bluer light. The claims to the supposed experiential effects of a change in lighting—creating better lines of sight and encouraging more people onto the streets—tie in to the wider strategic goals of

the regeneration strategy for the borough, particularly the areas Canning Town, Plaistow and Custom House. The creation of a safer environment, with a more vibrant street life, both day and night, are part of the strategy for creating a borough where people will come to live, work, and ideally stay (London Borough of Newham, 2003, 2007a, 2007b). The lighting of the public realm is therefore deeply engrained in the strategic political aim of increasing visibility and promoting walking during the hours of darkness.

The focus given to the experiential and sensory dimensions of walking in recent cultural geography, can be argued to coincide with the increased attention given by city authorities to promote walking as mode of transport benefitting the environment (Middleton, 2011b), increasing the level of physical activity and health of residents (Forsyth et al., 2008) and the sociability of local communities (Toit, Cerin, Leslie, & Owen, 2007). Scholars engage with such policy aims and initiatives by critiquing the underlying assumption that pedestrianism can be obtained as a direct effect of design and planning. Through Middleton's (2010b, 2011a, 2011b) studies of everyday walking in London the reader is presented with a critique of urban policies that promote pedestrianism based on numeric counts and surveys. As she argues, this approach reveals how "walking is assumed to be something people 'just do'" (Middleton, 2011b, p. 91), a type of locomotion (see Lorimer, 2011), where walking is considered the means for reaching particular ends, getting from A to B. And while walking is at times like turning on an "auto-pilot", what she contests is the focus on walking as a simplistic, purposeful action based on rational choices and decision making. Instead, she proposes a need to acknowledge and account for "the routine, habitual and everyday experiences of those people who actually walk in the city" (Middleton, 2011b, p. 94). This appeal echoes Creswell's call for considering mobility as more than simply a movement from A to B, exploring "the content of the line that links A to B" (2006, p. 2). Drawing from such studies, I wish to question the assumptions underlying the Council's strategy for lighting the streets in order to "promote the ease of movement and navigation across the area" (London Borough of Newham, 2008, p. 22), providing natural surveillance and thus encouraging particular forms of 'night life'.

The relation between local government driven urban design and walking has been given attention by Mike Benediktsson (2015) as he shows how policies promoting walking in the US are often incongruent with the needs of residents. Introducing the

term “material mismatch” Benediktsson calls for greater attention in urban design policies towards the needs of residents. Such call for attending to the everyday experiences and needs of residents is likewise supported in studies that question some of the policy claims that are made to the effects of increasing walkability in cities. For instance, in their study of walking in Adelaide, Australia, Toit et al. argue, there is “limited support” for the “proposition that walkable neighbourhoods are also more sociable” (2007, p. 1689). However, as also noted in chapter 2, Forsyth et al. (2008) argue that spatial design that aims to support specific practices of walking, can help enhance *enjoyment* of walking, by for instance providing shade, shelter, or induce a sense of safety. Trees, landscaping, shelters, benches pathways and improved lighting are all elements they mention that can contribute to the user experience—and, of particular interest for the focus of this chapter, they argue that the presence of streetlights positively correlates with total amount of walking, measured in miles per day (Forsyth et al., 2008, p. 1985). What this finding suggests, albeit not surprisingly, is that walking is a practice that is carried out *with* things, and, when applied to the notion of nightwalking, it is already always related to the presence of artificial lighting in the shape of streetlights, traffic lights, luminous windows, shops, signs, advertisements, media screens, headlights, and so on.

This proposition is more fully developed by Eric Laurier, Barry Brown and Moira McGregor (2016) in their study of pedestrians using smartphones to find their way and navigate in urban environments. They argue that walkers should not be considered just walkers, and consequently there is no such thing as walking, in and of itself. Walking is actualised by treading foot on *pavements*, along pre-designed *streets*, in specific *shoes*, with appropriate *clothes* depending on weather and sometimes with *electronic devices*—all of which mediate this practice. While Laurier et al. (2016) do not consider lighting, their perspective proves helpful for unfolding how walking in the urban, lit environment is always materially mediated. Such attention to the mediation of the sensory experience and embodied practice of walking in the city is similarly what Rose and Degen (2012) show, when arguing that sensory experiences don’t emerge solely through the material qualities of spatial design. The mediation of experiences and practices will be the focus of the following sections, by exploring how people respond to the changing and different layers of light they encounter along their routine walks.

6.2. “I JUST NEED TO MOVE DOWN THE STREET, NOT SEE IT”

As Beaumont (2015, p. 3) argues, historically the arrival of darkness in the city challenges our perceptive abilities to orient ourselves, making the well-known unfamiliar and estranged, displacing both the city and the self. As a corrective force, artificial lighting focuses visual attention towards certain features and roads, leaving others in obscure shade and subsequently ‘less’ visible. As I went on walks with residents, the lighting that became a point of conversation was first of all the focal glow that immediately gives direction and offers navigational points, drawing them towards some places and away from others.

Therefore, routinized walking in the urban, lit environment was firstly described by most of the residents as the act of going *somewhere*, to see *someone*, or to do *something*. While such a notion of ‘going somewhere’ puts importance on the destination and less so on the travel—almost to the degree that walking becomes a means for obtaining the goal, simply getting from A to B—the informants unfolded how their walks are mediated by light as they encounter changes in its intensity, contrast and colour. Middleton (2011b) argues that more often than not policy makers see habits as barriers for changing people’s mobility choices. However, she argues that along people’s everyday walks they negotiate situations that are unforeseen and suddenly demand of them to adapt in ways that demonstrate a creative potentiality of dealing with changes in habits. Such situations were particularly prevalent in the walk-along interviews, with the intensity of contrasts between streets, the diversity of light sources, and the immediacy of unforeseen events such as the occasional smashed or worn out light bulb, all demand of the residents to negotiate changes in contrast, intensity and colour. A common narrative was that they had never given much thought to the role of lighting, and rather took it for granted, describing it as something uneventful or just being there. Only once a light goes out or changes radically, requiring of them to adapt to the situation, do they begin to notice the importance of light to their routinized travel. In the following I will show how the layering and hierarchy of the urban, lit environment leads the gaze rather than arresting it, exactly because it takes a role as neutral background.

6.2.1. GOING, “AS LONG AS I CAN SEE WHERE I AM GOING”

A common trait throughout people’s descriptions of their experience of light, is its profound ability to allow people to orient themselves in the surrounding environment. Often, this is explained by opposing their experience of walking the artificially lit streets

of Newham to the country side, to towns where local governments cut off lights at midnight, such as Braintree and Hertford.

In chapter 1, I introduced Mary, who grew up in Bethnal Green and now lives with her husband Richard, originally from Torquay, in their terraced house in Plaistow. As they explained, once it starts to get dark around 4.30pm in winter they might be out shopping or doing other routine things, but very seldom would they be out just for the purpose of walking. They explained that this is because there is “nothing attractive enough” in their area and the parks are shut off at dusk. Therefore, their walking is ‘reduced’ to going from A to B to do *something*, or returning from *somewhere*. Mary explains how usually she is “going from A to B, and that’s it, and you don’t [take] notice”. She moves through the streets because she knows “how to get there, and you know, I am usually walking along and chatting”. The lack of attention paid to the visual features of the urban environment is partly in due to the familiarity they have developed: “we have walked down this road a hundred and millions of times before, in darkness or in daylight...So, we don’t pay attention to anything”. The repetition of walking the same strip ‘millions of times’ makes the walk habitual. In Middleton’s words, such habitual characteristic of moving on ‘autopilot’ while maintaining an unbroken stride, elicits a mechanical movement where the “body feels its way” (Middleton, 2010a, p. 583). Yet, along the route, Mary and Richard became aware of just how the changes in lighting affected the ways their bodies feel their way.

On their day-to-day trips they stick to the main roads, Barking Road and Prince Regent Lane. The presence of shops, services and amenities along these streets draw them towards them, but as conversation picked up they also started remarking upon the lighting. Twice we walked the route that Richard walks daily with their dog, taking them along the main streets, but only briefly before crossing down residential side-streets and a pedestrian pathway. The hierarchy between these streets was remarked in terms of their population and in terms of their light and sound levels. As seen on figure 18, the main road and sidewalks are lit up by street lamps and headlights from cars and busses. On figure 19, it is clear how the intensity of the lights decreases as we turn down a side road. Here, lampposts are dimmer and dispersed at a lesser frequency, creating a distribution of light and dark patches that create a darker and, in their opinion, calmer light- and soundscape. As we walked from the main road down the residential street, Mary remarked: “you are more aware of the light and dark, you have come off that main road, and the volume of noise has gone down”. The heightened



Figure 18: The High Street, Prince Regent Lane, is busy with traffic, shops and pedestrians. Source: Author's photograph.

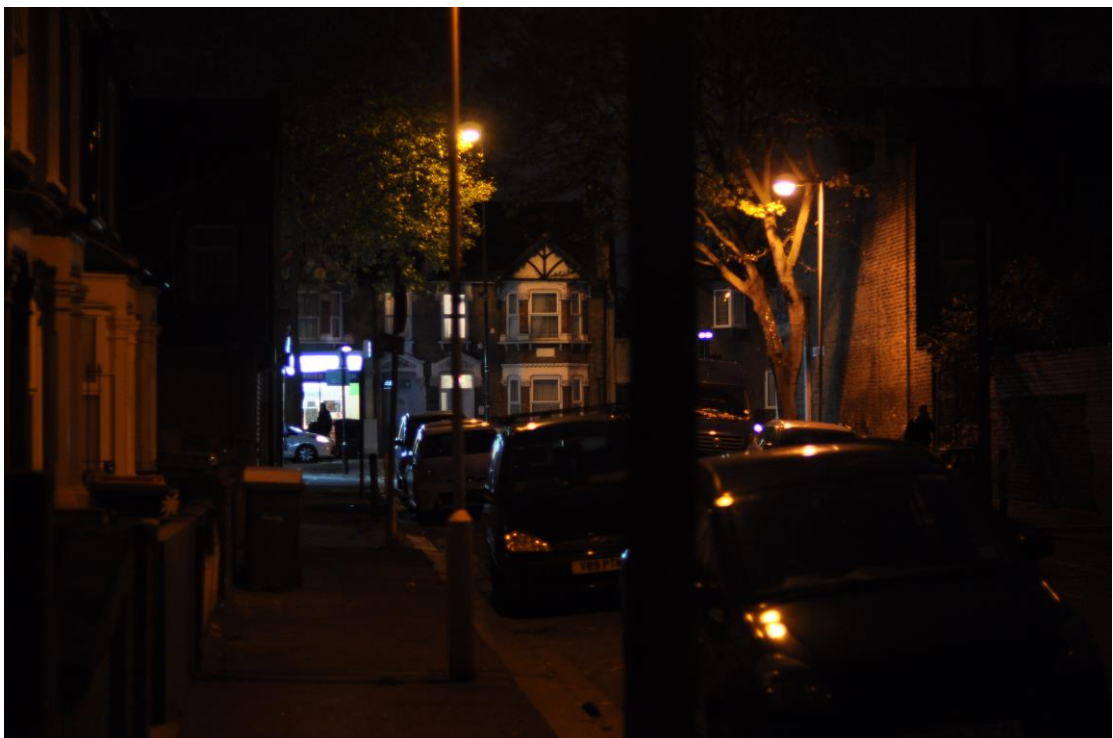


Figure 19: Residential Street off Prince Regent Lane.

awareness similarly surfaced as we came to the end of the residential street, leading onto a busier road. The change in light- and sound levels provided an interruption in the sensory experience where the quieter and darker spaces made Mary “more aware”, as the buzz from noise and bright lights no longer “hides other noises...[making] you hear other things” like “creaks and groans, little scuttles like mice or anything running around”. The tactility of the darkened environment, where sight starts failing and other senses take over, gives presence and precedence to ‘other things’—rodents, unfamiliar noise, and the lesser visible dark patches, which they concluded was “less friendly... like in Cumbria, less friendly because it is just you and the darkness”.¹⁵

As we moved from a bright to a darker environment, they experienced a shift in the sensory attunement, becoming aware of “other things”. When walking in the opposite direction, Richard remarked that “you are walking into lightness...it adds to the safety factor...it allows you to see what the ground is like, because Newham is really bad for pavements...if it is lit, you can see what is going on and hopefully you don’t fall down a hole”. The tactility of the environment was therefore accentuated by the lighting in ways that not only allowed them to see, but to anticipate the texture of the pavement in ways that affected their sense of safety. The sensual comfort or discomfort that was experienced as they moved through light and dark spaces was therefore mediated by the ways they are tuned sensually to the shifting visual and auditory soundscape. Richard remarked how the light streaming from a variety of sources gives “a focal point to look at...But I don’t fixate on it, it is just there”. As he continued:

the only extra thing it gives you are like navigation points. If you are quite familiar with the area you can, say, go down to the Perfect Fried Chicken shop and turn left and turn right. But it doesn’t add to the experience of being out at night.
(Richard)

To this Mary added that:

it doesn’t really matter that you can’t see in your immediate vicinity because we can see the whole area down there, the pitches, the parking spaces, and the walkways are lit, so we can see where we are going to. (Mary)

The importance of seeing “where we are *going to*” rather than where we *are*—our “immediate vicinity”—suggests that the lighting in the public realm makes Richard and

¹⁵ While there is a point to be made about loneliness and the lack of presence of others, this will be dealt with in more detail in the latter section of this chapter. For now, I want to remark on how the changing light and sound levels change the way they carry out their routinized practices.

Mary see by feeling drawn by the focal glow of the urban, lit environment. The ambient luminescence is all but superfluous to their experience along routine walks; it simply provides the background from which focal points stand out.

Throughout the fieldwork, similar changes in the lit environment along the routes we walked prompted the residents to talk about the ways that light was part of a ubiquitous background that lead, instead of arrested, their gaze. Many residents even played down the role of light to their routine walks, showing how they moved easily through dark spaces as long as they were able to see where they were going. One of the informants that noted this was Charlie, a 78-year-old veteran of the Armed Forces, who lives on his own in the ground floor apartment in a council estate in Custom House. Four times a week he walks the same route from his home towards the Library on Prince Regents Lane, visiting the library once and his brother three times a week. On this journey he walks through residential neighbourhoods and crosses the two main roads: Prince Regent's Lane and Freemason's Road. The heterogeneity of the built environment creates a confusing layout of roads, pathways, alleyways, and, of course, a multiplicity of different light sources.

Charlie remarked how he had never paid attention to the variegated nature of the lighting in these different streets until our meeting. He had made a point of looking at the light and realised that in the street where his brother lives, which can be seen on figure 20, the "lighting is very poor until you get down to the bottom, and on the curve at the bottom there is extra lighting put down there, so it is very bright." Similarly, as he approached Freemason's Road, and headed down the side street, Maplin Road, he remarked how "I noticed that in Maplin Road, the lighting is very, very good." Maplin Road is one of the streets in Custom House that has been refurbished with LED streetlights, as part of the Council's plan to upgrade the lighting. As seen on figure 21 and 22 it is easy to see why Charlie noticed the varying performance of the different streetlights: the 'poor' lighting he remarks, refers to areas where trees have overgrown the lamp, where the light has gone out, making the street darker and look dimmer; the 'good' light, he remarks, refers to an increased frequency and brightness of the light. However, he insisted that even though the lighting might be "very poor"—as in the case of his brother's street—he had never had any problems seeing in these streets. The light might be dim, obstructed by overgrown trees, or occasionally smashed or worn out, but had never given him any problems seeing. The difference between good and bad lighting, he explained, lay in "the actual density of the light", as some streets



Figure 20: Residential street where Charlie's brother lives. Source: Author's photograph.



Figure 21: Maplin Road lit in LED lights. Source: Author's photograph.



Figure 22: Freemasons Road lit in SON lights. Source: Author's photograph.

simply hold 'more light' than others. The 'amount' of light, and the quality of it, expresses how a specific "road isn't as well-lit as it could possibly be", yet, such difference in the quality and density of light did not concern Charlie:

as long as I can see where I am going I am not really worried about what lighting it is. I have never paid any attention to it... As long as I can see what is going on around me, it doesn't matter if it is half-light, as long as I know what is happening on around me. (Charlie)

The importance of seeing where one is going, reiterates the point Mary raised about seeing what one is moving towards, giving less importance to the light surrounding the immediate vicinity of the body. As Charlie argues, the amount of light, or its 'density', is of importance to him finding it 'good' or 'bad', but does not hinder him when out walking as long as he can see *where* he is going. Therefore, the lit environment is divided into layers of focal glow and ambient luminescence by the way the urban, lit environment is practiced through routine walks with the aim of going *somewhere*. To such routine walks, the identification of navigational points that stand out in the luminous landscape take precedence over the ambient luminescence that fills the space with a subtle

glow. However, this does not mean that the ambient luminescence is superfluous; it simply takes up a background role that allows for the focal glow to stand out and lead the gaze. This can be seen in the photographs as the dark areas are not black holes, but visible, yielding a less obtrusive vision which takes a background role to the purposeful and goal-oriented routine walks.

Eugene, 73, similarly picked up on the relation between seeing where one is going and where one is, along our walk. He lives on his own in a ground floor flat in a Council Estate in a residential area in Custom House, couched in between Prince Regent's Lane and Freemason's Road. His routine travels to the shops, the bus stop, the health care centre, the church, or to see friends, are all within about 500m walking distance, and mostly done during light hours. Yet in winter, darkness encroaches on his day-to-day travels and therefore many of these travels are made on foot, alone, through the artificially lit streets and alleys. As he took me along the route to the bus stop, Eugene insisted that he would only go out if he had a purpose, to go somewhere.



Figure 23: The car park with trees and SON lights dispersed around its edges.

When going to the bus stop he walked down his own street into a residential car park before turning down a few alleyways that lead him to the bus stop on Prince Regent's Lane. As we moved from the street into the first car park, which was surrounded by maisonettes, he noted that "we have no problems at all with the lighting

here” and that he did not find the lighting in his area dim. The lighting is very similar, if not identical, to the lighting that other respondents refer to as dim, yet Eugene found the lighting clear and sufficient. With clear he meant that he was able to see where he was going, and that all dark patches were eliminated. As we arrived in the car park as seen on figure 23—which is lit up around its sides by a few lampposts and hugged by trees that cause some of the lights to be thrown into shadow—I asked him about the lighting.

He defiantly argued that there was enough light to see, and that even though dark patches appeared underneath trees, between lampposts, between cars and down alleyways, it was not a problem. He still felt the lit environment was clear and that he could see in front of him, he could make out the navigation points that he moved towards. While such certainty was not unanimously experienced by the residents, the point is that the routine walks can be carried out under low levels of light. And this leads to the second point which all residents agreed upon, that there is no reason to light up the whole space, eliminating dark patches; as he argued, his route should not be “lit how you have a stadium or something...it gets light from the street anyway...[as long as] there is one [light], there is enough lights, it is not that there is no lights at all, you know”. The modesty of finding one light sufficient reveals a pragmatic way of acknowledging that he only needs to be able to *move through* the streets, not *see* them. And this is exactly where the ambient luminescence surfaces as that background support that allows the focal glow to take centre stage, allowing people to see where they are going. His route is not only lit by the focal points he is moving towards, but it “gets light from the street”.

6.2.2. SUMMARY

The focal glow of the luminous environment provides residents with navigational points that seem to reduce the role of ambient luminescence to an unobtrusive background. Yet, such a background role is exactly what Merleau-Ponty argues does not arrest the gaze but rather leads it towards certain features. A certain level of light is needed in space, and is ever present to the residents along their walks. As such, the ambient luminescence that seems to blend into an unobtrusive background, has utmost importance for how residents come to see these focal points: Mary, Richard and Charlie revealed how their gaze was not fixed but, through movement, was lead towards places that appeared, luminously, before them. This point was iterated by Eugene as he showed how even though dark patches appeared dispersed along his route

he can still see sufficiently because he didn't need to see the path he was walking as such, but simply the destination he was moving towards. All three walks therefore brought attention towards the relation between different layers of light. While the focal glow is given primary attention and importance to the routinized walk towards somewhere, the ambient luminescence takes a more subdued role, providing an adequate 'amount' of light in order for dark patches not to be completely black and for the resident to see.

When holding such experiences and practices up against the Council's strategy for using lighting to creating transparent spaces that allow for eased movement across spaces and views to provide eyes on the street, it would seem that the lighting strategy is supported by the stories, as the routinized walking in the urban, lit environment is primarily concerned with the unhindered passage towards somewhere. The stories further support how Alexander and Sutherland use light to lead people through spaces, rather than alarming them to the presence of particular spatial features. However, a crucial point of leading the gaze as Alexander and Sutherland remark is the incipient use of light to make people see in particular ways. In the following, I therefore wish to turn towards how light mediates ways of seeing, how different layers of light, and the changing luminous landscapes provoke residents to think about how they see.

6.3. SEEING (IN) URBAN, LIT SPACES

The purposeful practice of 'going somewhere' seems to reduce the experience of the urban, lit environment to a functional means for reaching a destination. As the ambient luminescence gives way to the focal glow to lead the gaze and people's movement, an interesting relation between the two layers of light emerges by providing focal points to move towards, rather than seeing, the street in itself. Yet it still provides enough light for residents to anticipate the materiality of streets. While the sensory experience of these differently lit spaces is mostly unnoticed and seen as "banal" to most of the residents, simply enabling them to see and move towards somewhere, the residents became increasingly aware of the light as we moved through streets lit with different lighting technologies. As Degen and Rose argue, the ways that sensory experiences are mediated can "multiply" an experience or "disengage an individual from full sensory immersion" and ultimately "reduce their sensory feel" (Degen & Rose, 2012, p. 3282). In this section I therefore turn to how changes in lighting impinges on, or enhances, the sensory experience of the streets, and in particular of differently lit spaces across the city.

As noted in the previous section, Charlie's walk home from the Library was interrupted by the bright LED light streaming from the retrofitted light poles on Maplin Road, exactly because of the contrast to the surrounding SON lit streets. As retrofitting is happening all over the borough it is no surprise that residents often notice changes in colour, intensity and brightness. Along the walks with residents, these visual or aesthetic interruptions therefore unsurprisingly spurred reflection upon how the different light sources allowed residents to see in different ways. Similar to how Eugene accentuates the importance of the ambient luminescence as well as focal glow, the stories that follow pay attention to how the interplay of luminosities affect not just *what* is seen but *how* people come to see. The section reveals the paradoxical relation between the *appearance* of an urban, lit space (its colour, brightness, intensity) and the sensory *experience* of the place (how the residents see, feel and act in a place). Such relation became evident during walk-along interviews as people's habitual experiences were interrupted by different light technologies placed against each other. The interruptions unveiled a distinction between the way residents look at and feel *about* particular lit spaces and how, in turn, when moving through these places, they come to see and feel *in* them. The focus of the section is therefore the ways that different layers of light in the urban environment allows for residents to negotiate spaces through challenging notions of proximity and distance.

6.3.1. "MIND YOU, IT'S NOT AS BAD AS IT LOOKS"

During the walks with residents, most would point out places they define as badly or poorly lit, and something that the Council should address. While such concern was not necessarily a call for more light, the point of critique was the dim, gloomy and dull light coming from SON lamps, making it difficult to see and giving an eerie feeling. However, as will become clear in this section, once we went from talking *about* a lit space to talking *in* it, most residents would acknowledge that the light wasn't as bad as they thought. On some occasions when residents pointed out bad or good lighting, I suggested that we went to the spot to have a look at it, to see what they meant. As such, the walk-along method allowed me to challenge perceptions or to provide the grounds for the residents to give richer sensuous accounts of how the specific lighting affected them.

This was especially clear as Lucie, 69, and her cousin Jackie, 67—introduced at the head of chapter 1—took me around their neighbourhood in Canning Town just

north of the A13 flyover. Their neighbourhood edges on to Star Lane Park and constitutes a collection of maisonettes, terraced and semi-attached houses that were constructed to replace gardens and fallow land in the 1970s. The houses are weaved together by a maze of alleyways and pathways, and, at the time I visited them, bathed in SON lights, giving it the yellowish hazy look as evening approaches. In the spring of 2016 all these lights were refitted with LEDs, and therefore provide a very different lit environment, yet the accounts that I draw on stem from the period before this overhaul had been put in motion.

Lucie came to these parts of Canning Town in the 1980s and lives in a semi-detached house close to her cousin, daughter and grandchildren. Most evenings she will visit friends and family walking back and forth, treading the sidewalks embellished in what she refers to as the “orange horrible stuff” emanating from the SON lights, which “seems to create this shadowy effect” around her neighbourhood. She took me for a walk, accompanied by Jackie, who has lived in the area for 40 years. The main point they picked up on was how the physical layout of streets, alleyways and paths not only create a confusing street layout but, lit in this orange light, “seems to create...dark patches” around the area. Walking through these spaces showed how some of them, when seen from afar, enabled ways of seeing, which allowed me to consider the different ways that distance and proximity relate to aesthetics and sensation.

Along the route to Lucie’s daughter’s house, she passed by an alleyway at the end of the turning, just 50 meters from her front door. As seen on figure 24, the pathway runs along a wall and she explained that “a lot of people” coming home from work “cut through” here on an evening. Both Lucie and Jackie were taken aback by people doing this because, as Jackie explained: “you wouldn’t go down that way because there is no lighting”. Thus as we stopped up and looked at it, they commented on the lack of lighting, the shadowy, orange effect of the light, and how people going down there must be “brave” to do it. In contrast the spot we were standing in, where the photograph was taken from, the light is described as “lovely and bright”. However, all the street lighting here was SON, and therefore, the quality of the light they saw and stood in was effectively the same. I suggested we walk down to the end of the turning and have a look at the alleyway, as seen on figure 25, where Jackie remarked: “it doesn’t look as bad as I thought it would be”. It was brighter than it looked from afar, and standing in the light, Lucie argued that “this is all right...this is quite bright down here, I didn’t think it was like this”. As the light technologies were the same

Lucie and Jackie’s reaction can be argued to relate to the perception of the alleyway being dangerous, rather than the light being sparse; it looked dangerous to them even though it was lit in the same light they were originally standing in.

The paradox between how particular places are seen, and thus felt from afar, and how once these spaces are experienced in motion, causing the resident to see *in* the light, or *through* the light, came as a surprise to the residents. They admitted that the space they found intimidating due to bad lighting—appearing dark and cut off from clear views—was actually “all right” once experienced up close. The paradox between *seeing* badly lit spaces and *seeing in* them therefore marks a relation between how they felt *about* places and how they felt *in* them; a relation between the aesthetic appearance and the sensory experience of the urban, lit environment. A connection can be drawn to the way Sutherland, in the previous chapter, questions if a space is appealing for the pedestrian: “Does [the light] make it feel like I want to walk down that subway?” In this case, Lucie and Jackie do not find what they are moving towards appealing, stressing the importance of the aesthetic appearance of the space rather than the sensory experience of it. Of course, they also experienced the space accompanied



Figure 24: View of the alleyway running along the wall at the far end. Source: Author’s photograph.

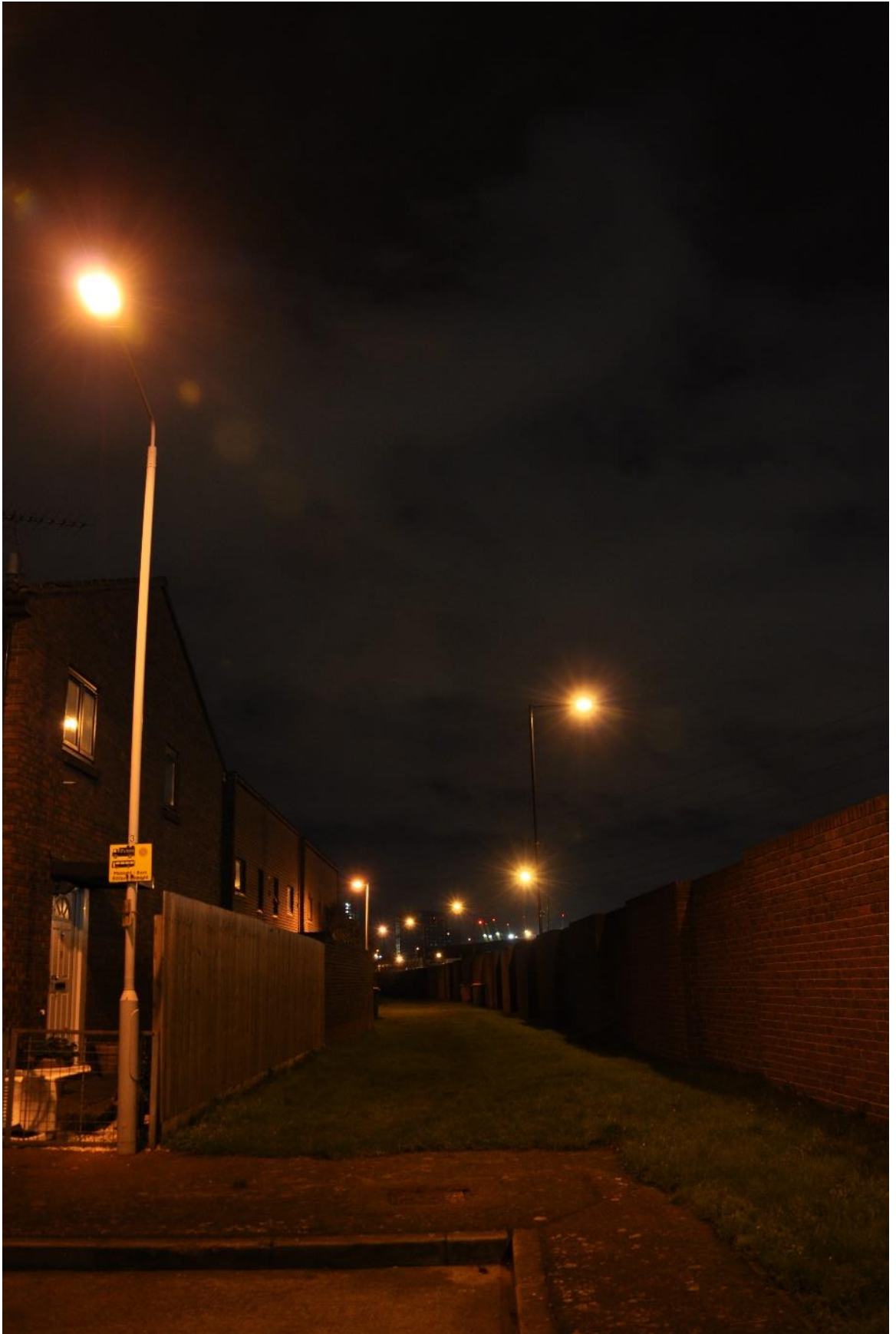


Figure 25: View when standing in the alleyway. Source: Author's photograph.

by me, a young man in his late 20s, which must be considered relevant to how they might, or might not feel, more or less comfortable compared to walking home alone. However, the point is that lighting is not only that with which people see. Lighting creates a certain presence in a particular way that imbues spaces with a sense or an atmosphere that might deter people from entering.

A similar episode occurred later on the walk, as we moved along the route from their homes to the off-license on Star Lane. Down by a pedestrian crossing across Star Lane, between Star Lane Park and Star Lane School, Lucie explained that the lighting used to be so poor that car drivers couldn't see children crossing the street. After filing a complaint, the Council replaced the two SON fittings on either side of the road with LEDs. As seen on figure 26, the colour temperature of the LEDs was different to the SON fittings—this is the experience that is referred to in quotations at the head of chapter 1. Lucie and Jackie explained how the lighting used to be yellow, giving an “eerie, dull, creepy feeling”, and how the new “blue light” was “a lot brighter” as the lamps “reflect a bit more” and “just gives that ... clearer view”. As we approached the crossing and talked about the lights they remarked how the different colours of the lamps could be seen in how they revealed the tree-crowns as yellow and green, respectively. In this way, the different light sources placed against each other made for different ways of revealing or representing things; the branches of the same tree looked different. As we continued to pass under the lights in the crossing, Jackie



Figure 26: Pedestrian crossing on Star Lane. Source: Author's photograph.

told Lucie and I to come and see how, underneath the LED lights, it was much brighter, clearer, and you saw better. Lucie remarked how you are better able to see people's faces, pointing towards a visibility that brought more comfort as people could be identified; "you feel safer", she remarked.

In contrast to the previous difference between how they felt *about* a space and how they felt *in* it, this example was interesting because it allowed the residents to experience two different light sources, and remark upon how they had profound effects on their ability to see; while the LEDs gave a "clearer view" that made them "feel safer", the SON stood out by giving a murkier "eerie, dull, creepy" light. Such light qualities were therefore easily translated into sensation and emotion.

Similar to how Mary noted that moving towards lit spaces enables you to see and anticipate the material and visceral texture of the urban environment as you move through it, Lucie and Jackie identified how the LED lights made them see people's faces better. It allowed them to negotiate the material environment in ways that made them feel safer. Thus, regardless of lit spaces looking different due to the material changes of the environment (an alleyway appearing) or new lighting technology (LEDs placed against SON) they were experienced, sensorially and embodied, as 'all right', as 'clear'. The fact that light sources were described as 'poor' but experienced as 'all right' and actually 'quite bright' speaks to Merleau-Ponty's point about how light becomes natural to us; once embellished in a particular light, it "ceases to have any definite colour for us" (Merleau-Ponty, 1962, p. 362), exactly because the human eye adapts to, and compensates for, light differences. Yet, once you can visually see the difference between light sources, it can change your way of feeling about particular sources and places, which will become more evident over the next two vignettes.

Lesley, 72, and Jan, 77, took me along their weekly hike along Barking Road in Canning Town, from their local bingo club at the Community Centre to their home in Plaistow. They live in a terraced house, built in the early 20th century. Having recently received an offer from an investor to buy it for future development they felt the changes going on in their neighbourhood. Amid friends and family encouraging them to move out of town, they wanted to stay in Plaistow.

Every Wednesday afternoon they went to the Community Centre to play bingo, and headed back home afterwards at about seven or eight o'clock. Most often they took their car, because they no longer felt fit enough to walk the full kilometre back and forth. Therefore, they parked their car in the parking lot across from the

Centre on Barking Road, and then walked from the car park to the bingo club; reversing the trip when heading home. As we stood outside the entrance to the Centre and looked down Barking Road, as seen on figure 27, they both remarked upon the lighting along the first 500 metres—being refitted with Metal Halide lights as part of the regeneration of the area—was a lot brighter than where they live. There were no dark patches along this part and they could perfectly see the pavement and people moving. But this brightness was only along the main road. As we moved towards the car park, which is situated down a small side street, they remarked how “very, very poor” the lighting in the car park was. Even though there were lights, they argued it was nothing compared to the main road; after having parked their car and they come back to find it “you just got to remember where you put it”, because you won’t be able to see it.

Therefore, their immediate comparisons of the sparkling bright light on Barking Road with the ‘bad’ lighting in the parking lot was centred on their ability to see in the different environments. Moreover, the ability to see was tied to a tale of areas chosen for development and others left in decline, putting particular emphasis on the streets around the area they live in, which are lit in the “poor” SON light. As Jan argued “it seems like, they only think of one end of it, yeah, and forget the rest of it” thus eliciting a feeling of being deprioritised by the Council in the regeneration of select parts of the neighbourhood; while their streets and the spaces they often use are left dark and badly lit, Barking Road and the station is bright and ‘up to date’. Such focus on how spaces look due to (a lack of) development bears similarity to Lucie and Jackie’s experiences. Although they found the lighting in their area “very, very poor” – to the point where you cannot see and have to rely on memory to find your parked car – once we arrived at their home, as seen on figure 28, they confessed that “it isn’t too bad”. They “have never had any problems” finding their way or to their car, or seeing where they are going. And on occasion when the streetlights go out, having been smashed or simply in need of change, they rely on the excess lighting streaming from people’s windows, which provides enough light for them to see.

While the lighting in their street was branded as “poor”, it was not experienced as bad. Through comparison with the brighter lights in the developed part of Canning Town, the difference occurred. While SON lights were branded as bad lighting by most residents once we walked through them—moving from talking *about* the lights to talking *in* the light—the difference in quality became less noticeable. This once again speaks to Merleau-Ponty’s notion of light as a neutral background that becomes that



Figure 27: View of sidewalk on Barking Road. Source: Author's photograph.

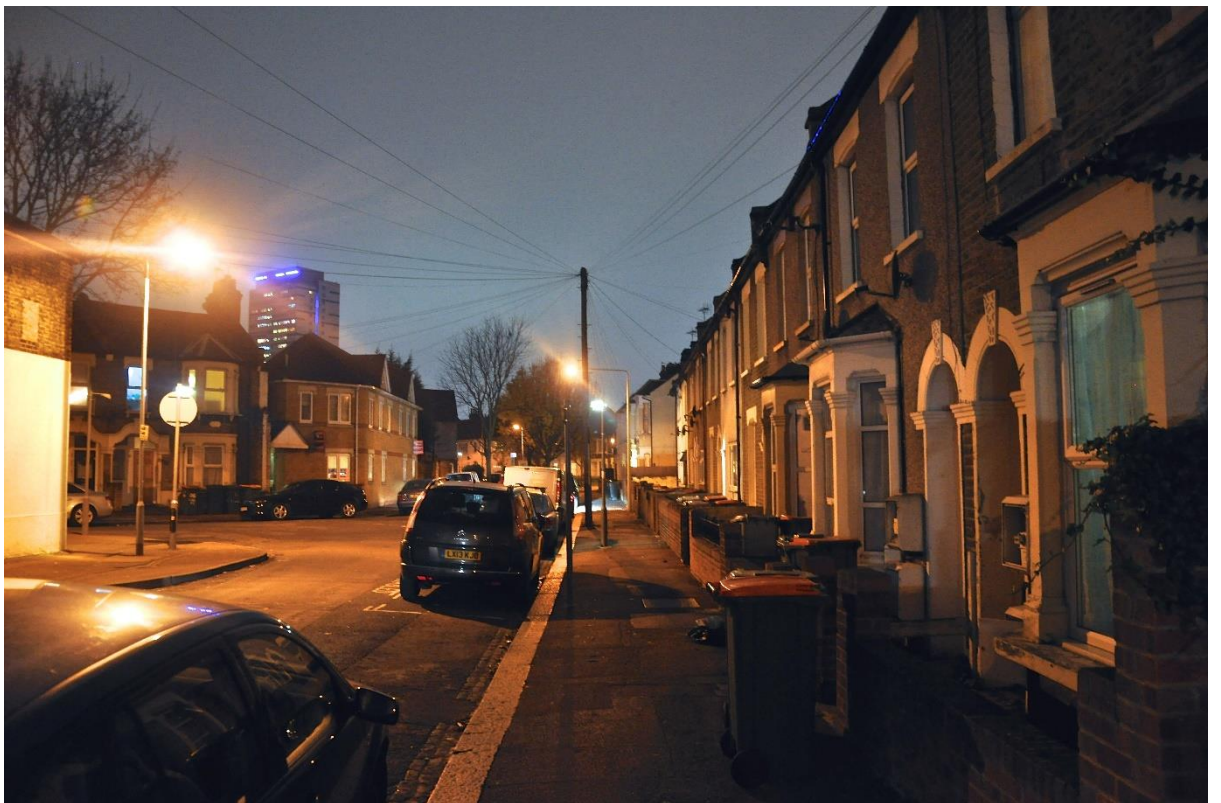


Figure 28: View of residential street approaching Lesley and Jan's home. Source: Author's photograph.

‘with which people see’: as shown in the previous section the interplay between focal glow and ambient luminescence is hardly identifiable for residents. And while the two vignettes above illustrate that the residents are aware of the different colours and perceptual qualities of the light, they can still see and have not yet experienced problems seeing.

To illustrate just how we can develop a way of thinking about this interplay between ways of feeling about light and feeling in light, I return to Eugene once again as he took me from the shops and health centre lying on Freemason’s Road, along the alleyways that run through the estate in which he lives. As we came to a bend around a building, the light on the corner was out, as seen on figure 29, making us enter the alleyway in darkness. As we turned around the corner we could see through the alleyway towards the end of it, where, a bit further down, a lamppost lit up the space we were moving towards. Eugene explained how “this side is dark” where the lamp was off, creating a dark patch, especially by the small nook in the middle of the alleyway that can be seen in the photograph. However, he did not find this immediate darkness we were approaching too dark “because of *that* light” around the corner, lighting up the space we were moving towards, seen on figure 29. Thus, the dark space we entered proved unproblematic for his travel because the lit

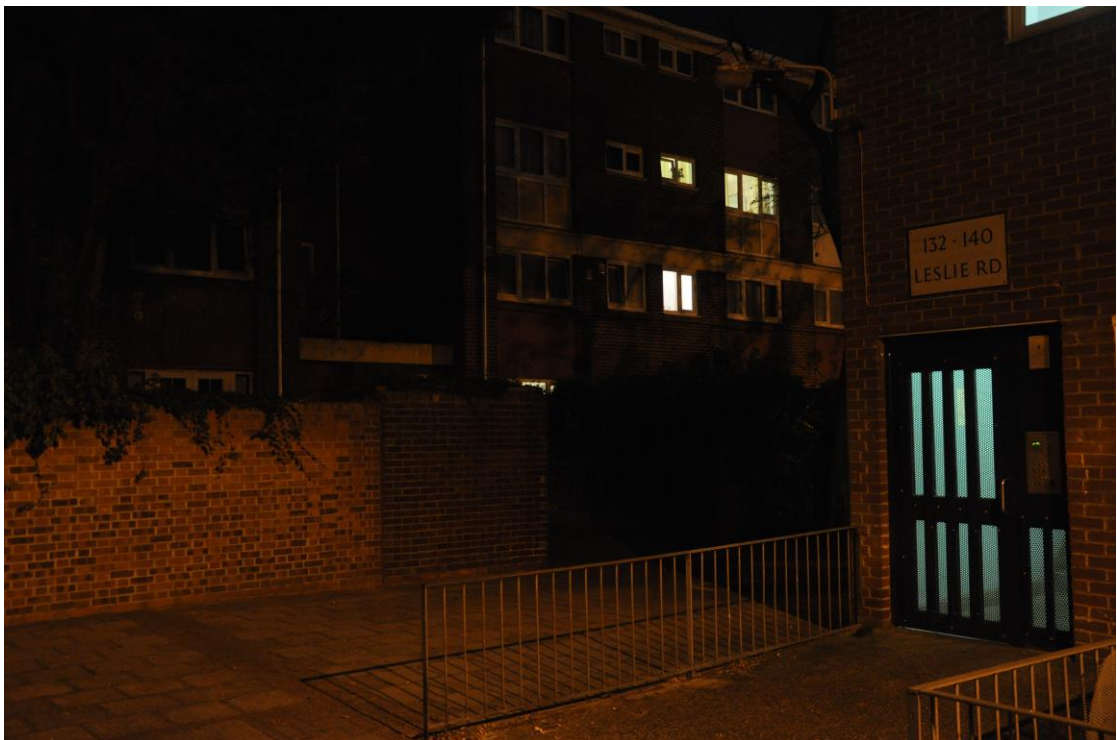


Figure 29: Approaching the alleyway with light on the corner out. Source: Author’s photograph.

space he was moving towards appeared in front of him. As he explained: “Even though there is not enough light *here*, then the place will be bright. So, it is all right. It is not too dark; it is dark, but I wouldn’t say it is too dark ... You can see where you are going”. The material presence of a dark space before him does not hinder him from keeping moving, because he can see the light further on. He sees through the dark space towards the navigation point, illuminating and making visible to him “where you are going”.

As we passed the alleyway we arrived at another lamppost by the end of the alleyway, placed at a bend. As seen on figure 30, this lamp was covered by a tree that had grown over the lamp, creating a shadowy, rippled leaf effect on the sidewalk as the light was shining through the tree crown (see figure 31). Thus, similar to the dark patch on the corner, a dark space appeared in front of us as we moved towards it and he remarked that the lower level of light in this dark passage was not intimidating or problematic. He would not want more lighting or the branches cut down: “Because as I said, one can see through... I just mean to say that I see people”. When the dark space is experienced in movement, with attention focussed on where he is moving towards, the dark space dissolves because you “can see through it”. This notion of seeing through the materially manifest darkened space, allowing Eugene to “see people”, resonates with Lucie’s remark of how she is able to see people’s faces in the brighter light. However, Eugene’s remark almost related to the lowest minimum of light needed for him to be able to orient himself (and in SON light), whereas Lucie’s refers to experience that makes her feel better and safer (in LED light). The point, therefore is, that the light through which residents saw became neutral to them; it became the way in which they saw, tainted, but not necessarily hindered by the way they remembered or thought they felt or looked. The neutrality can be understood as the ambient luminescence that allows one to see focal points differently; once moving through the different light sources, such ambient luminescence is acknowledged for creating very different ways of seeing. Yet such way of seeing was—similar to Mary and Richard’s experience—not fixed on points but emerged through the ability to navigate and anticipate their movement. It was *because* Eugene was moving towards somewhere that the differences in the lit environment did not pose an obstacle. Similarly, it was *because* Lucie and Jackie were deterred from moving towards the alleyway that they did not realise its quality as a medium for seeing. And lastly it was *because* Lesley and



Figure 30: The view through the darkened alleyway with a light at the end. Source: Author's photograph.



Figure 31: View of alleyway from the dark space underneath the tree. Source: Author's photograph.

Jan were reminded of being left out of the regeneration scheme that they came to forget how they saw perfectly fine on their own street.

6.3.2. SUMMARY

This section has turned attention away from the light that appears as a focal glow towards the ambient luminescence that conditions ways of seeing.

I have put emphasis on the ambient luminescence that takes a background role as that diffuse light people see through. As this diffuse light was somewhat 'invisible' in the vignettes in the previous section, it has become clearer that it has a profound role for experience in this section, courtesy of interruptions in the urban, lit environment caused by different lighting technologies pitted against each other and failing light sources. The point I want to draw from these findings is that the ambient luminescence will always take a background role, and affects people's way of seeing, but exactly because of the diffuseness of such light people might not realise its affective importance. Light is not only, in Merleau-Ponty's terms, that with which we see; it is also *what* we see, which can bear strong emotional resonance for us. By recognising the relation between the aesthetic appearance of a space and the sensory experience of

it, the main finding of this section brings attention to the subtlety of how strong emotional attachments to places, based on how they look, are not necessarily coherent with how people feel, and how they actually see in these environments. The recognition of the relation between aesthetics and sensation bears importance for how we understand lighting as both carnal, emerging through embodied practice, but also material and aesthetic, something existing beyond the body. In the following I turn towards this thing that lies beyond the body as the things that people meet courtesy of lighting.

6.4. SEEING PEOPLE: LONELINESS & PRESENT ABSENCE

A dimension of the routinized walks that has been left untouched until now, is that they are often carried out alone. This is not to say that they are experienced as lonely or lonesome, or that the residents feel vulnerable. Richard, Eugene and Charlie all noted how they never really were frightened or afraid. While not being gender exclusive, the remaining 19 residents expressed concern for being alone, or at least feeling alone in the urban, lit environment in particular places. By taking a closer look at just how light and darkness condition ways of feeling alone or vulnerable, I turn towards how light mediates the presence of others. Such presence brings the figure of ‘the other’ into contention—when the body reaches out into the world, the other appears as that which is different to the self (see Simonsen, 2013).

By turning towards such presence of others—human and non-human—mediated through artificial lighting, I explore how such (lack of) presence constitutes part of everyday practices of moving through the urban, lit environment. In Beaumont, Koslofsky and Ekirch’s writing, the figure of the other in the nocturnal city appears in two distinctly different ways; on the one hand, as the threatening noctavagrant of the nightwalker, posing a potential threat to anyone venturing out at night; and on the other hand, embodied in the bourgeois masses that ventured out in the night, domesticating and populating it, making it accessible for wider audiences. The presence of the other is therefore the potential threat *and* the safe-guard against the very same threats.

In chapter 5 this duality has been identified in Newham Council’s policy for creating safer streets. Through the Jacobsian focus on designing streets that encourage residents to populate the public realm, importance is given to a particular version of the other: the purposeful, gazing and attentive citizens, reminiscent of the bourgeois pedestrian of the 18th and 19th century. Eugene, Lucie, Jackie, Lesley and Jan, all remarked how light enable them to see people in the public realm. In this section, I

follow along this line of thought by focussing on how light mediates the presence of others, exploring what such a presence is, and how such a presence is experienced through everyday practices of walking.

6.4.1. ISOLATION AND LONELINESS: “NOT THAT THERE IS A LACK OF LIGHTING”?

The satellite photos of London presented in chapter 5 give a picture of where activity is facilitated at night, and where clusters of activity potentially make their nocturnal presence. The correlation between the presence of artificial light and human activity is confirmed in research that looks at the dispersion of light in satellite photographs (Meier, Hasenöhrl, Krause, & Pottharst, 2015), at the emergence of streetlights to signal power and authoritarian presence (Schivelbusch, 1995), and the shininess of archeologically excavated objects, that signal (religious) presence (Sørensen & Bille, 2007). Such presentencing of a physical absence is similarly noted in the opening quotation of chapter 1, where the light streaming from shop windows and people’s homes is experienced as giving a luminous presence in an otherwise desolate urban environment; light is shown to mediate a luminous presence of the sociality which is absent. Furthermore, as Mary and Richard remark, the decrease in light and sound on the quieter, residential streets, makes them more aware of other sounds, sights and things, bringing them to the awareness of a (lack) of presence. I want to further investigate how lighting figures as the medium that potentially shapes experience of social presence in the urban, lit environment.

Through the walk-along interviews, a majority of the residents expressed a concern about walking alone, especially in darkened environments, as they would feel isolated and vulnerable. 18 out of 22 respondents argued that better lighting could alleviate their fears of discomfort of walking in the streets during the hours of darkness. As shown in the previous section, SON lights are often targeted as the problem; however, they are not necessarily sensed as being problematic. Therefore, I find little support for arguing that it is darkness, or SON lights, that creates a sense of vulnerability; such a causal relation neglects the importance of light in creating such presence in particular ways. In line with Laurier et al.’s (2016) proposition, that walking is mediated by technologies, the routes I walked with residents revealed how lighting appeared as a medium for negotiating vulnerability in diverse ways. Depending on how the play of focal glow and ambient luminescence gives presence in particular ways, I will show how lighting conditions ways of seeing, feeling and practicing the urban, lit environment.

Ruth, Norman and Lily took me for a walk around their respective neighbourhoods in Custom House—the very same neighbourhood that Charlie walks through when he goes to and from the Library. Ruth, 58, lives in a council estate off Freemason’s Road, couched in between Maplin Road and Russel Road. Norman, 68, and Lily, 62, live further east, near Beckton District Park, in maisonettes just off Stansfeld Road. In both areas, the sprawling maze-like web of alleyways and pedestrian pathways creates an incoherent and heterogeneous lightscape as public, private, and vernacular light sources accompany the diverse architecture.¹⁶

Ruth has lived in Custom House for 35 years and expressed a general concern for the lighting in the area. On her routine walk home from Custom House DLR station, she walks through a network of alleyways, nooks and crannies, making several turns around blind corners, as seen on figure 32 and 33. This was “very daunting” as potentially “someone could be hiding here, when you walk around”. Added to this, she found the lighting “very, very dull”, “very discolouring” and “sparse”. She provided stories of walking home and suddenly being approached by a group of “younger guys”, which frightened her. Even though nothing “serious” ever happened to her, she expressed caution and concern because she cannot “always see who is behind” in the dull SON lit alleyways. She would prefer brighter light, not “bright, bright as in daylight...[but] bright enough for people to walk here, feeling secure”.

Recognising the inability to see other people approaching her clearly in SON light was further enhanced as we walked down Maplin Road (recall from figure 21). “*That* street is well lit up”, she uttered, echoing Lucie and Jackie’s praise of LED lighting. She argued the light is “a lot brighter”, and how she “can see whether there is anyone coming along, I can see that guy just around the corner...I even saw that tiny cat, down there”. This ability to see others is instrumental to how she felt in the LED light, because “If you see someone coming along ...who looks like they might ... mug you ...you would be able to avoid it. You would see, they couldn’t sort of hide or... It helps having good lighting because you can avoid situations”. The transparency of the

¹⁶ The estate on Freemason’s Road lies on a site where tower blocks used to stand, built after the Second World War to house Londoners in modernist-fashioned living machines. The post-war rebuilding of London completely changed the urban fabric and social function of these parts of East London. A turning point, however, occurred in 1968 as a gas explosion in the 22-storey tower block, Ronan Point, in Canning Town – similar to the ones that used to stand in Custom House – led to most of them being torn down in the 1980s. Subsequently, the areas were rebuilt, mostly with semidetached houses, maisonettes and four storey council blocks.



Figure 32: Darkened alleyway. Source: Author's photograph.



Figure 33: View around a corner in a darkened alleyway. Source: Author's photograph.

space and the clearer visibility therefore enables her to identify other humans and animals, but more importantly, measure the distance and anticipate and “avoid situations”.

The visceral comfort that the visual distancing creates therefore shows how the change in lighting allows Ruth to negotiate meetings with that which is different to herself; it allows her to control the (dis)orientation of the body as it opens up onto the world. Recall Merleau-Ponty’s understanding of vulnerability: the sensory invasion of the porous body by that which lies beyond the body (Merleau-Ponty, 1962, p. 264, 1968, pp. 113–14; Simonsen, 2013, p. 20). The lighting mediates the ability to control her porosity by facilitating appropriate distance. Writing on the ability of light to clear spaces before the body, creating visual distance and freedom to move, Bohme argues that light creates a sense of security as “everything is at a distance from everything else” (Böhme, 2014, p. 67). In keeping with such statement, the clearer light and the transparency of the street allowed Ruth to see people, things and animals at a distance, hold this distance or respond to proximity by creating distance. Thus, this kind of light on Maplin Road allows Ruth to “avoid situations”—or at least makes her feel that she would be able to, if, potentially, anything were to happen.¹⁷

By stressing the importance light for creating and maintaining distance to the other, Ruth’s experience harks back to how Lucie and Jackie argued that LED lights provide clear views that enables them to see people. However, such provision of visual distance obviously also makes the residents visible to others, marking out a paradoxical relation of seeing and being seen. This was further underlined by Lily and Norman.

Lily and Norman took me along their daily route from their home to the bus stop on Stansfeld Road, as seen on figure 34. The bus stop lies just on the boarder to Beckton District Park, which offers a vast, open green area, mostly left in darkness at night and with sparse lighting on pathways, as seen on figure 35. Having both moved here in 1986, they explained how they had never felt unsafe until the turn of the century as they started to feel the effects of, what they described as, a deteriorating neighbourhood; crime seemed to have risen, become more violent, and police efforts have be-

¹⁷ It is important to stress the use of the word ‘allow’ here, because what this presence of the other conjures is an external force that, as Merleau-Ponty argues, “*is itself*, that possesses itself by its own means” (Merleau-Ponty, 1968, p. 208). The people Ruth refers to as potential threats are not controlled by herself, and their presence is what produces in her a sense of openness and vulnerability, to which light enables her to negotiate distance and “avoid situations”.

come less successful. Neither Lily nor Norman walk along Stansfeld Road to the nearest DLR station, Royal Albert, or through the park to Beckton DLR station any more. They don't even walk to the bus stop as seen on figure 34, which they do in the day time.

Instead, Norman takes his car and when Lily cannot get a lift she gets a cab from the station to home. As we walked along the stretch from their home towards the bus stop, they noted how the lights “are very, very poor, these orange type lights” and how they are dispersed at such intervals that dark corners, darkened sidewalks and pathways make them feel vulnerable. Furthermore, as the bus stop is on the road edging onto the vast, open space of the park, Norman noted that “there is no housing either side, you are completely vulnerable”. The mix of the “dull” lighting, the vastness and openness of the area, the lack of people and the lack of trust in police makes the experience of walking through their neighbourhood feel “so lonely...It is isolated”. Such isolation, they argue, is felt when you walk through the park as seen on figure 35, as the lights are so dim and dull, with such sparse distribution, that it discourages both them and local residents from using the park. “It is dark, it is open” – making them



Figure 34: Bus stop on Stansfeld Road. Source: Author's photograph.



Figure 35: Pathway through Beckton District Park. Source: Author's photograph.

feel alone, even when accompanied. Such isolation, and lack of human presence, is paramount to their feeling of vulnerability, because “there is nobody that could help you if anything happened”.

In terms of lighting, the street lamps placed along the path give focus to the eye, presenting a focal glow to navigate towards. But the sparse distribution and the vastness of the space surrounding the path makes the ambient luminescence all but absent. While lights along Stansfeld Road, and the path in the park, do provide points of navigation, these spaces differ from the previous accounts that are given by not having any excess light, such as that from adjacent buildings or traffic, which would add an ambient luminescence to the space. The only light on these stretches streams from the lamps, making that with which Norman and Lily see the focal, navigational lights in themselves. It could be argued that their feeling of vulnerability not only relates to the lack of people, but also to the way that the focal glow accentuates their presence in this vast, open darkened space for other people, potentially hiding out in the dark; they are prone to surveillance by the other (see also Ebbensgaard, 2015).

To further develop this relation between focal glow and ambient luminescence in inducing a sense of vulnerability and (dis)comfort, I turn to the much-maligned space underneath the A13 flyover in Canning Town. Having mainly heard from residents that have lived most of their lives in low rise housing in Newham, built in the latter part of the 20th century, the following two residents have only just moved to Canning Town in 2012 in the newly constructed tower, The Vermillion.

Joe, 60, explained that he moved here with his wife, 43, because the investment in the flat was promising a great return in the future—and it has proven to do just that, as the property value has gone up. But, they have chosen to stay in the flat for now. It would be untrue to say that Joe enjoys life in his new neighbourhood and new apartment, as crime, anti-social behaviour and vandalism to the property has occurred repeatedly since they moved in. He explained how there had been nothing but problems in the building since they moved in, counting car and bike thefts from a locked basement, damage to the interior, elevators and doors, muggings and theft of personal possessions, and leakages from the internal water pipes that have caused flood damaging across several floors. The inability of authorities and the tenants and residents’ association to address these problems add to Joe’s concerns about the neighbourhood. He expressed that he does not feel safe going out in the evenings, and would only walk

outside, when travelling the 50 metres from the building entrance, as seen on figure 36, to the Co-op supermarket entrance on Barking Road, as seen on figure 37.

The entrance to the building lies in a side-alley between Barking Road and the space underneath the A13 flyover.¹⁸ When Joe exits the building, he turns right onto Barking Road, then left and into the shop. As we walked the short trip, he noted how poor and sparse the lighting was in the alleyway in front of their building, making him feel vulnerable and on edge when heading out. There were no designated lights in the alleyway, only lights from the building and from Barking Road and the A13 respectively. As we reached Barking Road and passed by the Co-op, the presence of people, cars passing by, brighter lights from the streetlamps and excess light from the shop, gave him a sense of comfort. This is why, when his wife heads off on her daily walk to the underground station, he advises her to walk along Barking Road in front of the Co-op, rather than cutting under the flyover. As the route under the flyover is the most direct, she walks this way and heads to the station, to Joe's dismay.

He explained how he finds the space intimidating, frightening and dangerous, because it is littered with pillars, light poles and benches, creating pockets of dark



Figure 36: Entrance to the Vermillion, through the alleyway. Source: Author's photograph.

¹⁸ Opposite the entrance is a wall, which faces you as you exit the building, which is the building housing the Co-op and the post office. This building will be torn down as part of the wider regeneration of the space in between the Vermillion, the A13 flyover and the Hallsville Quarter south of the highway.



Figure 37: Entrance to the Co-op on Barking Road. Source: Author's photograph.

spaces that he argues act as possible hideouts for muggers. Added to this, he argues that fewer people walk under the flyover, which prevents people from providing help in case anything were to happen, while also failing to deter potential offenders from committing crimes. As there are fewer people here, he feels more prone to attacks or mugging, and dislikes walking through at night altogether. The second aspect that adds to his dismay is the dim light underneath the flyover and the dark patches that diminish the visibility in the space. The link between brightness and visibility was illustrated as he compared the two spaces, arguing, “You can see it is a lot lighter down here” in front of the co-operative giving the pedestrian “higher visibility”. Similar to the difference that Lesley and Jan remarked when comparing the lighting on Barking Road to its side streets, Joe highlighted the different levels of visibility in SON and Metal Halide light respectively. He feels this visibility and transparency is comforting, not only because it allows him to see others, but also because he finds it discourages potential criminals.

Marlie, 63, is very well aware of the issues that Joe raises, and knows Joe from his work on the residents’ association. While she was not overly joyous with the flyover, she was less concerned about the threat of moving about in evenings and at night. She moved to Canning Town from Oxfordshire, buying the apartment, as it was affordable. Since choosing to stay in the flat permanently, the “flat has jumped up incredible [in price]...we would make quite a lot of money [if we sold]”, but she has no interest in leaving. She wants to stay.

On a weekly basis she walks to the Italian restaurant half a mile away down Silvertown Way, taking her through the flyover space. Exiting the building from the same entrance as Joe, she similarly pointed out that the light in front of the building entrance was sparse and dim and “should be far better” as the light “is only coming from this building really. As the hairdresser’s close then it gets quite dark.” The shop facades lying on either side of the entrance give an ambient luminescence and brilliance to the space, as seen on figure 38. Once these lights are switched off, the alleyway appears dark and seems more desolate. Echoing Ruth, Lily and Norman’s concern with darkened urban spaces, Marlie explained, “when it is dark you just feel a little bit vulnerable...you got to be a little bit more aware of things around you”. The heightened awareness, she went on, was necessary for her to feel safer. She explained



Figure 38: Excess lighting streaming from hairdresser's onto alleyway in front of entrance. Source: Author's photograph.

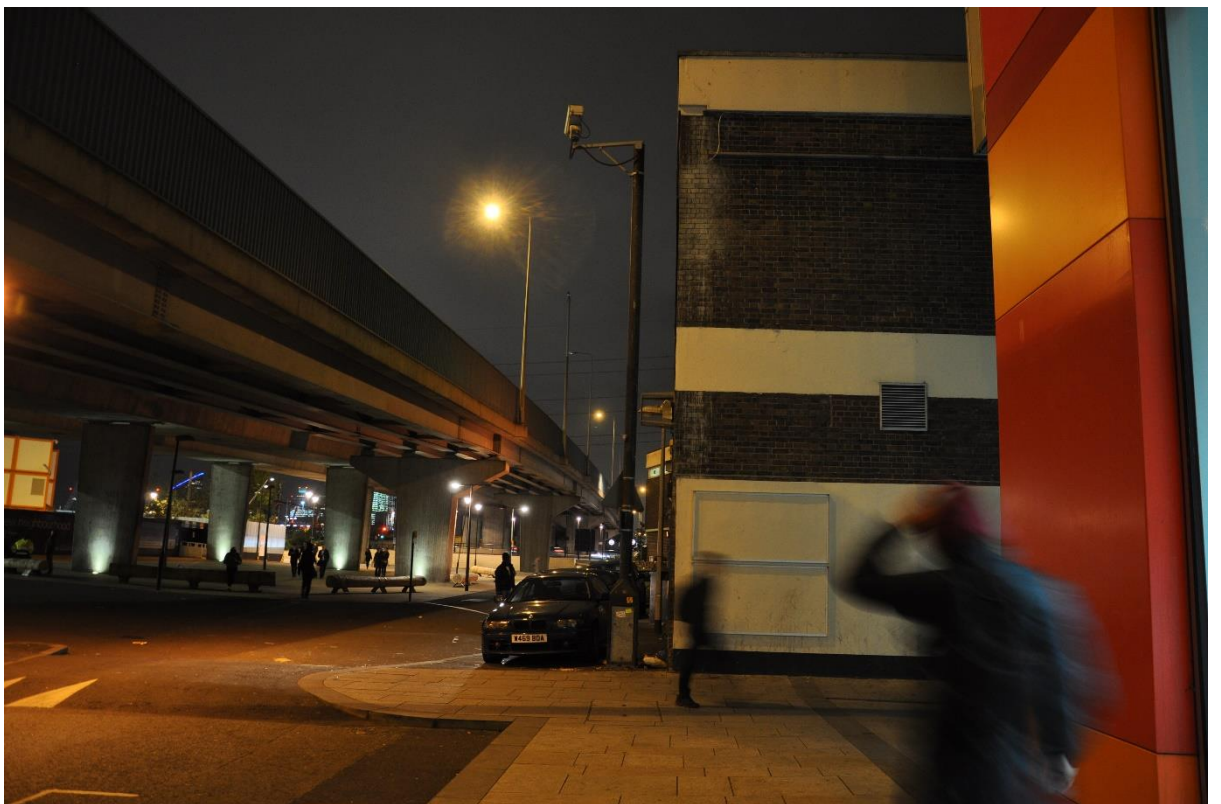


Figure 39: View Space underneath the A13 flyover seen from the Vermillion. Source: Author's photograph.

how she is “aware to keep walking quickly...I often look behind me if I hear footsteps”. She explained this awareness was unique for the urban environment, as “you feel here, parts of London, it’s gonna be worse”. She didn’t recall feeling vulnerable in the same way when living in the country side. Yet, it was not a problem and she never experienced anything ‘serious’.

As we moved onto the space beneath the flyover, she commented, “it’s too desolate”, but not necessarily because of a lack of people. As she confided, hordes of people walk through the space from the station, sit on the logs, alone or in groups, smoking and drinking, leaving traces of smashed bottles and cigarette butts the following morning. So, in this case, it is not a lack of people that makes the space seem desolate, but the kinds of people and the way they behave in, or use, the space, which affects how Marlie feels about the place. But furthermore, she explained how the lighting contributed to shaping such an atmosphere of desolation and discomfort, not because of a lack of lighting. As she argues “it is not that there is a lack of lighting”, but rather “that the pitch of light and where it is directed...you can see how dark it is, creating shadows”. As seen on figure 39, concrete pillars and nine different types of light sources are scattered around the place, creating a patchy lightscape full of shadows, contrasts and different colours. As she identified the presence of light, making her able to see, but questioned “the pitch of the light” and “where it is directed”, points to a discrepancy between the ambient luminescence of the space and the focal glow. As focal points are scattered around the space, a mute luminescence that allows you to see is present, but the scattering seems to create confusion as to where the walker should direct attention. Such luminous confusion is interesting when considered in relation to how Eugene earlier argued for the need to be able to see through spaces, and see people, or Mary and Richard’s insistence on not seeing where you are but where you are moving towards. In the case of the flyover space, Marlie’s experience adds a further dimension to such need for seeing where one is moving towards, as the focal glow can make up a lightscape that disturbs the ambient light in ways that create a sense of darkness or disorientation. This further coincides with Norman and Lily’s experience of walking in Custom House, as the lack of any ambient luminescence creates unease and awareness.

6.4.2. SUMMARY

In this section, I have given attention to the relation between focal glow and ambient luminescence by considering how the body opens up towards ‘the other’ in the urban,

lit environment. By focussing on how lighting mediates the presence of others, I have explored what such a presence is, and how such a presence is experienced through everyday practices of walking. The focus on ‘the other’ therefore considers the vulnerability of the body as it negotiates meetings with what could be a threat, just as well as an assuring presence of that which guards against threats.

The main argument that I want to present from this section follows on from the previous section’s focus on the play between focal glow and ambient luminescence, by arguing that the orchestration of different layers of light profoundly (dis)engages residents in negotiating the presence of others. As night time approaches, the narrow maze-like alleyways, vast open green areas, and transitional spaces such as the A13 flyover, are cut off from clear view, not only obstructed by clutter in the urban realm, but by the lighting giving shape to particular ways of seeing. Lily and Norman can see where they move towards, but the lack of a diffuse light makes it all but impossible to judge distance and negotiate approaching others. Because they see nothing but a single lamppost in the middle of a vast, darkened space, they are opened up to gazes and views from the dark. Joe and Marlie are not lacking diffuse light, but almost lose a sense of orientation in the vast space due to the visual clutter and contrasts of light and shadow. The chaotic clutter creates disorientation and a confusing play of shadows that are experienced as potentially threatening. The lighting fails to give direction.

The problem regarding the orchestration of different layers of light is not, as Marlie remarks, a lack of light, or, as Ruth and Lily remark, the dull, orangey light alone. Rather the problem lies in how this light is orchestrated in relation to the space they are meant to light up, creating confusion and contrasts under the A13 flyover, and singling out people moving in the vast open park, rather than enabling views.

6.5. CONCLUSION

In this chapter I have investigated how lighting mediates the experiences of older residents as they routinely walk through the streets of Newham. With attention given to the way that different light sources mediate the experience of walking, I have questioned the Council’s assumption that specific lighting technologies yield particular experiences, emotions and sensations. Instead, I have blurred the lines between experience and lighting technology and questioned the significance that lighting is given in planning, underpinning technology- and policy-driven change and upgrades in lighting.

First, I have shown how routinized walks are often purposefully directed towards a destination, putting emphasis on the focal glow of the urban, lit environment,

as it guides people towards that elusive somewhere they are heading. Such focus on navigation points, suggests that the ambient luminescence takes an unobtrusive role in everyday life: coined in a slogan-like manner, the purposeful walker just needs to move down the street, not see it. Yet, by considering moments where the purposeful walk is interrupted by a sudden change in lighting, I have brought attention to the significance of ambient luminescence as it becomes tangible how lighting figures as the medium with which people see (in) lit spaces. Therefore, I spell out the difference between the ways lit spaces look from a distance and how residents see in these spaces; a difference between how residents feel *about* places and how they feel *in* them. I argue that this relation between the aesthetic appearance of a space, and the sensory experience of it, marks out a mismatch between the ways spaces are lit and the ways they are experienced; a mismatch that in paraphrasing Benediktsson's (2015) concept of "material mismatch" I wish to term a luminous mismatch. This luminous mismatch is evident in two examples.

In the cases where residents note the change in lighting technology, they were unanimous in finding the LED lighting brighter and clearer, but all expressed that they had actually never had problems seeing or doing anything in the dimmer SON-lit areas. The positive sentiments that residents associate with the luminous upgrade seems to rest more on the fact that, aesthetically, they look different to the common lighting, and remind residents that they are being prioritised—and therefore symbolically deemed worthy of living in a borough equipped with the newest technology. While I do not wish to disregard the importance of such feelings of recognition, the point I want to make is that the incentives for installing new lighting do not necessarily match the diagnosis that gave ground to the incentives in the first place. While the SON lights are depicted negatively in many of the residents' accounts, they have never experienced problems with the quality of the light. Therefore, the upgraded LED lighting all but polishes the streets in a thin veneer of clarity, but without any reasonable effect on the supposed benefits (increasing nocturnal activity, providing more eyes on the streets and in the windows, alleviating the feeling of anxiety about going out, and lifting the carpet of darkness supposedly covering for crime). Joe could very well illustrate this point, as he does not feel safe even in the new lights. The new lighting on Barking Road and on the building hasn't stopped crime, and he even experiences crime encroaching on his private life, entering the building. Similarly, Marlie shows how it is

not necessarily the amount of light, but rather how it is distributed and directed in the space that bears significance for how you see and feel when moving through spaces.

In the stories presented in the final section, I question how the lack of a diffuse light makes it all but impossible to judge distance and negotiate approaching others, and how an overabundance of focal lights makes it difficult to orientate in vast spaces. As Lily and Norman argued, the lighting in the park enables them to see where they are heading towards, but because of the vastness of the darkened park surrounding the illuminated pathway, they are made visible to others potentially hiding out in the darkened space. In this case, the lack of diffuse light makes it all but impossible to judge distance and negotiate approaching others. They only see the space that is illuminated on the path in the middle of a vast, darkened space. In the case of Joe and Marlie, it was not the lack of diffuse light that gave them cause for concern when walking under the A13 flyover, but rather the abundance of visual clutter and contrasts of light and shadow that creates disorientation, confusion and a feeling of being vulnerable. In this case the lighting fails to give direction because it lacks focus altogether. Both cases point towards a mismatch between the way spaces are lit, and the way they are practiced, yet in very different types of environments.

7. NOCTURNAL DOMESTICITY: THE LUMINOUS HOME

With the previous chapter focussing on the role of light, to the way people move through the urban, lit environment, this chapter turns towards the role of light that streams from, and into, an anchoring point for such travels: the luminous home. The chapter investigates how the luminous home affects the ways residents experience the urban, lit environment by considering how domestic luminosity adds a different, more ambient character to the urban environment. Furthermore, I explore how the lighting in the streets is experienced from the vantage point of the home and how lighting affects domestic routines. With an analytical focus on the role of the luminous home in the urban, lit environment, I explore how lighting is used in creating relations between the domestic and the urban.

The Council's vision for ensuring safe and secure environments through the provision of 'eyes on the streets' and 'eyes from the windows' of buildings, suggests that the 'private' realm of building interiors plays an important part in constituting the urban, 'public' realm. By turning towards the ways people experience the city during the hours of darkness through the home, I therefore wish to challenge the Council's assumptions about the role of the home in the urban. I do this by focussing on how residents negotiate the spillage of domestic lighting onto the street and the seepage of street lighting into the home, through routinized practices such as drawing curtains, turning on lights, and looking out through windows, and by putting devices into motion, such as curtains, blinds, and self-mounted lamps.

Empirically, the chapter provides an insight into the lived experience of the urban, lit environment from the perspective of older residents who no longer have the physical ability, energy or desire to move about in the streets once darkness falls. Rather than walking the streets of the nocturnal city, these residents experience the urban from inside their homes, looking out through windows or drawing curtains to shut off views from the outside. The chapter draws on empirical material that resulted from the work I carried out with the group 26 of older residents at Chargeable Lane Resource Centre, and specifically on the photography project with 14 of these clients. As described earlier, these residents are on average 17.5 years older than the residents I

followed in the previous chapter, ranging from 68 to 96 years old. Roughly half of them grew up in the area, having lived in Newham all their lives, while the other half moved from other parts of the UK, Jamaica, Trinidad and Tobago or Bangladesh.

In the first section, 'Home: seepage, spillage and transgression', I situate the chapter in relation to discussions of the role of light in disenchanting and domesticating the urban night (as presented in chapter 2). The second section, 'Lighting the urban through the home', considers the way that the luminous home appears in, and as part of, 'the urban'. The section draws partly on material that resulted from the walk-along interviews, and this was in order to develop an understanding of the role of domestic luminosity to the experience of the illuminated street. In the third section, 'Drawing curtains: windows and doors as thresholds', I turn towards the domestic interior by zooming in on the micro level of the window, as it enables most residents to negotiate with the outside, and thus establish a connection between the home and the street. As the focus in this section is primarily on the routine of drawing and opening curtains, the following section, 'Looking through drawn curtains', turns the focus to the deliberate act of creating a border which allows one to negotiate the arrival of potential intruders. With the attention turned towards the conscious choice of (not) using curtains, the following section, 'Using and exploiting streetlights', hones in on the creative use of light that seeps into the home in particular ways. In the final section, 'Conclusion: the spatiality of nocturnal domesticity', I discuss the implications of the argument presented in the chapter, bringing together discussions on the everyday experience and practice of the home.

7.1. HOME: SEEPAGE, SPILLAGE AND TRANSGRESSION

The constantly changing lightscapes of cities demand of residents to adapt to, as well as negotiate with, intensities, glow and shade that encroach on their lives; light sources are put in motion alongside devices such as windows, curtains, doors, and phones in order to control the creation of shade and light. In recent popular debates, such negotiation has been given heightened attention, as the refitting of street lamps with LEDs are claimed to exhaust residents, keep them up at night and disturb their circadian rhythm (Chaban, 2015, 2016; Ifversen, 2016; Schreiber, 2015). The ways that residents come to arrange their homes in relation to, and often in an attempt to savour the qualities of, darkness, appear as essential to gaining an understanding of how people come to feel at home in the city at night. As shown in chapter 2, research on the use of light in the home recognises the ways that practices of home making engage in a

constant negotiation and adaptability with the outside (Bille, 2014; Pink & Leder Mackley, 2014; Vannini & Taggart, 2013b). Similarly, drawing back to 16th century London, the luminous home is argued to have played a central role in domesticating the urban night (Beaumont, 2015). What these studies indicate, but do not discuss in greater detail, is that the practice of making a luminous home in the city is inextricably linked to an understanding of the luminous city as home during the hours of darkness. In this chapter, the aim is to explore not only this relationship between the luminous home and practices of home making and the city, but also in order to consider the role of the luminous home to the production of the urban, lit environment. In order for me to do this, I want to briefly outline the theoretical underpinnings of my approach.

I want to start out with Martin Heidegger's notion of dwelling, which is helpful in exploring how the home and the practice of home making is inextricably linked to the surrounding environment of the home. As Heidegger argues "To be a human being means to be on the earth as a mortal. It means to dwell." (Heidegger, 1971, p. 145). If we understand dwelling as the "*the basic character of Being, in keeping with which mortals exists*" (Heidegger, 1971, p. 158 emphasis in original) the act of making places in which mortals dwell, that is the practice of building, becomes central to dwelling:

"Building as dwelling, that is, as being on the earth, however, remains for man's everyday experience that which is from the outset "habitual"—we inhabit it, as our language says so beautifully: it is the *Gewohntheit*. For this reason it recedes behind the manifold ways in which dwelling is accomplished, the activities of cultivation and construction." (Heidegger, 1971, pp. 145–146)

According to Heidegger, the practice of building homes has fallen into oblivion, as it simply has become the habitual, everyday practice of inhabiting places. Yet, Heidegger wants us to turn the more fundamental way that such building, understood as dwelling, denotes a fundamental being-in-the-world. Therefore, with an understanding of 'home building' as dwelling the practice of making a home expresses a "circular relation" (Blunt & Dowling, 2006, p. 4) to the surrounding environment, it is "the power to let earth and sky, divinities and mortals enter *in simple oneness* into things" (Heidegger quoted in Blunt & Dowling, 2006, p. 3 emphasis in original). The "thingness" of the home could therefore be seen as a "vessel, something of the kind that holds something else within it" (Heidegger, 1971, p. 164), which in the case of the home is the relation to the "earth and sky". Such notion of an embodied, spatial 'oneness' with the sur-

rounding environment is further developed by Ingold, as he argues that the surrounding environment's thingness is mediated by the "indeterminacy of the interface between substance and medium" and therefore becomes "one *between the binding and unbinding of the world*" (Ingold, 2008, p. 1803, emphasis in original).

With this notion of dwelling as a spatial oneness that binds and unbinds the world, I want to draw a link to Merleau-Ponty's notion of carnal light, as that medium placed in-between the body and the surrounding environment. Light emerges through the body's involvement with the world, but in opening up onto the world, gives heed to an understanding of a porous and vulnerable body; a body susceptible to pressures beyond its control, disorienting and overwhelming the subject. Such notion of carnal light, therefore sits well with Downey's (2013) notion of the home as a contingent and ever changing 'construct'. This perspective on people's ability to dwell in a fluidly mobile world draws our attention towards the importance of people's ability to negotiate 'removals', 'shifts' and 'changes' to the home, in order to maintain an 'artificial fixing' (as Downey, 2013 puts it). To paraphrase Heidegger's writing on the thingness of the jug, the home is only a home because of its ability to connect to the outside; the inside of it is made through a relation and connection to the outside (Heidegger, 1971, pp. 169–170).

By following older residents along their everyday routines in the home, the chapter develops an understanding of how the body copes when opening up onto the urban, lit environment. As the older residents shape their lives in a seeming 'oneness' with their surrounding environment, their bodies are opened up to disruptions and intrusions. The multifarious ways that the residents use light in often paradoxical ways shows how age plays an important part in how the luminous home is given presence, and how this presencing affects the way they come to dwell in the urban, lit environment.

Thus the chapter focuses on the diverse ways that residents in Newham negotiate changes in the lit environment. Almost unanimously the older residents at the Resource Centre reported a very limited engagement with the 'outside' environment once nighttime approaches. Such limited engagement is partly due to the consequences of ageing: decreasing mobility, health, and energy levels, coupled with an increased feeling of vulnerability (Ewart & Luck, 2013; Van Steenwinkel, Baumers, & Heylighen, 2012). Practical reasons, such as the arrival of carers preparing dinner, often at 6pm,

and getting ready for bedtime at 7pm, naturally limit the possibility for seeing streetlights turn on during the summer—which occurs around 7 or 8pm. Yet, the clients at the Resource Centre revealed extensive engagement with the ‘public realm’ *through* the windows and doors of the home. The engagements are often made by use of mediatory devices, of which the curtain and the drawing of curtains was the most significant practice in negotiating between the ‘interior’ space of ‘the home’ and the ‘exterior’ space of ‘the street’. Therefore, a core theme throughout the chapter is the use of curtains in managing the porous threshold of the home. However, before turning to the domestic practices of drawing curtains and negotiating the changes in light and darkness outside the home, I want to consider the role of such luminous homes to the experience of the urban.

7.2. “THEY HAVE BOTH GOT THEIR LIGHTS ON ... SO THAT HELPS THE ROAD”

A key concern that came up during the group discussions with the older residents at the Resource Centre was the negative changes of their respective neighbourhoods: the decline in pubs, once an anchor in their social lives, and the subsequent increase in betting shops along High Streets; the loss of social ties in the immediate vicinity of their homes, often explained through white working class flight to places such as Essex and Braintree, and an increased in-migration, causing an ethnic diversification of the local community; and the concern for troubled youth hanging out on street corners, drinking and smoking. Such narratives of a neighbourhood, deteriorating into an anti-social state, lacking community spirit and cohesion, has been echoed in studies of older residents in similar urban areas (Ewart & Luck, 2013; Van Steenwinkel et al., 2012). The residents expressed a general concern for their own wellbeing, yet often defiantly aired a content attitude to their lives—albeit tinged in a slightly ironic tone. These stories are part of the reason why most participants responded dismissively to my opening questions about their engagement with the ‘public realm’ at night—they wouldn’t be outside, but rather inside, having dinner, a shower, on their way to bed, or sleeping.

However, as the residents started describing their routines once darkness falls, two very distinct practices came to reveal an interaction with the lighting in the streets. The first practice related to the small journeys people would make by foot from vehicles that had brought them home from somewhere, parked in the street and to their front door. The second practice related to routinized domestic practices, such as drawing curtains to prevent views entering the home and to shut out, or make use of, excess

lighting streaming through their windows. In this section I consider the first practice, as it unfolds the role of light that emanates from people's homes, from shops and signs in giving a luminous presence in the urban and shaping the way people experience the urban, lit environment.

Throughout the group discussions with the clients at the Resource Centre, attention was given to the role of glowing windows in streets to the experience of the urban, lit environment. For example, Susie, 75, highlighted the importance of other people's luminous homes to the way she feels when coming home from the Resource Centre. She is driven home either by a driver or her husband, and when arriving at her home she walks the short distance from the (parked) vehicle, along the sidewalk to the gate in front of her home. As seen on figures 40 and 41, terraced houses align both sides of the street. Trees are planted along the street, creating a kind of corridor of sidewalks, with parked cars on the one side and the landing areas and front gardens to the other. From the doorstep of Susie's house she looks directly upon the four houses on the opposing side of the street, as seen in figure 40.



Figure 40: The view of the luminous windows in the street seen from the door of Susie's home. Source: Author's photograph.



Figure 41: The stretch that Susie walks, from their car parked at the curb to the entrance (the grey-blue Nissan is not their car). Source: Author's photograph.

As she explained, this short walk was made possible by the lighting in the street streaming from the lamp post, but furthermore “there are two houses there, and they have both got their lights on there, so that helps the road, when people have got their lights on, so that helps the road”. When she said that the lighting streaming from people’s homes, through the luminous windows “helps the road”, she meant that “it is brighter”, which she argued directly influenced the safety in the street, as “there would be less robberies with the lights on wouldn’t there?” What such seemingly simplistic narration reveals is that illuminated windows—whether open, allowing for views into people’s homes, or with curtains drawn, adding ambient light through illuminated garments hanging in the windows—adds luminosity in the street. But this luminosity is not only a case of seeing better, making the streets “brighter”, but making them feel safer, as it is argued to deter robbers from preying on victims. Thus, the vernacular lighting that streams from people’s homes adds a sense of safety to the environment. In order to get a better idea of how this excessive lighting in the street contributes to the atmosphere of the street, I turn towards two anecdotes from the walk-along interviews with two couples introduced in the previous chapter.

Lesley and Jan, who took me for a walk from their local Bingo Club to their terraced house in Plaistow, remarked how the lighting in their residential street, seen on figure 42, is scant, dim and even sometimes goes out. Instances where the light fails them, they are left with nothing but the light emitting from people’s homes to light up the street. As Lesley explained:

I say it isn’t too bad, but when they turn that light off which they do some times, then it is quite dark. I mean it could really do with a few more, couldn’t it, because you have the lights in the houses, and once they are not on, obviously it is a lot darker isn’t it.

Thus, once the streetlights fail or, on occasions, are turned off, “it is a lot darker” and you only “have the lights in the houses”. However, the interesting point is that while the sudden change in provisioned lighting does leave the street “a lot darker”, it was never a problem for Lesley and Jan. They could still see due to the light streaming from people’s homes, thus providing enough lighting to actually carry out their everyday practices of entering and exiting the home. Yet, “once they are not on”, obviously there is no light in the street, which is a problem. But the point is that the excess lighting streaming from people’s illuminated homes is recognised for its functional addition to creating a brighter street. This significance was even further verbalised by Mary and Richard, who live not too far from Lesley and Jan.



Figure 42: The view of the lamp and luminous windows in the street right in front of Lesley and Jan’s home. See also figure 28. Source: Author’s photograph.

If you can recall from chapter 1, Mary also noted the importance of vernacular lights streaming from homes and shops. At the end of the walk with Mary and Richard, they followed me from their home back to the spot where I had parked my bike. Having already explained to me how to get back there—straight down the road and take the second, *not* the first left—they followed me down there anyway. As we walked down the road and came to the first left, I asked whether this was the left I shouldn’t take. By looking down the side-street, as shown on figure 42, Mary noticed the light streaming from shops at the end of the road and uttered: “see that’s well-lit at the end where the shop lights are on, they have the signs”. The presence of luminous signs down by the shop, she argues, makes the street look like “it’s alive”. Richard further commented that if the streetlights down that end of the road were out, the light from the shops and signs would still provide “sufficient light for you to see”, to navigate the environment and see other people. As such the lighting streaming from the shops “signals life” and the presence of people carrying out practices such as going to the shop, buying something and then leaving again—thus, not hanging out for a dubious reason, but simply using the public realm for an everyday purpose, that you, yourself could just as well be doing. Richard underlines this point as he argues that most of the



Figure 43. The view down the side street with shops and moving vehicles lighting up the street. Source: Author's photograph.

shops “have got lit signs as well as their windows” which “signals life”. The signal value of illuminated shops, signs and homes, therefore plays a significant role in how places feel: they feel alive because people *could* carry out everyday practices and navigate the environment *if* they wanted to.

Such potentiality—that anyone, including yourself, could make use of the space even if the lights went out—suggests the an emotional significance in addition to the functional importance of excess lighting. This is very much in line with Jacob’s appeal to designing places that draw people out into the public realm, along the sidewalks not as attractions in themselves, but “as routes to somewhere else” (1961, p. 36). Ultimately, what this suggests is that people, even when walking the streets alone, as Richard would most mornings only accompanied by their dog, feel the presence of people as it is mediated and signalled through luminous windows, signs and storefronts.

Vernacular light sources add something different to the street scene; if they were not on, Margaret argued, “you would need street lighting. So I think there is definitely something about the light that makes you not feel alone in the city”. The significance of the signal value of excess lighting can therefore be argued to allow people to park their solitude in the dark areas of cities. The potential presence of people

allows people to be alone in the city, yet a solitude that does not feel lonely and vulnerable, but one that allows for people to be alone while being in the (absent) presence of others. The lighting that streams from people's homes onto streets, the windows that glow luminously in tower blocks, in terraced houses from shops and storefronts, or the lights that stream from signs and traffic lights therefore signal a potential presence that makes people feel at home in the urban, in ways that allow them to carry out everyday practices, navigate and do what they want to do.

7.3. DRAWING CURTAINS: BEING IN (THE OUTSIDE)

In the previous section I have brought attention to the role that vernacular light sources play to the experience of the urban. Vernacular light sources are argued to improve the sense of safety by signalling the presence of other residents in the city, even though people are not physically present in the streets. The significant role that the luminous home plays in older residents' experience of the urban, lit environment, thus blurs the borders between the home and the street. With attention brought to the significance of vernacular lighting to the experience of the urban calls for greater attention to the way the urban emerges through the domestic practice of lighting up the home. In this and the following two sections, I turn towards the routinized practices that are invested in producing such vernacular luminosity in the urban, lit environment. I show how the domestic is lit in conjunction with the changes in the lighting outside the home, mediated through the act of drawing and opening curtains.

The communication with the outside became a point of conversation, bringing the porosity of the home—its windows and doors—into contention. Windows and doors provide a potential for communicating with the outside and are recognised as “immensely important domain of communication as they mediate in the non-verbal interactions between strangers.” (van der Horst & Messing, 2006, p. 22). Such non-verbal interaction between strangers is prevalent in the stories from the residents in Newham. While windows can enable residents to exhibit a staged identity as a “front-stage”, communicated to the outside world, it also enables residents to close off the home to the outside by turning blinds, drawing curtains or installing frosted glass, allowing them to ‘let down their act’ in the home as “back-stage”. The residents in Newham showed how managing this threshold space not only controls views in to and out of the home, but also hones the feeling of ‘the home’ and effectively ‘the urban’. Curtains become particularly important artefacts in negotiating this threshold space, and I

therefore want to turn attention towards the ways that people use curtains to make themselves at home in the city.

7.3.1. LETTING LIGHT IN: IT IS “JUST TO SEE MORE LIGHT”

Throughout my conversations with the group of older people, the act of drawing curtains was not reflexive, as they argued that they simply do it without thinking about it. Curtains are clearly drawn with a purpose, such as guarding views from the outside or preventing light from shining into bedrooms, but the residents did not ascribe any ‘deeper’ meaning to it. Most residents explained how the act of drawing curtains was simultaneous with turning on the lighting inside the home. The need to do so depended on the amount of light streaming into the home from the outside, decreasing towards the end of the day as the sun goes down. Similarly, most residents would open the curtains in the morning, letting light stream into the home, not necessarily in order to eliminate darkness and be able to see, but rather to let light in and to be able to see out, onto the world. The act of drawing and opening curtains is made in conjunction with the rhythm of the day, revealing how the older residents’ routinized practices of the home engaged in an act of negotiating and adapting to changes in light and darkness. When explaining why such negotiation of light levels was carried out, different opinions about lighting, different aims with drawing and opening curtains, and different embodied and emotional responses to light and darkness emerged as essential parts of how they came to make themselves at home in the city during the hours of darkness. In order to elaborate on this, I want to highlight three aspects of such emotional response to light which emerged in the stories: first, the notion of *seeing light* as a material phenomenon; second, the adaptation to changes in the natural light; and third, the ability to see outside.

The notion of seeing light came up in several conversations, when residents aimed to describe why they would turn on lights in their home or why they would open curtains in the morning. One resident who highlighted this is Jeranda, 82. She lives on her own in a semidetached house in Plaistow, as seen on figure 44. The street she lives on is aligned with houses similar to hers on either side of the road, opening up towards the road through small landing areas, guarded off by low fences and hedges. Cars are parked along the traffic-calmed road, hugging curbs and making the sidewalks seem



Figure 44: The home of Jeranda with the lights on in the hallway, bathroom and upstairs bedroom. Source: Author's photograph.

like narrow tunnels. Daily, Jeranda is visited by her daughter, on mornings and afternoons, to assist her with the everyday tasks.

As the day gets darker, Jeranda knows that it is time to turn on the light and draw the curtains in her home. The exact time of this act of turning on the light changes “depending on how the outside is”, thus shifting from about 4pm in winter to around 7pm or 8pm in the summer. In the evenings, she will most often be downstairs in the living room, taking care of routines such as making food, cleaning, washing or watching or reading. Once it gets to that time of the evening, she will get ready for bed and move upstairs to her bedroom, where the curtains have been left open since the morning. She will draw the curtains, explaining that she never goes to bed without drawing them because she needs to shut out the light from the street. This is not because it is too bright or because people can see in, as such, but simply because it has become a habit of hers since she was a child.

When she wakes up in the morning, she always opens the curtains “just for light to come in”. The daylight is let in to “have light in the room” and because, as she explains, “you see more light when you open the blinds inside”. She deliberately stressed how the act of letting light in, in the morning, was not necessarily to see the room and the things in her house, but “Just to see more light” and this was because, as she further explains “I just like a light environment”. This notion of seeing more

light inside the home not only related to the morning practice of opening blinds, but also related to the act of drawing the blinds in the evening. As she talked me through a typical day of coming home from the Resource Centre around 4pm, she would turn on the lights in the flat, and draw the curtains, once again: “To see more light inside”. Thus, from the morning and daytime to the evening and the arrival of darkness at night, the home is constituted through the use of curtains as a way of ensuring “more light inside”—either by opening them and opening the home into the outside or by drawing them and thus containing the interior environment.

7.3.2. CONTAINING LIGHT: “THE DRAWN CURTAINS MAKE THE LIGHT CONCENTRATED”

Such use of curtains to accentuate a feel of the home was prevalent in most residents’ explanations of their everyday practices. They insisted on their routines inside the home being carried out in relation to the changing lightscape outside the home. While Jeranda stressed the desire to see light, as such, other embodied accounts of these acts emerged. Nelqueisha, 86, who lives on her own in a ground floor flat in a council building, explained how the act of opening curtains and closing them was done according to the *amount* of light that she receives from the outside. Nelqueisha has a carer visiting each morning and afternoon to assist her with her daily routines such as cleaning, cooking, doing laundry, shopping and bathing. The flat is situated at the end of a turning, as seen on figure 45, which allows her to overlook the turning from the big south-facing window pane—clothed in lace curtains, as seen on figure 46—in her sitting room, extending into the kitchen. Due to her physical challenges she does not open and draw curtains herself but relies on the carer to do this.

Every morning the carer arrives and wakes her up, opens the curtains in her bedroom and living room, yet leaves the net curtains drawn, and depending on the weather she might turn on the lights in the hallway, bedroom and living room. From Nelqueisha’s bedroom she can look through the hallway towards the door, and see the light streaming through the glass panes in the door. The glass panes are small shapes of coloured glass so she cannot see outside, into the street, but she explains how she can see the light streaming into the home.

Therefore, when she wakes up, she can see into the hallway, but this light streaming through the glass panes in the door might not be enough to see inside her home: “If it is a grey kind of morning, you have to keep your lights on, even when you



Figure 45: The view of the turning from Nelqueisha' front door. Source: Author's photograph.



Figure 46: The view of the street through the window with lace curtains drawn in Nelqueisha' living room. Source: Author's photograph.

have your breakfast.” The amount of light that streams into the home determines whether the carer turns on the lights in order to compensate for the lack of light.

As she explains, “I have decided to use my light according to how much light comes in”, thus adapting the way she lights her home to the change in light levels over the course of the day and time of the year. Especially during the winter months from November to March, she finds it necessary to have lights on in the kitchen and living room.

Once she leaves the home or comes home, after having done her usual chores, the curtains will always be open. Once it gets dark, in similar fashion to Jeranda, she has the carer draw her curtains “because it is night”. It is simply a habit for her—once the day has come to a close and not because outside forces such as light do disturb her or people are looking into her home. Rather, she draws the curtains because she is “not getting light from outside, the light I am getting is inside, so the drawn curtains make the light concentrated”. The notion of making the light in the home “more concentrated”, bears similarity to Jeranda’s embodied account of light as a material phenomenon that is felt, which has a presence rather than giving presence to things. Using light and drawing curtains in ways to see light and create more concentrated light therefore speaks against the notion of light as neutral background phenomenon; in these cases, light is an essential part of how they do and feel in their homes. Light appears as *that* medium through which the residents negotiate with the outside environment, and thus come to dwell in their homes in a particularly desired way. This dialectic of being in the home by being with the outside similarly surfaces as she explains how she would often sit and look out the windows through which she can “see the light points, you know, the people on the right, the people on the left, further down I might see the movement of a vehicle kind of thing.” This act of gazing out onto the street makes her “feel alive” and gives her “joy”.

The two examples demonstrate how the act of lighting up the home—either through artificial lighting inside the home or through letting natural light from the outside in—is made for the sake of seeing more light inside the home and making the light more concentrated. The point is that in both cases, Jeranda and Nelqueisha are not saying that they intentionally created a particular atmosphere, as such, they simply wanted to be able to see concentrated light in their home. This point – about seeing light not for a particular purpose but as something that ‘just is’, in and around a space – is similarly recognised by Michael Gilsenan (1982) in his study of Islam prayer rituals.

Gilsenan struggled to make sense of the ritual until he realised that he had been distracted, feeling discomforted by a green light penetrating the mosque. This greenness was not noticed by the Muslims, it had ceased to be green light and rather, to them, was something that ‘just is’. Similarly, in Bille’s (2017) study of Bedouin homes in Jordan, shows how the green windows installed in all the homes, bathing the domestic interior in a neon green light when sunlight shines through the windows, were seen as ordinary by the Bedouin, but perplexed Bille. The analytical point Bille makes, is that the mundane practice that might seem alien to the researcher is simply a way of being to the local residents. These findings are therefore in keeping with Merleau-Ponty’s understanding of light as the neutral, background medium that leads the gaze, as something that ‘just is’. The point I want to make is, therefore, that the acts of opening curtains to let light into the home or drawing them to make light more concentrated, illustrate how domestic light, whether streaming in from the outside or from interior lighting, ‘just is’ as a part of the home.

7.3.3. COMPENSATING FOR WINTER’S COLD: “YOU FEEL WARM AND SAFE”

As Nelqueisha hints at, seasonal changes play a significant role in determining when older residents draw curtains. This is particularly stressed by Reggie who, at the age of 91, lives with his wife in a house they have stayed in for 37 years. Similar to Nelqueisha, they are visited by carers to help with daily tasks in the mornings and evenings. The house is situated in a residential street in Stratford, opening onto the street through large windowpanes in the living room and onto their garden through their sitting room.

As the carer comes in the morning to help them measure their blood sugar levels (both being diabetic) and get ready for the day by helping them to take a shower and get dressed, the curtains will be drawn and they will turn on the lights in the bedroom, the hallway and the bathroom. Drawing the curtains is similarly described as a routinized practice that isn’t given much thought, but, as Reggie explains, once these preparatory practices are over and they move to the kitchen to have breakfast, then it normally has become a lot lighter. The act of drawing curtains is explained as an act of letting “the daylight in, its not anything else”. As the breakfast is consumed and the dishes are washed, he will normally move to the living room, which faces the street, and “open the curtains and put the television on and see what news is for the day”. This is again described as an “automatic reflex”, but the habituality of opening the curtains is explained, on the one hand, to let the daylight in and, on the other hand,



Figure 47: Reggie's home with curtains drawn in the living room. Source: Author's photograph.

to see what it is like outside. You always look out the window when you pull the curtains in the morning to see what the day is like, whether it is cold and frosty or whether it is cloudy or whether it is sun shining or whatever.

Therefore, the act of opening the curtains is both to let light into the home, but also to allow Reggie to look outside and check the weather. The act of seeing the outside world becomes part of preparing for the day. As the body is opened up to the sensory qualities of the world helps Reggie decide on appropriate clothes and thus prepare for his day.

As the day comes to a close he explains that he draws curtains because “it gets dark”, because “it is night” (see figure 47). He doesn’t ascribe any particular reason for doing so: “Whether it is a matter of security or what, in case anybody outside is bossing you or what”. But it does change the way he feels inside the home. Especially in the winter months, he explains that once the curtains are drawn, “you feel warm and safe and nothing will happen to you”. This feeling of safety and warmth evolves in conjunction with external rhythms; they are facilitated once nighttime comes and especially in the winter. As he explains, the feeling he receives from drawing curtains “depends whether it is winter or summer [because]... there is a difference between summer and winter”. In the summer time he explains how “you don’t go in until nine or half past nine...and when you go into the bedroom you just draw the curtains, automatically, because it is night time”. During the summer he doesn’t draw the curtains to feel warm, because it is already warm. Thus, drawing curtains becomes a way of compensating for the prolonged darkness and lowered temperature during winter months. In the summer, he only draws the curtains once he goes to bed, because as he argues there is no need to draw them “because it is still light outside”. So when curtains are drawn in the winter because it gets dark, they are left open in the summer because it is light, not necessarily to shut out darkness in the winter and to let in light in the summer, but to compensate for the lack of warmth and safety that the winter darkness supposedly brings. Once they go to bed around “nine or half past nine” the curtains are drawn independent of season.

7.3.4. SUMMARY: BEING IN (THE OUT)SIDE

The three stories show how the home is constituted through the practice of drawing and opening curtains in order to let light into the home and to adapt to and negotiate with ‘the outside’. Light is not only a medium that enables vision but also a material presence that is desired in order for the residents to be present in the home. By letting

light in when the home is dark, and turning on artificial light in the home once darkness falls, shows how the home is constituted in relation to the natural light emitted from the sky. To paraphrase Heidegger, it could be argued “In the *homeness* of the *home*, sky and earth dwell” (Heidegger, 1971, p. 170). The home is *of* the sky and surrounding environment and the way the residents feel at home in the city at night. The ways that curtains are drawn therefore relates to a sort of being in (the out)side.

Such being in (the out)side speaks to Ewart and Luck’s study of older residents’ sense of being at home, as they argue that “the sense of being at home includes a perception of the physical structure as being a place to go *from*, instead of a place to go *to*” (Ewart and Luck, 2013, p. 27, emphasis in original). While such a desire to leave the home is not present in the three stories I have presented, the way of establishing contact with the outside, through the incessant medium of light, bears similarity to how the home becomes a medium for being in conjunction with the outside. I will elaborate further on this point in the following section, which hones in on the outside as an intrusive force embodied through visitors approaching the home.

7.4. “I LOOK OUT THE WINDOW...PULL THE CURTAIN...AND LOOK”

In addition to way that curtains are drawn in conjunction with ‘the exterior’, they also maintain the boundaries of the home. By turning towards the relation to the exterior environment, I want to consider how curtains are used not to open up the home, but as a safeguard against potential intrusion. As Burrell argues, it is important to acknowledge the “limited power the home has, in reality, to resist unwanted outside forces” (Burrell, 2014, p. 162). Recognising such limited power is essential to understanding how the residents safeguard their home after darkness falls, closing borders and stabilising boundaries through the acts of drawing curtains, locking doors, mounting lights on the house facade, installing CCTV or reshuffling rooms inside. With reference to Downey’s point of constituting the home through an ‘artificial fixing’ that responds to ‘removals’, ‘shifts, and ‘changes’ in and around the home, such practices of ‘border maintenance’ is therefore part of a porous understanding of the home *and* the self.

To the clients at the Resource Centre, such border maintenance was not simply a case of safeguarding against malevolent intrusion, but also a routine of welcoming visitors and guests. Most of the residents have carers visiting twice a day, making the welcoming of guests a ubiquitous part of their everyday lives. Therefore, many stories about the lighting revolved around the ability to see and identify the people that would

approach their home. The ability to see people through drawn curtains or peepholes became a topic of discussion, alongside the auditive atonement to noises outside the home, such as doorbells or knocking. The routine practices that were described ranged from welcoming drivers to people being robbed as they had opened the door to imposters for charities or gas companies. Therefore there was a general pride and defiance in the voices of residents who made sure to lock their doors, close their windows and use the peephole, ‘just in case’.

7.4.1. LIGHT (GUARDING AGAINST) INTRUSIONS

When residents remarked how they would greet people approaching their home—whether carers, drivers, family and friends, or, as in the case of this research project, myself, accompanied by a care worker—they had routinized ways of coping with this approach to their home. Either they would be expecting someone because they would have planned the visit, or, in the case of an unplanned visit, put different devices in use to judge whether or not to open up their home. Daphanie, 91, elaborated on this as we discussed figure 48, putting particular emphasis on the use of curtains and the reliance on street lighting. She lives on her own in a two-storey house almost identical to Jeranda’s house, situated on a parallel street. The street is calm, with low levels of traffic, and cars parked on either side of the pavements in front of people’s landing areas.

As she explained, there is a huge difference between welcoming a visitor who she knows will arrive beforehand, and the sudden approach by “a stranger who has never come before”. If she knows a person is coming she will simply ask who is there and, once recognising the voice, open the door. Yet, if someone knocks at her door unexpectedly and she has not planned for it, or if she does not recognised the voice, she will take her precautions by moving to the sitting room, drawing the curtain from the window facing the landing area, and quickly look out. As she explains “when I hear the bell I look out the window...[I] just pull the curtain immediately, and look”. Then she will make up her mind, whether she feels like opening or not. But in order to do this, she needs to draw her curtain in the living room and then she is dependent on sufficient light hitting the person at the door. The streetlamp seen on figure 47 is the light that provides the main light hitting the landing area, and it ensures her ability to see out of the home. The point is, that the borders of her home are maintained with the help from the streetlamp. In Daphanie’s home, the streetlight comes to dwell in



Figure 48: This is the view of the landing area and street that Daphanie has when she opens the curtain to peep out. Source: Author's photograph.

her home once strangers approach her home, similar to the previous examples showing how the natural light dwells in the home. The light of the street becomes the light of the home. Therefore, we could paraphrase Heidegger once more, and argue that for Daphanie “In the *homeness* of the *home*, the street lamp and visitor dwell” (1971, p. 170).

While Daphanie therefore dwells with the street lamp and depends on its light, other residents reveal how they could not rely on the streetlights, because of the lights’ poor performance. Kenniesha, 85, who also lives on her own in a two storey house squeezed in between a strip of shops and a row of houses, commented on her (in)dependence on the streetlamp outside her home. As she explained, in relation to figure 49 and 50, she has mounted a movement-sensor light on the façade of her house that turns on as people approach her home because of the inconsistency of the streetlights. When the clocks are turned to summer- and wintertime, the streetlights never catch up, leaving her street in darkness for an hour in mornings or evenings during the winter shift. So, she installed a light herself, compensating for the lack of light outside her home. Three times a week, the driver, who takes her to the Resource Centre, picks her up. When someone approaches she will know that someone is arriving because the motion-censored light will go off and alert her to the presence of someone in front of her home: “my light on my door...anytime anyone approach my gate, it comes on automatically”. Therefore the light has a functional use to her, as she can “look through the door, through the window and see who is there”. As seen on figure 49, she can look through the lace curtains offering a degree of protection from the outside while allowing her to see the illuminated landing area and a person or car approaching her home. When the driver arrives, she looks out and knows it is him, and safely leaves the home.

Moreover, when she has not made an appointment and people she is not expecting approach her home, the light will turn on and wash the intruder in bright light, alerting her to their presence, and also making her able to see them. As she argues, this ability of the light to alert her to the presence of someone while also providing the distanced visibility offers her “protection”. Therefore the vulnerability of being of age and alone in a big house is negotiated through the installation of a movement-sensored light, that offers her the ability to distance herself from visitors.

Such a system that allows the resident to negotiate the borders of the home is similarly evident in the last story of this section, that of Cassandra, 85. She lives with



Figure 49: The view through the net curtains from Kenniesha's living room, overlooking the landing area, which is lit up by the lamp attached to the building. Source: Author's photograph.



Figure 50: Kenniesha’s home with the motion censored light turned on. Source: Author’s photograph.

her daughter in a two-storey house similar to Kenniesha’s and Daphanie’s, but at the end of a road. Cassandra was one of the few respondents who noted that the lighting in her street was too bright and streamed through the window into the living room.

As she used to sleep in the living room, the light would keep her awake, and she had to have her daughter relocate her bed to the room facing the backyard, where no lights would create the same annoyance. A couple of months before the interview, her daughter had moved into the living room and installed blackout curtains to allow her to sleep without being disturbed by the street light. The point is that the lighting outside the home was experienced as an intrusion, obstructing practices of the home such as sleeping. But furthermore, once we discussed the quality of the streetlight, she revealed how the light was only a nuisance when experienced from inside the home. When people approach the house and she has to welcome them on her doorstep, the lighting is a big help to her.

The light streaming from the streetlight is therefore essential to her when welcoming visitors, as she does not have “a spyhole to look through, so I have to open the door. I usually have to ask who it is, ask who it is to open the door”. Therefore, before opening, she calls out to the visitor, and asks who they are. If she feels compelled or convinced she will open the door. She described a recent incident when a person asking for charity had approached her door. In this particular case she opened



Figure 51: The view through the door of Cassandra’s home, overlooking the street. Source: Author’s photograph.

the door and when seeing the person standing at the door the light was “sufficient”, because “there was light enough to see their face plain, and their badge, and I felt safe enough to open the door”. Therefore, the light helps her identify and recognize persons approaching her home, yet this is only once she has asked who they are and, based on their answer, feels that she can safely open her door. The interesting paradox between the street lighting invading the home, forcing her to re-arrange the bedroom and her daughter to install blackout curtains, while also providing a support in welcoming visitors, suggests that the lighting has different meanings at the same time (see also Bille, 2015). From being a nuisance that requires an act of ‘blinding out’ from inside the home, the meaning shifts to one of sufficiency that allows her to see intruders once the home is opened up onto the street. The shift in practice (from shutting out light to letting it fall in) thus delineates a spatial shift in the constitution of the home (from shutting off to opening up). The relation to the outside is constantly present, but the meanings of this relation shift, depending on where the resident is looking from (the bed or the doorstep) and where vision is directed towards (the domestic interior or the street).

7.4.2. SUMMARY: LIGHT INTRUSIONS

In the three vignettes, curtains become more than simply part of negotiating the changes in natural lighting over the course of the day and year. Curtains and doors are set in motion in order to negotiate the benevolent and malevolent intrusions of the home. The stories show variation in how residents manage borders and stabilise the boundaries of the home. While Daphanie and Cassandra rely on the light streaming from the street lamp, Kenniesha has become independent through installing her own lighting. While Daphanie and Kenniesha look out through their windows, somewhat protected by the visual distance provided by windows and curtains, Cassandra relies on hearing to create the same distanced negotiation. And finally, such practices of negotiating the borders of the home have shown the paradoxical nature of how such negotiation might depend on light sources that, in other parts of life, are a nuisance. As such, the previous section's vignettes focussing on how older residents in Newham draw curtains and turn on lighting inside the home as part of being in (the out)side, show how lighting is not just something they dwell with, but something they dwell in opposition to. Therefore, while lighting allows residents to guard against intruders, it simultaneously opens up their bodies to potential threats—threats that they dwell with, and against.

7.5. SEEPAGE: “I NEVER HAD TO USE MY BEDROOM LIGHTS TO GET UN-DRESSED”

The previous two sections give rise to an understanding of the luminous home as a site of negotiation with ‘exterior’ forces that influence the way the ‘interior’ is practiced: changes in natural light over the course of the day, the changing seasons, street lighting, and visitors approaching the home. By focussing on practices of adaptation and negotiation these external forces challenge the spatiality of the home by proposing that the home is the site where people dwell with, and against, the electric lighting of the street and the natural light of the sky. In this section, I want to elaborate further on the paradoxical relation to the light outside the home, by considering two examples where curtains are used in quite different ways to the above: first, as residents opt out of drawing them to let light from the street stream into the home; and second, by drawing curtains that allow for light to stream into the home in a particular way. The two vignettes open up for considering how such attention to (not) drawing curtains changes over the course of people's lives, and how particularly older people come to use curtains in particular ways.

Maile-Petty (2012) shows how curtains were promoted in the post-war era in America as the medium that liberated residents from the black holes that their windows turned into as darkness transformed the view of the outside to an opaque nothingness. Promoting instead a seamless continuation of walls, curtains offered an ornamental amelioration of the interior appearance of the home. Since such post-war fashion, curtains have come to play a significant role to how residents stage their home to outside viewers. In Pauline Garvey's study of the Norwegian home, she argues that windows provide "the material medium for the negotiation of ethnic identity and social classification" (2005, p. 157). Similarly, Van Der Horst and Messing's (2006) study of the Dutch use of curtains shows how the Dutch home is prepared for views from the outside, stressing how "house-fronts form an important part of the meaning of the urban landscape" (van der Horst & Messing, 2006, p. 23). This Goffmanian understanding of the window as a stage through which residents can show off their self-perception, is similarly present in Bille's (2014) study of Danish residents' abstinence from drawing curtains, to signal openness. I wish to contribute to these studies by considering how residents in Newham use curtains in ways that are less concerned about staging their identity to outsiders, but rather about supporting domestic practices.

7.5.1. LIFE TIME CHANGES: THE VULNERABILITY OF AGEING

Terms such as excess lighting, light pollution and light trespass, all indicate that lighting, notably in urban environments and along infrastructural constructions, produce a malevolent surplus of light, bringing adverse effects onto its surroundings (Meier et al., 2015). In addition to the discovery of the detrimental effects lighting can have on sleep patterns and the circadian rhythm—for humans as well as animals and insects—the debate around light pollution has grown somewhat heated, particularly in the West (Chaban, 2015, 2016; Ferlazzo et al., 2014; Ifversen, 2016; Schreiber, 2015; Karin C H J Smolders & de Kort, 2014).

Yet, only a couple of the residents at the Resource Centre found the lighting in their streets a nuisance. The majority hailed the increase in brightness and distribution of lighting, and underlined the importance of 'more lighting' for them to feel safe. Some residents welcomed excess lighting to stream in through windows and doors, as this lighting was exploited to "save on the energy bill" as well as provide visibility to carry out everyday practices. However, this act of opening up the home to the intrusion of light, was similarly coupled with a recognition of the dangers of doing so. Several

residents reported how the presence of suspicious people roaming the streets, and groups of youths hanging around outside their doorstep, alarmed them. To guard against such threat, doors are kept locked and curtains are drawn. Some residents explained their routinized practices by referring to past experiences, such as having been robbed, mugged or simply approached by strangers in ways that felt uncomfortable. Time and memory came to play a role in how the residents reflected upon their current routines, in keeping with Degen and Rose's (2012) investigation on the role of memory to how people experience the present. In the two cases that follow, I show how memories of past experiences and routines mediate the ways that residents relate to the lighting outside their home, by diminishing or augmenting their experience of the present.

First, Vera, 82, proves an interesting case as she reflected upon her use of curtains by reminiscing the way she used to (not) draw curtains in her youth. She lives on her own in the two-storey, semi-detached house that her children were raised in, some 40 years ago. Having lived here for most of her life she recollects how she used to sleep upstairs with her husband in one of the rooms looking onto the street, and their three children shared each of the remaining two rooms upstairs. But now, she no longer has the ability to move up and down stairs on a daily basis and she has moved her bed to the living room downstairs. As a consequence, the upstairs is only used whenever family stays over. As seen on figure 52, the house lies in a residential street opposite a turning. This means, that the two bedrooms upstairs and the living room downstairs face the street and look onto the turning as seen on figure 53. Unlike their neighbours, no houses lie opposite and therefore the two bedrooms aren't directly visible to neighbours.

Noticing the reflection of the street lamp in the upstairs' bedroom window, as seen on figure 52, Vera elaborated on how, when she used to sleep up there, she used to rely heavily on the excessive lighting streaming through her bedroom window. As she explains, "I never had to use my bedroom lights to get undressed, to see, I could always see pretty well what was going on in the bedroom". She would never draw the curtains, not even the lace curtains as "there is no one to overlook me", neither from the street nor from houses opposite.



Figure 52: The façade of Vera's home with the reflection of the street lamp in the upstairs window.
Source: Author's photograph.



Figure 53: The view of the turning opposite Vera’s home, as seen from her front door. Source: Author’s photograph.

There has always been a street light right outside their window, she continues, “there is enough coming in, sending up light into the bedrooms. And as you can see it reflects on the window” (see figure 52). The quality that this light brought to their lives, meant that they never had to turn on the lights in the bedroom, and could carry out the routines of going to bed and getting dressed, in the light cast from the street lamp: “[we could] get ourselves undressed, to get ourselves in a pyjamas on or a nightdress or whatever we wanted.” The ability to do whatever they wanted, to see underwear, pyjamas, clothes in closets and chest of drawers without turning on the lighting, therefore, tells the tale of a freedom to do as they wish without turning on the light.

However, downstairs, drawing curtains is a different story altogether because Vera no longer uses the rooms upstairs. Having moved all her activities downstairs, she now closes the curtains “because people walk past, and I don’t want to be bugging them, for one thing. And another thing, I live on me own, and if they see me sitting there they might think, ooh I will have a knock there”. The prudence of not wanting to embarrass others and herself, by undressing before open windows facing onto the street, is coupled with a sense of vulnerability, from being older and living on her own. Drawing curtains now figures as a way of ensuring a feeling of privacy and intimacy

while holding her personal vulnerability from solitude at bay. Such change in the way curtains are used over the span of a lifetime interestingly points towards the particular ways that perceptual memory gives presence to a very particular experience of the present. Her current solitude makes her aware that she will not allow “people [who] walk past” to look into her home out of fear, but also decency and prudence. She cannot do what she used to, and therefore her experience of her engagement with people outside, and with the lighting outside, has changed altogether. It is important to note that it is not simply age that has changed her domestic practices and way of feeling at home. All of the residents who took part in the photography project live in ground floor flats, or, as with Vera, they live in houses where they no longer make use of the rooms upstairs and have shifted their bedrooms downstairs. Presumably it is not only older people who feel exposed by living downstairs, yet, in the case of Vera, ageing has changed the way she orchestrates her domestic practices and consequently reduced her enthusiasm and joy from exploiting the qualities of excess lighting, replacing it with a concern for safety and vulnerability.

Charlene, 72, describes how she draws curtains because she once was burgled. She lives on her own in a one-bedroom, ground floor flat in a retirement facility. Her apartment opens up towards the east, with windows overlooking a residential street from the bedroom, sitting room and kitchen, only separated from the street by a thin strip of grass and a hedge. The houses on the opposing side of the street are terraced houses, and can be seen from inside her home, beyond the hedge, as briefly made out in figures 54 and 56.

The episode in which she had been burgled was crucial to her description, and while the content of the episode is of less importance to my interest in lighting, she emphasised how the episode was the reason for drawing curtains. As she explained, “there are such nosy buggers round our way that they will clock what I am doing, right, and think oh she has gone out.” Thus, in similar fashion to Vera’s act of blocking out views from strangers, Charlene is concerned with the people looking into her home, and breaking in once they see she is gone. As such, she explained that she always draws curtains when she leaves her flat, and once she comes home opens them up. The curtains are left open while she is home during the day, but once darkness falls she will draw the curtains; yet her routine of drawing curtains was not only to protect against potential threats.

When flicking between figures 54 and 55, Charlene explained how these curtains were chosen deliberately because of their pattern and because they let the lighting from the street stream into her bedroom and living room, enabling her to see inside her bedroom and living room without having to turn on the lights. As seen in figure 55, the lighting streams through the flowery pattern, perforating the curtain, and “creeps up there and then comes up over the top”, making the curtains glow from behind. Rather than blinding the window off from excess lighting, she allows light to stream into her home, and to add a particular aesthetic expression to the room. As Burrell has shown, choosing curtains is central in managing the amount and type of light streaming into the home; one of her informants similarly draws curtains that have “been carefully chosen to let in sufficient light to enable them to be kept permanently drawn” (Burrell, 2014, p. 154). While these curtains are not permanently drawn, they are so at night, and therefore appear like Maile-Petty’s post war curtains that allow for an aesthetic improvement of the home. The light that streams through the curtain provides her with enough light in the room to “light up the whole bedroom”, making it possible for her to identify the chest of drawers, the bedside table, the bed and her television. The ability to identify things in the room makes her able to move around in the flat, even when she wakes up in the middle of the night. As she explains, the excess lighting enables her to “to get up, right, go to the shower room, go to the toilet right, I can even have a shower at six o’clock in the morning...If I want a drink, I get out of bed, I go into the front room...I can go in and I know where everything is, so I can get myself a drink from the fridge and go back to bed.” Through such ability to identify objects and get a clear overview of the layout of rooms in the flat, she is enabled to do exactly as she desires. This ability to see and do as she desires, she argues, “makes me feel safe”. Furthermore, being able to see “gives me the security to know that there is nobody else in my house”. This feeling of safety and security has come with her acquisition of curtains as she argues that “I never used to feel like that, I used to feel violated.”

Thus, her choice of curtains has enabled her to see and know “where everything is” and therefore “see what [she is] doing”. As she describes, she “can get up”, “walk straight ahead”, “walk into the kitchen” (see figure 56) or “go to the shower room” if she wants to. Because she can see she is able to identify “where everything is” and therefore is allowed mobility in and of her home. This ability to see therefore underpins Merleau-Ponty’s notion of light as a mediating element that enables her to



Figure 54: The light from the street streaming through the lace curtains in Charlene' bedroom window. The photograph also shows a luminous square, which is the television of the neighbours opposite. Source: Author's photograph.



Figure 55: The same view with the flower-patterned curtains drawn. Source: Author's photograph.



Figure 56: The view of the street through the window in Charlene’ kitchen. Source: Author’s photograph.

see. She is not seeing light itself, in the same way that Jeranda and Nelqueisha suggest, but simply allowed to make out the objects that she needs to use in order for her everyday routines to function.

With phrases such as “All I have *got* to do”, “If I *want*”, “I *can* go in” and “I *can even* have” she stresses the freedom to do as *she* desires, feels like and wants. This freedom makes her feel safe—and also she can “see that there is nobody else in [her] house”. Thus, her feeling of safety and security is linked to visibility inside the home and to the ability to do as she pleases, thanks to the light that she lets creep and seep into the home. But furthermore, this visibility inside the home and subsequent feeling of safety is linked to the way that her act of drawing curtains is related to the outside.

Similar to the way that Vera noticed a light source in the photograph during the photo-elicitation interview, Charlene identified a light source in figure 54. The light she noticed is the luminous television screen that can be made out through the window, appearing inside the living room of her neighbour opposite. As she explained, pointing at her neighbour’s television, “their telly is on there, right, and that is next door, and further down there is a pink house, and if I see that light is on, and their light is on I know it is time to draw me curtains”. Confirming the former stories of

curtains being drawn in conjunction with the outside environment, Charlene draws her curtains as her neighbours' lights come on. Once these lights appear as lights in their own right she is alerted to the fact that she has to draw curtains. As such, the luminous exterior environment does not appear to Charlene as the medium with which she sees, leading her gaze. These lights arrest her gaze because she does not look at the television as such, but realises that once the television becomes visible, it means that darkness is falling, and that others will be able to see her, sitting inside her home. As she is not interested in "nosy buggers...that...will clock what I am doing...and think 'oh she has gone out'" she draws her curtains. Charlene's relation to lighting in the street is therefore paradoxical, as she relies on lighting to alert her to the need of drawing curtains, while also providing her with the excess light by streaming through her curtains and, thus, enabling her to see inside her home.

Charlene uses light in creative ways, spilling from one place into another and therefore controlled in ways as to underpin practices, ambiences and atmospheres. But this spillage and seepage is created through a chain of luminous encounters with the streetlights and other people's luminous homes. The luminosity of the home and domestic practices during the hours of darkness are constituted in relation to the luminosity of the street and that of other people's homes. Therefore, in similar ways to how Jeranda, Reggie and Nelqueisha draw their curtains and turn on the lights inside their home in conjunction with the changing lightscapes outside the home, Charlene shows how the domestic is practices in conjunction with the luminous homes in the streets of Newham—the luminous home in the city.

7.5.2. SUMMARY

Building on the previous section's focus on the paradoxical role lighting takes in domestic practices during the hours of darkness, this section has considered how drawing curtains has changed over time for the residents. While Vera used to rely on lighting outside the home, she now guards against it; and while Charlene still relies on lighting to see inside her home, she has come to manage the light spill with caution, guarding against threats. These shifts in ways that the residents have changed their routinized patterns therefore show an interesting way that light streaming through their windows enables them to see objects in their homes and develop a spatial awareness, without turning on lights. But over time this visuality becomes associated with a vulnerability towards the outside; a vulnerability that Vera and Charlene identify the light sources in the photographs which enables them to explain how they negotiate the borders of

their homes. Vera and Charlene reveal how they exploit(ed) the lighting and subsequently open themselves up to the outside world. This point underscores how Merleau-Ponty's notion of carnal light both leads the gaze and figures as material phenomenon that imperils the body. However, when stabilising this porosity of the home and the self, the creative ways of using curtains shows how the residents adapt to the conditions, and doing so, particularly in Charlene's case, by relying on the visibility of other people's homes. It is through this connection to the outside, looking into neighbours' homes, that her practices of stabilising the border of her home are practiced.

7.6. CONCLUSION: THE LUMINOUS HOME

In this chapter I have sought to explore the role of the luminous home to the production of the urban, lit environment, and simultaneously I have investigated how lighting in streets affects domestic practices in the home after darkness falls. I have traced the ways the home enters into luminous relations with the ever-changing lightscapes 'outside' the home, such as natural sunlight, artificial streetlight, and the vernacular lights spilling onto the street from shops and other people's homes. I have shown how the older residents use devices such as interior lights, curtains, doors, and windows to exploit, mould and guard against the luminosity of the outside. I have argued for the need to understand light not as one thing, for one body, but as inherently paradoxical, as it does and means multiple things to different people simultaneously; in some instances, it even means different things to the same person, at the same time. With this understanding of light as paradoxical, I argue that the luminous home and the urban, lit environment are intertwined in everyday life, which calls for a need to reconsider the role of the luminous home in the urban, lit environment.

In the first empirical section, 7.2, I considered the importance of vernacular light sources that emerge as emblems of everyday life being lived in the city for the experience of the urban, lit environment. Luminous windows clothe the streets with an ambient, vernacular luminosity that signals life, activity and the presence of people, even when there are no people in the streets. This atmospheric addition signals the process through which the urban night is domesticated, not simply by the presence of luminous homes, shops and moving vehicles, but through the role such luminosity plays for domestic practices. In the following three sections I explore how domestic practices are carried out in conjunction with the urban, lit environment. In section 7.3 I presented three stories that illustrate how domestic practices are carried out in conjunction with the outside, and in particular in conjunction with the changes in light

and darkness that occur through changes in natural and artificial light. By drawing and opening curtains residents let light in to the darkened home, demonstrating how domestic practices can be considered as carried out in relation to the outside—which I label being in (the out)side.

However, as argued in sections 7.4 and 7.5, such way of being in (the out)side is not sufficiently understood as a means of being *with* the outside, alone. When residents stabilise the borders of their homes, as a defensive strategy, protecting them *against* the outside, the domestic emerges in a very different relation to the outside. By considering how residents draw curtains, look through drawn curtains or peepholes, and install lighting onto the façade of their home, I have shown how residents fend off against potential intruders, thus dwelling in their homes against the outside. Such guarding against potential intruders or threats reveals a vulnerability that the older residents experience. By unfolding the ways that lighting streaming through the home is exploited to support domestic practices, the lighting of the street, or from other people's homes, not only becomes part of the domestic routine, but also opens up the home to outside views. The paradoxical relation between maintaining borders and opening up the home reveals how lighting both impinges on, and supports, domestic practices.

8. CONCLUSIONS: LIVING WITH LIGHT

The aim of this thesis has been to investigate the role of artificial lighting in everyday life of older residents in Newham. By exploring the diverse ways that the urban, lit environment is produced—through urban planning, architectural design, and everyday, routinized practices—I have brought attention to the ways lighting conditions how people see, feel and structure their lives, but furthermore, to how lighting is negotiated and manipulated through everyday practices to support and enable particular ways of seeing. By considering how the older residents adapt and respond to lighting, I have shown that seeing not only depends on the quality of the light, but also on how people co-produce ways of seeing. This co-constitutive role of everyday practices is evident in how the older residents negotiate changes in lighting in the streets and how they adapt to and mould different light sources that stream through their homes.

The main contribution of the thesis therefore lies in reconceptualising the experience of urban lighting and rethinking how such experiences can be researched and represented in cultural geography and related disciplines. I have argued for the need to attend to everyday experiences of lighting, by employing an ethnographic method that enables researchers to investigate the role of lighting in how people see, feel and do things in the city. In concluding this thesis, I first sketch out the conceptual and methodological contributions that I have made throughout chapters 2, 3 and 4, and draw some implications for research on urban lighting and the urban night. Second, I present the main findings that emerge from each of the empirical chapters 5, 6 and 7. And finally, I consider some implications of my findings and put forward three recommendations for the professional world of light planning and design.

In calling for the need to attend more carefully to the practices of negotiating artificial lighting in everyday life, I have developed an understanding of urban lighting through a focus on everyday practices. This approach emerges out of a critique of research that assumes a distinction between the experiencing body and the lighting technology, design or planning practice (see Besecke & Hansch, 2015; Challeat, 2009; Deleuil, 2009a; Marc Fontoyntont & Deleuil, 2009; Zissis & Sajous, 2009). While the emergence of new lighting technologies has been proven to condition ways of seeing, feeling and practicing the city at night (Schlör, 1998; Simmel, 1971; Thrift, 1994), I argue that experience is not simply an effect of a particular light setting. In chapter 2, I question the technological determinism that runs through much research on urban lighting, particularly as urban lighting is argued to have domesticated the urban night

by taming vagrant and unruly practices (Beaumont, 2015), and disenchanting the city at night as the lighting technologies have become taken for granted (Schivelbusch, 1995). By turning towards recent studies on urban walking (Degen & Rose, 2012; Middleton, 2010b, 2011b) and the home and the city (Burrell, 2014; Downey, 2013), I reconsider how everyday, routinized practices contribute to, and ultimately change, the way lighting can be conceived to domesticate and disenchant the city. Scholars that study urban walking in the artificially lit city have foregrounded how mundane practices play a key role in re-enchanting the experience of the urban night (Edensor, 2015b, 2015c; Sandhu, 2010). And, in considering how urban everyday life is not only shaped by, but plays a constituent part in shaping the urban, lit environment scholars that study the urban home and processes of domestication pay greater attention to the co-constitutive role of domestic practices in shaping the illuminated city (Bille, 2014; Burrell, 2014; see Koch & Latham, 2013; van der Horst & Messing, 2006). Drawing inspiration from such studies, the thesis responds to calls for researchers to develop studies that account for the “variegated experiences of lighting” (Gallan & Gibson, 2011, pp. 2514–5), and how different uses of lighting “shape experiences” (Bille & Sørensen, 2007, p. 266). The point is that lighting does not singlehandedly shape or condition experiences; different culturally specific ways of using, responding to and feeling about lighting co-constitute the urban lit environment and consequently how people come to see, feel and do things in the city once darkness falls.

Ontologically, I have called for the need to consider the role of everyday practices, and turned towards phenomenology, and particularly Merleau-Ponty’s phenomenology of light. Through a reading of Merleau-Ponty’s writing, chapter 3 aimed at rethinking how urban lighting can be conceptualised and researched in ways that capture and encompass the paradoxical ways that light both figures as a background medium that neutrally—and seemingly naturally—leads the gaze and orients the body, while also figuring as a material phenomenon that invades, disrupts and disorients the body. The strength of employing a carnal understanding of light, lies in acknowledging how “disorientation is unevenly distributed” (Simonsen, 2013, p. 20), and in taking seriously the ways that people experience lighting differently.

The epistemological implication of such an embodied understanding of urban lighting, lies in taking seriously the specificity inherent to experience. I have sought to bring attention to such experiential specificity by focussing my study on how older residents experience lighting in everyday life—a social group that is unrecognised in

light planning documents and understudied in academic research on lighting and the night. Rather than providing a gerontological study of lighting, the point I am making is of a more general kind: any study of the experience of urban lighting should take the difference inherent to experience seriously, and consider how experiences vary according to gender, culture, class, geography, time, as well as age. The conceptual approach therefore responds to Gallan and Gibson's (2011) call for geographers to account for variegated experiences of light by providing a framework that is sensitive to how lighting conditions ways of seeing and how it is used and moulded by residents to shape the way they see, feel and do things.

In keeping with the embodied understanding of light, the methodological approach that I developed in chapter 4 aimed at providing a framework for researchers and participants to explore the visual experience of artificially lit spaces and at rendering such experiences visible. The methods were adapted to the specific abilities and type of routines that the residents expressed and enabled me to investigate the ways that lighting is both a neutral medium that leads the gaze and a material phenomenon that interrupts and overwhelms the body. I developed a methodological approach that combined mobile and visual methods in order to enable residents to enact their everyday practices and engagements with light, and reflect upon such experiences through a series of interruptions where they were required to respond and negotiate.

The mobile method of walk-along interviewing, allowed the residents to re-enact what Thrift calls the 'onflow of everyday life' (2008, p. 5). Along the walks, I purposefully interrupted the 'onflow' by asking the residents to reflect upon why they did as they did, and how the lighting made them see and feel in particular ways, making the participants conscious of aspects they had not realised before. Therefore, by walking and re-enacting, the residents were allowed to shift between the unconscious act of seeing in different types of light and the reflexive acts of looking at how they themselves saw differently through the light.

The collaborative practice of photographing everyday engagements with and experiences of lighting in the city provided residents with a vehicle for exploring and reflecting upon ways that the world appeared visually to them. The photographs and the act of taking them empowered the residents to reflect upon the taken-for-granted hierarchies of light sources in the city. The photo elicitation interviews provided an opportunity for questioning how different light sources condition ways of seeing, feel-

ing and doing things because the photographs elevated certain aspects of the lit environment and granted them status. The images were produced *with* residents and *with* the lit spaces, documenting, enlivening and rendering the material and sensory qualities of different lit spaces visible to the participants—again allowing residents to shift between seeing and looking at how they were seeing.

The methodological approach I have developed provides a significant contribution to research on urban lighting and the urban night, by demonstrating how walking and photography can be used to explore how people see and, more importantly, how ways of seeing are negotiated and moulded through routinized practices.

The point of developing the embodied understanding of light and a methodological approach to studying the role of light in everyday life of older residents has been to produce a very particular kind of knowledge. I have aimed at unfolding how the seemingly mundane encounters with lighting throughout everyday lives play an important role in how residents experience urban lighting and how the urban, lit environment emerges. Chapters 5, 6 and 7 gave attention to the sensory qualities and embodied experiences of different lit spaces by providing different cuts into the urban, lit environment. The consideration of the role of lighting in planning, urban design, routinized walking and domestic practices was intended show how the urban lit environment emerges through a range of practices that all play a part in shaping how older residents experience the artificially lit city.

Chapter 5 served to unveil the discrepancies between the way light planners and lighting designers use lighting to shape and support practices in urban environments, and thus, dissect the underlying rationales that drive each of these practices. Emblematic of growth-led urban development in peripheral areas of major cities, the regeneration projects in Canning Town and Custom House showcased how lighting is used to create physical, social, and emotional change. For light planners, lighting is argued to ameliorate the urban environment by eliminating dark patches and deterring criminals from loitering in blind spots. Improved public lighting is argued to encourage more people to go out during the hours of darkness and thus provide ‘eyes on the street’ and ‘eyes from the windows’ of buildings that contribute to the ‘natural surveillance’ of the public realm (London Borough of Newham, 2009; Secured by Design, 2014).

The redesign of the lit environment encourages residents to play an active part in ensuring safety and security in the evening and at night. Residents are assumed to respond directly to the technological change, revealing a technological determinism in the Council's approach, or, as I have argued, a prescriptive approach. However, in directing such a latent critique at the local planners, I have acknowledged the constraints under which local councils in the UK are working, particularly in times of austerity and budget cuts. The support given to progressive light art events and the Council's recognition of the potential benefits of changing street lighting (economically, environmentally and experientially) show how the Council are progressively using lighting in reshaping the experience of the borough. The Council's efforts deserve recognition, and I have drawn attention to is the limited manoeuvring space that both planners and designers operate within, under the current climate of local government austerity. In turning towards the approach of the architects, landscape architects and lighting designers involved in specific projects in Canning Town, I have however shown how the rationale for using lighting changes.

The deterministic approach to lighting is challenged by architects, landscape architects and lighting designers, who gradually add layers of light to spaces, and orchestrate them in ways that are claimed to encourage already existing spatial practices; rather than pre-determining experiences, lighting is used as an incipient medium that leads and suggests practices incidentally. I identified a difference in how light planning and lighting design practices respectively use light in giving shape to urban spaces. In support of recent research on the need to bridge the gap between expert fields in light planning (Köhler, 2015), and to ensure that planning decisions are based on 'facts' rather than assumptions (Morgan-Taylor, 2015), I have argued for the need to take more seriously the discrepancy between light planning and design. The core difference between light planning and design practice lies in how light is conceived to be either prescriptive or performative, and in taking social practices as the starting point rather than the outcome of technological change. The recognition of social practices, therefore, needs to extend beyond the Council's appreciation of residents walking in greater numbers in streets and overlooking spaces from their homes, offices and shops, to consider more carefully how residents engage with lighting through mundane practices in streets and in homes. In the two chapters that follow chapter 5, I turned towards such everyday practices, focusing on routines of walking through illuminated streets and the domestic practices such as drawing curtains and lighting up the home.

The foci in chapters 6 and 7 were prompted by the Council's insistence on residents playing an active part in ensuring the safety and security in the Borough by walking the streets and by overlooking public spaces from inside their homes. Empirically, the chapters focussed on two different groups of older residents, distinguished by a significant age difference as one group is 17.5 years younger on average than the other group. The significance of this difference lies in the residents' differentiated mobility and physical ability; while the younger group can sustain an everyday life by walking independently to local shops and to visit neighbours during the hours of darkness, the relatively older group of residents rely on chauffeurs to bring them from place to place, and are therefore restricted to engaging with the public realm through the home.

In chapter 6, 'Moving through the illuminated night', I followed 12 routinized walks with 22 older residents between the ages of 58 and 79 years old, and paid attention to how different layers of light were identified to shape the way the participants experienced their travel in different ways. The main finding of the chapter emerged as residents identified how particular lighting technologies or lit settings made them see in certain ways, but moreover, how their way of responding to the different lit spaces came to shape how they saw and moved through the city.

Initially, I showed how the purposeful walker just needs to move down the street by way of luminous navigational points rather than seeing every detail of the street. Yet, by exploring the difference between *what* people see and *how* they see—taking inspiration in Merleau-Ponty's embodied understanding of light—I questioned the role of different layers of light and lighting technologies to the ways that people see (in) lit spaces. This relation became evident as residents moved through differently lit spaces, and in particular streets that had been upgraded with LED lights, standing out against the SON-lit streets. When seen from a distance, and talked about in general, residents found the upgraded LED lights to give better lighting, making them see more clearly, and thus supporting the Council's claims about LED lighting improving the experience of the lit streets. Yet, the residents also explained how they had never experienced problems seeing in the dimmer SON-lit areas, calling into question what the luminous 'improvement' actually benefits.

The strong emotional attachments that the residents harboured for certain lit spaces—based on how they look *at* the light—were not necessarily in keeping with how they felt in them—how they see *through* the light. The analytical switch from looking *at* light, to the embodied experience of seeing and moving *in* the light, made me

question what it is that makes residents harbour positive and negative feelings for different light sources. The positive associations that the older residents expressed for the brighter lights were not only because they saw more clearly but also because the lit spaces looked aesthetically different to SON lit streets. The aesthetic ‘improvement’ reminded the residents that they were (not) being prioritised for luminous upgrade—and therefore symbolically (not) deemed worthy of living in a borough equipped with the newest technology.

By 2018 no one will have to feel ‘left out’ as all the streetlights in the borough will have been refurbished with sparkling bright LEDs. As I turned to the way residents experienced encounters with ‘others’, such as other people, things and animals, I showed that a lack of ambient luminescence and an over-abundance of focal glow could create a sense of vulnerability and confusion. The problem with the lighting not being adjusted to the specific locality made people feel vulnerable, avoid places, and even in the recently upgraded space underneath the flyover, feel uncomfortable. The point I raised is that these experiences that do not show a uniform picture of how different lit conditions affect the residents, suggesting that it is not the actual quality of the light that is important to how people come to see and feel, but rather the orchestration of different layers of light, adjusted to the spatial features. Moreover, how people negotiate the lighting, by walking through spaces even though they feel afraid – adapting by moving faster and looking over their shoulder, or simply choosing a different route altogether – suggests that attention should be paid to how people actively take part in shaping how they come to see and feel.

The main finding of chapter 6 therefore suggests that while the lighting in streets profoundly shapes how people feel about certain places, such sentiments are not direct effects of the lighting alone, and are not necessarily in keeping with how they feel in them. These findings therefore speak more broadly to research on the sensory experience of urban environments and the role of perceptual memory and contingency in mediating sensory experiences (Degen & Rose, 2012; Middleton, 2011a). In particular my findings add further nuance to Edensor’s (2012) recognition of memory in mediating experience of light festivals, by considering how sensory experiences of lighting are not always necessarily in keeping with aesthetic appearances, and furthermore, that different layers condition different ways of seeing feeling and doing.

In chapter 7, ‘Nocturnal domesticity: the luminous home’, I turned from the experience of publicly provided lighting in the streets to consider the role of vernacular luminosity, such as luminous homes, shops and moving vehicles, and domestic practices during the hours of darkness. By investigating the relation between the luminous home and its wider context, I questioned the Council’s focus on the home as a contributor to ensuring natural surveillance in the borough, and instead showed how domestic practices negotiate light streaming through the home in order to guard against exterior threats, to support domestic practices, or tune the home in certain ways.

Alongside luminous shops and moving vehicles, the luminous home is experienced by the older residents as giving life to the street, adding a human presence in streets, which were otherwise desolate. The symbolic representation of people inside homes, in shops or on the move, signalled the presence of people carrying out everyday practices, and was argued to contribute to the sense of safety and comfort of walking around the city. This recognition seems to support the Council’s identification of the role of the home to encourage natural surveillance. Yet, as I turned towards the domestic practices that are invested in lighting up the home, I showed that older residents are less concerned with looking out through windows than shielding off the home from views or letting light stream into the home. By tracing the ways the home enters into luminous relations with the ever changing lightscapes ‘outside’ the home—natural sun light, artificial street light, and the vernacular lights spilling onto the street from shops and other people’s homes—I investigated how residents use devices such as interior lights, curtains, doors, and windows to exploit and guard against exterior light.

The ways that the residents respond to, and negotiate, the spillage and seepage of light between the home and the city collapses the distinction between inner and outer realms, and instead proposes a way of being in the urban night akin to the Heideggerian (1971) ‘oneness’ with the surrounding environment—the residents practiced ways of being in (the out)side. However, by paying attention to the ways residents come to embody such ‘being in (the out)side’ I unfolded the paradoxical ways that the older residents relate to such luminous negotiation and called for the need to understand such being not just *with* the outside, but also *against* the outside.

I drew on Merleau-Ponty’s (1962) sensitivity towards the paradoxical nature of light to unfold how residents use lighting (streaming into the home) to carry out everyday practices inside the home, while also revealing people’s presence in the home,

thus making them vulnerable. The paradoxical relation between maintaining the borders of the home by drawing curtains and installing lighting to shield off against potential threats, while relying on and exploiting lighting streaming into the home and manipulating this lighting by opening curtains and installing porous curtains, reveals how urban lighting entering the home is both a threat and a necessity. With such consideration of the paradoxical way light is negotiated through domestic practices, I drew attention to the particularity of the experience of older residents. Factors include living alone, decreased physical ability over time, and how most residents have moved bedrooms from the first to the ground floor, making them feel more vulnerable facing the street. The street travelled into the home, in the figure of exposure to views from the outside, and was kept at bay through practices of installing and drawing curtains and lights. Therefore, rather than older residents' homes adding to the natural surveillance of streets, the porous nature of the homes is negotiated in relation to outside forces, mediating borders and guarding against threats entering the home.

By investigating the role that the luminous home plays to how people experience the urban, and in turn how urban lighting affects domestic practices after the hours of darkness, my study contributes to recent research on the relations between the home and the wider city (Blunt & Bonnerjee, 2013; Bonnerjee, 2012; Burrell, 2014; Ghosh, 2014). Through the prism of lighting, I have explored how the practices of establishing the home as a place of shelter and safety relies on opening up the home in ways that potentially compromise that very protection. Thus, the borders of the home are stabilised and maintained (Burrell, 2014) in continuous relation to shifts and changes in lighting outside the home (Downey, 2013). Yet, my research further expanded on these points by developing a nuanced understanding of how older residents' everyday lives are practiced in a constant negotiation over the limits of vulnerability.

The main argument of the thesis is therefore that light conditions ways of seeing by shaping *what* and *how* people see, but the ways that people come to see further depends on how they respond to, negotiate and mould lighting through routinized practices. By recognising the agency of residents and the importance of everyday practices to how people see, feel and do things in the artificially lit city, I therefore claim that light planning and design practices should take more seriously the ways that residents continuously shape and mould the urban lit environment. How this should be done, in practice, I will unfold in the remainder of the conclusion.

As I have argued in the above, the methodological approach that I have developed brings a sensitivity to the study of everyday experiences. By using photography as a method the residents have been enabled to question how they see, feel and do things in differently lit spaces, and ultimately the hierarchies of different light sources. A major contribution, therefore, lies in providing a methodology that is sensitive to the mundane aspects of everyday experiences of urban lighting—a sensitivity that can be used to inform decision making in light planning and lighting design. In the remainder of this conclusion, I reflect upon how my research can inform future light planning and design practices, and I will do so by putting three recommendations forward. These recommendations aim at considering the potential value of employing a practice-based, social scientific approach to investigating how lighting shapes and is shaped by everyday practices for commercial ends and in professional fields of light planning and lighting design.

First, I argue that decisions made in light planning and design should be better informed by how residents respond to different types of lighting. Echoing Köhler (2015) and Morgan-Taylor's (2015) calls for bridging knowledge gaps between disciplines, I want to call for researchers to inform professional practices about the social and cultural dimensions of light. On the one hand, this requires that light planners do not only evaluate and project lighting based on standardised measures stipulated in guidelines and technical specifications. As I show in chapter 5, urban planners and politicians aim at ensuring certain levels of lighting across their cities, and for good reasons. However, lighting designers respond to such standards by developing tailored lighting schemes for specific sites—the standards and recommendations are moulded and challenged to create specific experiences, feelings and atmospheres in the city. As Sutherland argues, he aims to challenge uniformity in the urban, lit environment, yet without creating a confusing and incoherent lightscape. The point is that a lighting design or a lamp that meets the specifications, standards and fulfil technical requirements does not guarantee 'good lighting'.

In two examples illustrating this, residents found the spaces underneath the A13 flyover and the path through the Beckton Park not necessarily lacking light or making it difficult to see. The problem in these spaces was the way the light was distributed and focused on spatial features, which gave the residents a feeling of discomfort and vulnerability. Through the testimonies from residents and the visual represen-

tation of the spaces in question, my hope is that it is clear to light planners and designers that even in spaces where people can see, it is not a guarantee that the feeling or atmosphere supports everyday practices and encourages activity. In such instances social scientific researcher could, and I would argue should, contribute to and work towards collaborating with local authorities and lighting designers, to inform decision making in planning and design process. The research I have conducted in this thesis gives indications as to what light planners should take into account, such as: the uneven distribution of different types of lighting across varying urban areas; the ways the publicly provided lighting conflicts or supplements the vernacular lighting; how some technologies are assumed rather than scientifically proven to change practices; and that there is a difference between *seeing* light and seeing *in* or *through* light. With these insights, I argue that better practice could result and improve the way lighting is used to support everyday life in the city after the hours of darkness.

A second aspect I want to raise concerns the role of lighting designers in urban planning and development projects. Once the design is drawn and the fittings commissioned, the lighting designer hands over the responsibility for the project to the local authority and the highway maintenance team. The lighting designers interviewed in chapter 5 explain how, at the end of a project, they strive to arrange a hand-over session with the engineers to make sure that the lighting design they have created will be maintained as envisioned. But this is not always the case. The hand-over process is important for ensuring that the knowledge that lighting designers have about how people respond to lighting is transferred to the engineers. As Shaw (2014) has shown, often lighting engineers do not possess sufficient knowledge about how people's preferences and experience of particular light settings. Therefore, a further recommendation lies in ensuring, on the one hand, that lighting designers are included in urban planning and development at an early stage, and, on the other hand, that once the designs are delivered that the engineering team – that will operate and maintain the lighting on a daily basis – is educated on the social dimensions of lighting.

Another area where the discrepancies between the professional practices in urban development projects become clearer, is in focussing on what happens at the borders of the areas under development. As shown in chapter 5, the regeneration area in Canning Town and Custom House produces a luminous division of the area, where the newly designed streets, plazas and buildings stand out against the surrounding SON lit residential areas. Such division seems almost unavoidable, yet, the luminous

boundaries affect residents. As a third recommendation I argue that light planners and lighting designers should take account of the ways that changes in lighting create luminous boundaries that potentially affect how people come to feel about, and in, the city.

In thinking about the luminous boundaries across the city, it is important to distinguish between light planning and lighting design practices. The development of the bounded area around Canning Town and Custom House creates a planning area which the lighting designer works within. Lighting designers acknowledge the luminous contrasts in the bounded area and to adjacent areas, and accommodate such differences by smoothing them in some instances and enhancing them in others. Lighting designers thus accommodate and challenge practices and perceptions. The difference between light planning and design practices, I argue, lies in the designers' recognition of the need savour and exploit already existing luminous contrasts in underpinning and supporting social practices, whereas planners neglect of the implications of such luminous contrast. I want to appeal to planners to anticipate changes to adjacent streets, neighbourhoods and boroughs, and a way forward would be to develop a lighting masterplan, focussing on the lighting within the boundaries of the borough but also the areas where it connects to adjacent boroughs (Tower Hamlets, Hackney, Waltham Forest, and Dagenham and Redbridge). The recent rise in lighting masterplans across Europe (Köhler, 2015), seems to have evaded London. While this is arguably not down to a lack of need, explanations could be found in the decentralised planning authority of London as a whole, the relative autonomy of each of London's 32 boroughs, and the limited power that each local authority holds in steering development. The current climate of austerity puts pressure on local authorities to sell off sites for private or at least public-private partnership-led development, shifting the decision making in terms of design and planning to developers and contractors who are not paid or obliged to have the interest of the common good at heart. The questions about responsibility, authority and the distribution of power in urban development are similarly raised by Degen as she warns that "regeneration must not be left solely to developers. Rather, planners need to be given more powers" (2008, p. 200). In the case of Canning Town and Custom House, it seems fitting to agree with Degen, as the Council have a very limited footprint in the developments. Dodd, as neighbourhood regeneration planner, explains that the lighting design of the regeneration projects goes through a planning process, but the planning authority's influence is very limited—they accept or decline the plans, but they are developed and effectuated by the developer. Therefore in calling

for planners to take action and develop a commitment to ensuring that the urban, lit environment is controlled for the benefit of the wider borough, I also want to acknowledge the limited power of local governments and the need to develop a stronger planning apparatus.

With these three recommendations, I have brought attention to the potential contributions that a (post)phenomenological understanding of the experience of urban lighting can bring to the world of light planning and design. Turning towards Merleau-Ponty has allowed me to unravel the contradictory ways that residents feel about the urban, lit environment, which consequentially bears implications for how planners and designers should think spatially about lighting. As I have shown, the ways that different layers of lighting are distributed across spaces and different boundaries are (un)intentionally created across neighbourhoods bears implications for how residents experience the urban during the hours of darkness. The methodological approach to studying how people negotiate encounters with different light layers and luminous boundaries could prove valuable for planners and designers, as it renders the contradictory and often paradoxical relations that people have to lighting visible, and thus elevates details of the urban lit environment that are commonplace or taken for granted, giving them status. My hope is that the research I have provided can inspire planners and designers to employ a more sensitive approach to lighting cities, and researchers to explore new paths for investigating how people experience urban lighting in everyday life.

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