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# Becoming Crepuscular: rethinking the human relationship to day and night

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Becoming Crepuscular:  
rethinking the human relationship to day  
and night

A thesis submitted in fulfilment of the requirements for the award of the  
degree

Doctor of Philosophy  
from  
University of Wollongong

by  
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Department of Geography and Sustainable Communities  
Faculty of Social Sciences

2014



# Certification

I, Ben Gallan, declare that this thesis, submitted in fulfilment of the requirements for the award of Doctor of Philosophy, in the Department of Geography and Sustainable Communities, University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for qualifications at any other academic institution.

Ben Gallan

23 July 2014

# Declaration

Some small parts of the following publications, completed during my candidature, are reproduced in this thesis:

Gallan B. and Gibson C. (2011) 'New dawn or new dusk? Beyond the binary of day and night', *Environment and Planning A* 43, 2509-2515

Gallan B. (2013) 'Night Lives: Heterotopia, Youth Transitions and Cultural Infrastructure in the Urban Night', *Urban Studies* (online first), DOI: 10.1177/0042098013504007, 1-16

# Contents

Certification.....	i
Declaration.....	ii
List of figures.....	vii
List of boxes .....	ix
Abstract .....	x
Acknowledgments .....	xii
<b>Chapter 1 – Introduction.....</b>	<b>1</b>
1.1 Thesis introduction .....	1
1.2 Asymmetry: day and night, and light and dark, beyond human agency .....	2
1.3 Changing worlds, changing futures .....	6
1.4 Structure of the thesis.....	7
1.4 Context.....	10
1.4.1 Anthologies of night .....	11
1.4.2 Histories of the night.....	12
1.4.3 Contradictions.....	16
1.4.4 Creatures.....	17
1.4.5 Melbin’s night as frontier.....	18
1.4.6 Geographies of the night, light and darkness.....	19
1.4.7 But what of the day? .....	22
<b>Chapter 2 – Troubling the binary of day and night.....</b>	<b>25</b>
2.1 Binaries in geographic knowledge.....	25
2.2 Discovering the binary day and night.....	28
2.3 The binary of day and night.....	30
2.4 Daycentrism.....	32
2.5 Beyond the binary of day and night .....	39
<b>Chapter 3 – Lefebvre’s transduction: becoming crepuscular .....</b>	<b>41</b>
3.1 Why Lefebvre? .....	41
3.1.1 Alienation .....	42
3.1.2 Lefebvre’s urban emphasis .....	49
3.1.3 Utopia .....	52
3.2 Transduction: rigour in invention, knowledge in utopia.....	53

3.3 Becoming crepuscular.....	56
3.4 Transduction as method .....	59
<b>Chapter 4 - Crepuscular moments: the linear and cyclical day and night .....</b>	<b>63</b>
4.1 Linear versus cyclical time .....	63
4.1.1 The urban, modern day and night .....	65
4.2 Lefebvre's moments .....	68
4.3 Crepuscular moments.....	70
4.3.1 Sublime crepuscular moments.....	73
4.3.2 Solstice as cleansing .....	75
4.4 Crepuscular moments and the emergence of the virtual .....	78
<b>Chapter 5 – Crepuscular spaces: renderings of day and night in the production of space .....</b>	<b>81</b>
5.1 The production of space .....	81
5.2 Renderings of night in the night-time economy debate.....	83
5.3 Competing renderings of night in Wollongong and Sydney .....	87
5.3.1 Hassle free nights.....	88
5.3.2 Videoed violence.....	89
5.3.3 The night-time is the right time? .....	91
5.3.4 Sydney: a world class night-time economy?.....	96
5.3.5 A fatal rendering.....	97
5.4 Dispelling renderings .....	99
5.5 Producing crepuscular space .....	101
<b>Chapter 6 - Crepuscular lives: health, happiness and productivity.....</b>	<b>105</b>
6.1 The right to the city: what kind of humans do we want to be? .....	105
6.2 Monotonous and homogenous everyday life .....	107
6.3 Sleep: a contested practice .....	109
6.4 Crepuscular lives: towards increased segmentation of 24-hours.....	116
<b>Chapter 7 – Crepuscular technology: equipping the virtual object.....</b>	<b>119</b>
7.1 Lighting dominating the city.....	119
7.2 Remedying the damage: towards disalienating technology .....	127
7.3 A future with crepuscular technology .....	130



<b>Chapter 8 – Crepuscular politics: ongoing nocturnal and diurnal antagonisms.....</b>	<b>135</b>
8.1 Melbin’s frontier conclusions .....	135
8.2 Multiple rights in the right to the city.....	137
8.3 Ongoing antagonisms .....	139
8.3.1 Gendered exclusion and the night.....	139
8.3.2 Seeking recognition for the nocturnal city.....	144
8.4 A crepuscular right to the city.....	146
 <b>Chapter 9: Crepuscular rhythms: crepuscular thought in practice.....</b>	 <b>149</b>
9.1 Lefebvre’s rhythmanalysis and geographies of rhythm.....	150
9.2 Presenting rhythms in text.....	153
9.3 Rhythmanalysis of parenting.....	154
9.4 Rhythmanalysis and transduction: life strengthening thought .....	170
 <b>Chapter 10 – Crepuscular places: a site where the virtual and actual coexist.....</b>	 <b>173</b>
10.1 Day and night in the ‘big’ cities .....	173
10.2 Crepuscular places.....	174
10.3 Tekapo and Aoraki Mackenzie Dark-Sky Reserve: the context.....	176
10.3.1 Expanding Tekapo and Aoraki Mackenzie: the night-sky as a point of difference ..	181
10.3.2 Scepticism.....	183
10.4 Dark-sky tourism: subjective experience of the Aoraki Mackenzie Dark-Sky Reserve..	185
10.4.1 The night tour .....	185
10.4.2 The day tour.....	189
10.4.3 Tekapo’s diurnal, nocturnal and crepuscular sky.....	191
10.5 The disalienating night-sky .....	192
10.6 Aoraki Mackenzie Dark-Sky Reserve: what can we learn for the virtual?.....	195
 <b>Chapter 11 – Coda: in conclusion, an opening.....</b>	 <b>199</b>
 <b>References.....</b>	 <b>207</b>

<b>Appendices.....</b>	<b>229</b>
A: Time-geography.....	229
B: Metaphorical renderings of day and night .....	233
C: Implicit renderings of day and night.....	237
D: Crepuscular others.....	239

## List of figures

2.1 Artistic impression of the Blue Mile Vision's harbour front .....	34
2.2 Artistic impression of the Blue Mile Vision's beach walkway .....	35
2.3 Parking and driving restrictions during the night-time, Wollongong's South Beach.....	36
2.4 Day shelters permitted, night shelters restricted, Wollongong's North Beach .....	37
2.5 The Blue Mile, 7pm .....	38
3.1 Edward Hopper, <i>Nighthawks</i> .....	46
3.2 Edward Hopper, <i>Seven A.M.</i> .....	47
3.3 Edward Hopper, <i>Office at Night</i> .....	48
4.1 Automated streetlight 'tricked' into use during the day by dark clouds .....	72
4.2 Tourists congregate for Mindil Beach's famous sunset, Darwin .....	74
4.3 A 'moment' in the <i>Illawarra Mercury</i> : the solstice as cleansing .....	77
5.1 Video recorded violence in Wollongong, lower Crown Street Mall .....	90
5.2 Video recorded violence in Wollongong, upper Crown Street Mall .....	90
5.3 Front page, <i>Illawarra Mercury</i> : Wollongong's night-time 'shame' .....	92
5.4 Front page, <i>Illawarra Mercury</i> : reinterpreting Wollongong's night-life .....	95
5.5 Front page, <i>Daily Telegraph</i> : a fatal night out .....	98
5.6 Edward Hopper, <i>Early Sunday Morning</i> .....	102
6.1 Crepuscular Coruscant as science fiction dystopia .....	112
7.1 Thierry Cohen, Shanghai in the absence of artificial illumination .....	124
7.2 Thierry Cohen, the bright sky over darkened Sao Paulo .....	125
7.3 Edward Hopper, <i>Sunlight on Brownstones</i> .....	132
7.4 Edward Hopper, <i>Summertime</i> .....	133
8.1 Edward Hopper, <i>Automat</i> .....	143
9.1 Walt's first-day hearing test .....	157
9.2 Walt, New York hotel room, 3am .....	160
9.3 Fast asleep in Times Square, early evening .....	161
9.4 Knox napping with white noise .....	168
10.1 Welcome sign to the Aoraki Mackenzie International Dark-Sky Reserve .....	177
10.2 The view from Tekapo to the silhouetted observatory on Mt John .....	179

10.3 Low pollutant streetlighting, Tekapo's foreshore park .....	180
10.4 The Church of the Good Sheppard, Tekapo, illuminated by headlights of passing cars .....	182
10.5 Tekapo's sundial, the centre of the 'solar system', under construction, June 2013 .....	185
10.6 The sky over the night-time tour, transformed through photography, Mt John .....	188
10.7 Mt John Observatory during the day .....	190
10.8 Wollongong's night-sky .....	191
10.9 Tekapo's crepuscular sky .....	193
10.10 No parking overnight, Lake Tekapo's shore .....	196
11.1 The Oxford 'before', circa 2004 .....	200
11.2 The Oxford 'after', 2012 .....	201
D.1 Crepuscular bats of Austin, Texas .....	240

## List of boxes

2.1 The Blue Mile Vision: an example of daycentric urban planning .....	34
3.1 Edward Hopper: capturing consciousness of alienation in art.....	46
4.1 Borges: <i>The History of the Night</i> .....	67
5.1 The vacant day .....	102
6.1 Dystopian renderings: total alienation from day and night.....	112
7.1 Cities without light .....	124
7.2 Living with light.....	132
8.1 Women's safety in becoming crepuscular .....	143
9.1 Power-tools ordinance.....	154
9.2 Advice from a nurse.....	156
9.3 Jet lag, New York.....	159
9.4 Just the two of us.....	162
9.5 The midnight wakeups.....	164
9.6 Morning people/Night people.....	164
9.7 They'll sleep well tonight .....	166
9.8 Bats at the beach.....	166
9.9 White noise.....	167
9.10 Sharing a room .....	169
9.11 Segmented days and nights.....	170

# Abstract

This thesis is a critical geographic study of the human relationship to day and night. Historical and geographic analysis of one of these two categories – night – has accumulated in the last decade. Such work has explored the diverse meanings and experiences of night, and how they have changed with modernity. In the context of such research on night, this thesis contends that a closer consideration of the binary of night *and* day is needed. Humanities scholars and social scientists have critiqued binaries since the critical, poststructuralist and feminist turns of the 1970s and 1980s. Thus far, however, the binary of day and night has been remarkably absent from such critiques. This thesis responds accordingly, and provides a new means for theorising the binary of day and night. I develop a ‘crepuscular’ framework as a means to unsettle the seemingly rigid binary of day and night. Crepuscular literally means to be active at dawn and dusk, distinct from the more familiar categories of diurnal (active during the day) and nocturnal (active during the night). In this thesis, crepuscular is a term that signals an agenda to trouble and to extend beyond the dualistic categories of night and day, the nocturnal and diurnal.

An emphasis on the crepuscular is developed through Lefebvre’s theory of transduction. Transduction is a method to propose ‘virtual’, hypothetical futures. Imaginative, utopian futures are seen as increasingly important in the context of current economic and ecological crises. Such conversations tend to speculate on coping with instability, insecurity and uncertainty. This thesis departs instead from a focus on the comparatively stable and eternal cycle of day and night. Beyond the binary of day and night I explore a notion of *becoming crepuscular*. Becoming crepuscular is a projection of how future encounters with day and night could be thought differently. In becoming crepuscular, this thesis considers what we ultimately might want day and night to mean in our everyday lives. Transduction ensures that such explorations remain rigorous and embedded in existing examples of the material world. I complement the development of transduction with other elements of Lefebvre’s intellectual corpus including the production of space, critique of everyday life, rhythm analysis and the right to the city. These elements compose an overall Lefebvrian sensibility. A Lefebvrian sensibility seeks to make contributions that are both intellectual and grounded in the experience of everyday life.

This thesis is *primarily* conceptual in that it seeks to retheorise and refocus existing scholarship that is either explicitly or implicitly concerned with day and night. Conceptual advances are illustrated via a diverse mix of examples gleaned from everyday life: revealing divergent

temporalities of day and night between linear and cyclical time; debates about the night-time economy; bringing everyday behaviours, practices and technologies such as sleep and lighting into a specific discussion about day and night's meaning in our lives; exploring gendered exclusion in the night and calls for the legitimization of nocturnal subcultures; an autoethnographic analysis of the changing experience of day and night for new parents; and exploring the rise of place-based dark-sky preservation. None of these examples constitutes a single case study or central empirical core. Rather, they are woven as examples into a structure that stems from transduction as method. In this structure, the journey from critique of the actual towards the 'virtual' horizon takes place through a sequence of encounters with the crepuscular. Conceptual explorations are fleshed out through literature reviews, media analysis, autoethnography, artistic and literary texts and a digital research repository, facilitated through social media.

The cycle of day and night is one of the most dependable aspects of planet earth and has played an integral part in the evolution of cellular life. We are, in many ways, made of day and night. This thesis provokes further consideration of how we want that making to define our future life. In developing a crepuscular perspective this thesis concludes that day and night are full of possibilities for reimagining everyday life.

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# Chapter 1 – Introduction

## 1.1 Thesis introduction

This is a thesis about day and night. A thesis about how we understand day and night, how our experiences have changed with the advent of modernity, and where their meanings are open to contestation. Above all, this is a thesis that makes an argument for how we might think about day and night differently in the future. Day and night are two halves of a pervasive, seemingly insurmountable binary. This thesis is concerned with unsettling that binary towards political and cultural ends.

To move beyond the binary of day and night I develop the notion of the ‘crepuscular’. Crepuscular literally means to be active at dawn and dusk, different to the more familiar categories of diurnal (active during the day) and nocturnal (active during the night). Humans are recognised as diurnal, bats nocturnal, wombats or moths are said to be crepuscular. The naturalness of such assumptions, however, comes into question with the emergence of urban, capitalist society. Have humans superseded diurnalism? And if so, have other configurations of our relations with day and night become normalised? Are there alternatives? This thesis pursues a notion of *becoming crepuscular*, not merely as a reclassification based on the observable traits of our species, but as a means to reinvigorate the way we think about day and night, to contest uncritically embraced notions of day and night and to suggest different future possible relationships to day and night.

The cycle of day and night has been a timeless concern of human enquiry. The evolution of cellular life is testament to the earth orbiting the sun and our periods of darkness and light across the 24-hour cycle (Bjorn 1976). Almost all living organisms have evolved physiological and behavioural rhythms in response to such a predictable and enduring cycle (Connor and Gracey 2011). Day and night are, quite simply, part of our bodily constitution. And yet, throughout the ages we have pondered day and night’s origins, duelled with their antagonisms – of light and dark, life and death, good and bad – and imbued them with many diverse and contradictory meanings.

This thesis has three key foundations. First, within critical geographic thought. Since the critical Marxist and feminist turns of the 1970s, geographers have targeted exploitative agendas in the pursuit of social justice. Like other humanities and social sciences, geography is critical too, in the way it reframes ontologies. Discussions of day and night *are* discussions of geography: of earth systems, of cities, of humans and their fundamental relationship to the external world.

All these play out in unique ways across space, place, time and rhythm. This thesis is critical in that it questions how we understand day and night and provokes new consideration of that binary. Second, this thesis is deeply informed by the work of Henri Lefebvre. In particular, this thesis follows Lefebvre's concept of transduction which is a method to progress conceptually and practically from the world as we know it, towards imagined future worlds. In reconsidering day and night, I complement transduction with Lefebvre's ideas on everyday life, alienation, utopia, the right to the city, production of space, moments and rhythm analysis. Third, the many observable meanings of day and night are inherently contradictory. To write, think and talk about day and night enrolls diverse and disparate conceptualisations. This thesis proposes working with this diversity, bringing disparate dialogues together and embracing their contradictory qualities.

From these foundations this thesis aims to address three further concerns. First, to subject the binary of day and night to deconstructive critiques, as previously brought to bear on conceptual binaries such as man/woman, white/black, culture/nature and human/nonhuman. Second, throughout this thesis I aim to interrogate many different *renderings* of day and night. As one of the most ubiquitous aspects of the earth, day and night is often taken-for-granted. Day and night's cosmological basis, in many ways, leaves it seemingly ontologically secure. What this means for scholarly analysis of day and night is that they often form a backdrop for discussions of class, politics, identity and the rhythms of city life, without being explicitly interrogated in their own right. That day and night can have many different renderings – metaphorical, historical, political, artistic, spatial, temporal and cosmological – is not cause for concern, but rather a productive and fertile set of contradictions with which to work. Third, through revealing day and night as an untroubled binary and limiting orthodoxy, I argue that rethinking day and night has radical potential to change everyday life and the cities in which we live.

## 1.2 Asymmetry: day and night, and light and dark, beyond human agency

This section discusses the limits of human agency over day and night as a prelude to subsequent explorations of possible crepuscular futures. Agency refers to the ability of objects, humans, nonhumans and events to exert influence over each other (Gregson 2005, pp. 21-38). Such influences may be purposeful or intentional, others may be affective or unintentional, such as a consequence of proximity (Pile 2010).

Adding to the already heavy discursive baggage accompanying night and day are the material qualities of light and darkness. Certainly the sun comes up, the sun sets, we grapple with light

and darkness as a fact of life – but what do we make of the agency of light and darkness, or how do humans seek to deny that agency? In ancient Roman culture there existed ten periods of night, varied in length and attributed to either human action or celestial movement. Medieval Britain too had sunset, shutting in, candle lighting, bed time, midnight, the dead of night, cock crow, and dawn (Ekirch 2005, p. 137), as lives intersected with cosmological and cultural renderings of day and night. One of the fundamental ways in which humans have negotiated the agency of light and darkness has been our imposition of concepts of time over the earthly process of dawn, dusk and noon. By the industrial revolution, time zones were standardised and a geographically varied sense of time generated by observing noon at a longitudinal location on the earth's sphere was replaced by a segmented map of time across day and night (Cronon 1992; Glennie and Thrift 2009; May and Thrift 2001). Implementation of standardised time zones were necessary to enable the engines of industrial capitalism to move smoothly and predictably – trains especially, but later planes, e-mails, freight shipments, and financial transactions in the time-compressed global economy. The net effect was to impose a Western conception of linear time even though many cultures throughout history have had quite different conceptions of time (Thrift 1977).

There is a separate, but related, thread of biophysical research on light and darkness, as qualities of day and night, both with their own agency. Such conceptions inform detailed ecological and human physiological studies of circadian rhythms, melatonin, and vitamin D deficiency (Bjorn 1976; Brody 2011; Rosato 2007). Time zones are examples where humans have sought to deny the agency of day/night, light/darkness. Physiological factors such as circadian rhythms and vitamin D deficiencies highlight how day/night, light/darkness exert considerable agency over our bodies and health. Such examples point to the importance of theorising agency as it relates to day and night. Night and day appear as utterly dependable, stable elements of both earth and the universe. Yet, exactly how humans encounter and respond to day and night warrants further unpacking. This is especially so given the recent flourishing of more-than-human and relational thinking in the humanities (for example Bennett 2010), which seeks to excavate more nuanced and entangled conceptions of human-nonhuman relations.

Nevertheless, Nigel Clark (2011) recently took issue with how far more-than-human, relational thinking has been pushed in the social sciences and humanities. There is value in exploring those elements of nature that respond to our influence and, in turn, of those that influence our daily lives. Clark's (2011, p. xxvii) argument is that this is no longer controversial. Rather, researchers in the social sciences and humanities should 'push through this zone of inter-

mixture of human and nonhumans and press on into regions where we are absent' (Clark 2011, p. xvii). This, for Clark, means a return to both physical sciences and also a consideration – both philosophically and practically – of the elements of the earth that provide, or have the power to withdraw, the very conditions of life on which we depend. Such earthly elements, I contend, include day and night.

In a world increasingly concerned with the human impact on climate, science is revealing that the earth has been susceptible to rapid cooling and warming processes throughout its long geological history, devoid of human impact. Enlightenment social theory and philosophy leave us in a predicament for adequately dealing with this realisation. Over 200 years ago, for example, when Kant realised the full consequence of geological time – that the earth exists in a universe beyond human comprehension, seeing periods of species extinction, and monumental natural catastrophes – his response lay in 'bolstering the human subject' (Clark 2011, p. xii).

Instead of triumphing human agency, the task is instead to come to terms with a planet that 'constantly rumbles, folds, cracks, erupts, erupts' (Clark 2011, p. xiv). Such a perspective begins with human vulnerability, rather than a perspective of power, understanding the 'social' as a more heterogeneous mix of not only humans, but other-than-human things (Latour 1993; 2005). The 'things' that surround us in the environments we inhabit do not merely do what they are told, but have their own agency, their own purchase and influence over human life. A consideration of our relationship to the things and beings around us allows insight into how the worlds around us are made and assembled.

Yet, pushing things further, 'the fearsome capacity of the earth to undo our sustaining connections and footings ... serves to remind us that all is not equal in the world of mixing and mobilizing things' (Clark 2011, p. xvi). Clark (2011, p. xvi) cites the ancient Icelandic parliament – the Althing – located on the fault line where Atlantic and European tectonic plates meet as 'more vulnerable to the geo-tectonic movements beneath its foundations than tectonic plates would be to any motions passed in the parliament'. For Clark (2011, p. xvi), 'there is an asymmetry here: the impression that deep-seated forces of the earth can leave on social worlds is out of all proportion to the power of social actors to legislate over the lithosphere'.

Beyond aspects of our worlds that are conducive to human recomposition, the crucial and pressing concerns of the world – in light of climate change and an increased incidence of catastrophic environmental disasters – compels more substantial consideration of the mechanisms of the earth and universe 'irrespective of our influence' (Clark 2011, p. xvii). A

tension here is that social scientists are in many ways taught to be sceptical of the work of physical scientists, and the false precept of a 'pure', 'real' world outside of human influence. As Haraway (1988, p. 576) has argued:

From the strong social constructionist perspective, why should we be cowed by scientists' descriptions of their activity and accomplishments; they and their patrons have stakes in throwing sand in our eyes. They tell parables about objectivity and scientific method to students in the first years of their initiation, but no practitioner of the high scientific arts would be caught dead *acting* in the textbook versions.

The critique of the scientific method lies in the doubt that any human actor can remove themselves entirely from any work – to make it truly objective, rather than being subjectively implicated. So why at a stage where humans are beginning to realise the way they are implicated in the world's climate, should an agenda seek to reposition the earth, and earthly forces as autonomous? In Clark's (2011, p. xix) words:

We do not yet know, cannot know, precisely what human-induced climate change has in store for us. Or what the ordinary, ongoing rhythms and movements of the earth will deliver us into. But it is fairly clear that most of our current living arrangements, our patterns of settlement and provisioning, have not evolved with enough attention to natural variability and volatility. And that puts billions of us – all of us, in fact in a globalized world – in a very precarious position.

Later in this thesis, I will suggest that aspects of day and night can be productively rethought as conducive to human composition and recomposition. Nevertheless, I want to stress at the outset the asymmetrical nature of day and night on a cosmological scale. Day and night existed long before humans and will exist long after we are gone. Day and night are, and will remain, a cycle that lies far out of reach of the limits of human agency. Yet such an acknowledgement is not intended to be defeatist. Nor am I suggesting a slide back into some troubling notion of environmental determinism<sup>1</sup> that critical geography left behind many decades ago.

Recognising those elements of day and night that will remain as they are irrespective of human influence gives us a vital connection back to temporalities that are erased in the modern, urban notion of day and night (as discussed in Chapter 4). Respect for an asymmetrical day and

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<sup>1</sup> Environmental Determinism is a 'type of reasoning that holds that the character and form of a society, culture or body can be explained by the physical conditions within which it has developed' (Hanson 2009, p. 196).

night can help to provide coordinates for more productive thinking about the human relationship to day and night, and by extension, for the modern city and everyday life.

An approach to retheorise day and night benefits from viewing agency as entangled, but also asymmetrical. It helps explain the reluctance to interrogate day and night to the extent other binaries have been critiqued. It is difficult to resolve day and night's immensity within a notion of relational frameworks. Day and night created and sustains life as we know it (Bjorn 1976).

The cycle is irreducibly constant, and yet, how do we begin to approach rethinking or evaluating anew such an immense part of our cosmos? Asymmetry points towards redefining human relationships to the physical world, remaining mindful of the limited purchase humans have in the grand scheme of things.

The constancy of day and night offers a different framing for a world in which we are increasingly finding ourselves implicated. Whereas Clark wills us to think about the volatile matter that the earth is composed of – and the ways it folds, cracks, burns, floods and erupts – this thesis considers the earthly forces of day and night that appear to be stable. We can depend utterly on the cycle of day and night, and it is precisely this dependability that can underpin discussions on future possible configurations of the city and everyday life. From the outset, then, this thesis respects the asymmetrical relationship between humans and the earth's cycle of day and night. I seek to redefine that relationship in what follows, but in so doing maintain and work with such respect for the cycle of day and night that persists far beyond the purchase of human agency.

### 1.3 Changing worlds, changing futures

We can never know the future. And yet, events in recent years have seemingly 'raised the stakes' of uncertainty. The world is currently facing the spectre of catastrophic climate change, and widespread economic and political instability. Climate science projects increased frequency and severity of extreme weather events (Intergovernmental Panel on Climate Change 2012). This creates anxieties around adaption and mitigation. At the same time, since 2008, the global financial crisis has raised similar uncertainty and anxiety around the economy and austerity measures. People are uncertain about climate, about jobs, about futures.

Such uncertainties, around ecological and economic crises prompt scholarly reflection, as geographers, and others, seek to ontologically reframe our response to the volatility of earth systems (Clark 2011), the rise of the Anthropocene (Head and Gibson 2012), and sustained economic crisis (Harvey 2010). Instability has reinvigorated the Left critique of capitalist cities,

and academics and activists are increasingly asking deeper questions of what exactly cities are for – who and what should our cities represent (Brenner et al. 2012; Chatterton 2010)?

Imagination and desire are resources from which to envisage alternative futures – to make that which seems impossible, something to which we strive. Merrifield (2009, p. 386) has prompted ‘politics more than anything else needs the magical touch of dream and desire, needs the shock of the poetic’.

Social scientists and humanities scholars are increasingly wrestling for a distinctive speaking position on issues such as financial instability or climate volatility. They are seeking to unsettle known truths and replace gradualist or incremental conceptions of future change with anticipations framed around ‘not knowing’, instability, uncertainty and doubt (Gibson et al. under review). And productively, the task here for critical scholars is to contextualise what possibilities might arise from such doubt (Yusoff and Gabrys 2011). This thesis aligns with such speculative thinking, yet in contrast, speculation and projection are taken from a notion of day and night which is inherently *stable*, as one of the most dependable factors of earth, rather than a source of impending catastrophe. As we try to come to terms with uncertainty and doubt, this thesis proposes using day and night to imaginatively unlock different coordinates for urban life.

I return to these utopian themes in Chapter 3, where I discuss how Lefebvre’s ideas of changing futures developed out of similar contexts of uncertainty and instability.

## 1.4 Structure of the thesis

This thesis is primarily conceptual. As such, it differs in some ways from a conventional human geography thesis. There is not a designated literature review chapter but a series of conceptual explorations that pursue different dimensions of the overall agenda of *becoming crepuscular*. My research has not entailed an extended period of field work but rather a sequence of conceptual explorations, bringing a crepuscular, Lefebvrian, perspective to diverse and eclectic debates about: the difference between linear and cyclical time; the night-time economy; the practice of sleep; lighting technologies; gendered exclusion from the night; activism for night-based cultural pursuits; the changing experience of day and night when parenting newborns; and the emergence of dark-sky preservation and reserves. Such conceptual explorations are fleshed out in thematically organised chapters that are each an amalgam, combining literature reviews, media analysis, literary and artistic texts, autobiographical diary notes, and a digital research repository, facilitated through social media (further details of the mix of sources can be found in Chapter 3).

The remainder of this chapter contains what is closest in the thesis to a traditional literature review. It outlines the context of prior research on night (and day). This context is divided into a discussion of anthologies, histories and geographies of the night, including a close reading of a seminal text, Murray Melbin's *Night as Frontier* (1987). This contextual discussion surveys what literature already exists as a foundation for a thesis on day and night. In this literature there remains a disproportionate focus on night, with day gaining comparatively less critical, scholarly attention.

I seek to remedy this oversight in Chapter 2. In reviewing the important work of geographers in critiquing binaries, I extend discussion to a consideration of the binary of day/night. How might we think differently of day and night, had they been an earlier part of the critical geographic project? In this chapter I propose the notion of daycentrism, to support a critique of how the 'day' is legitimated and normalised within society and scholarly work, as well as where day and night are restricted from shaping human life differently. Chapter 2 ends by provoking that we move beyond the binary of day and night through a crepuscular perspective.

Chapter 3 focusses on one thinker, and a method, for pursuing an alternative crepuscular horizon: Lefebvre's theory of transduction. I outline Lefebvre's enduring emphasis on alienation, the urban, and utopia and how they have informed the development of this project. I develop Lefebvre's notion of transduction as the philosophical, political and methodological basis of the thesis. Transduction is a theoretical device for imagining future everyday life and cities in a dialectic around the possible/impossible. I develop the idea of *becoming crepuscular* as a radically different rendering of the day/night binary.

In exploring the notion of becoming crepuscular, the remaining chapters each pursue a particular crepuscular theme.

Chapter 4 theorises crepuscular *moments* through Lefebvre's theory of moments. This chapter highlights how the human relationship to day and night is most often theorised as a teleological notion of progress from the day into ever-increasing activity in the night. In this chapter I argue how moments offer a temporal break with this linear narrative of day and night.

Chapter 5 focusses on crepuscular *spaces*. I review Lefebvre's (1991) theory of the production of space before highlighting how different renderings of day and night become implicit in conceptualisations of space. To illustrate the idea of crepuscular spaces I review the competing



renderings of night (and day) that exist in night-time economy debates in the Australian cities of Sydney and Wollongong.

Chapter 6 and 7 then explore how everyday practices and objects intersect with the human experience of day and night. Chapter 6, *crepuscular lives*, draws on debates about sleep. In so doing, I argue that the contested nature of sleep – how, when, and where we sleep – reveals an ongoing negotiation of how we structure our days and nights. I ask what kinds of lives we want to live in the context of becoming crepuscular. Chapter 7 instead explores a notion of *crepuscular technology*. I draw on the historical development of industrial lighting and then discuss social movements seeking to restore darkness in an over-illuminated world. Chapter 7 draws out examples of technology that represent destructive or harmonious relationships with day and night.

Chapter 8 turns attention to a notion of *crepuscular politics*. In so doing, I review how themes of gender and subcultures intersect with access to day and night. The examples in this chapter reveal ongoing political issues that disrupt free-reign utopian visions of future days and nights.

Chapter 9 then details my autobiographical experience of parenting. Deploying insights from Lefebvre's (2004) theory of rhythmanalysis, this chapter explores the ways in which day and night can be both thought and lived. This chapter builds on the provocations of *crepuscular spaces, moments, lives, technology and politics* to examine the instances where they resonate with everyday life through *crepuscular rhythms*.

Chapter 10, *crepuscular places*, is a case-study of the Aoraki Mackenzie Dark-Sky Reserve in the South Island of New Zealand. Like Chapter 9, *crepuscular places* explores where the conceptual discussions of this thesis play-out in a contemporary example. The focus of the chapter is a visit to a place in which a radically different day and night is envisaged by residents and stakeholders that, although utopian, remains constrained in some ways by concerns of the 'real world'.

As this thesis is primarily conceptual, seeking to bring a critique of the day/night binary to many diverse contexts, there is also a significant amount of material placed in boxes and appendices. The boxes appear in the main text. The majority of the boxes (with the exception of 2.1 and 9.1-9.11) explore literary and artistic renderings of day and night. Geographers have regularly utilised artistic and literary sources (Hawkins 2013; Saunders 2010). Such interest in diverse mediums for analysis continues to resonate as geographers increasingly focus on interdisciplinary research and practice (Hawkins 2013, p. 65). Using literature and artistic

examples is not so much a search for 'truth' or 'accuracy' but a means to highlight uncertainty and future possibilities (Saunders 2010, p. 440). The reader will be prompted as to where the appendices are most relevant to the thesis.

## 1.4 Context

The meaning of day and night is an age old concern. The cycle of day and night is perhaps the most predictable aspect of the planet we call home, and yet has continuously been the subject of speculation across cultures and continents. By literal definition, day and night is simply the presence and absence of light and darkness across the earth's rotating 24-hour cycle as it orbits the sun. From the biblical to the mythical, from the philosophical to the astronomical, countless cultures and paradigms have gnawed at the meanings of day and night.

In the famous Christian account of Genesis, God said "let there be light' and there was light. God saw that light was good, and he separated the light from the darkness. God called the light 'day' and the darkness he called 'night'" (Genesis 1: verses 3-5). In the biblical account, there lies a fundamental antagonism between the good of the 'day' and of 'light', and the bad or evil association with the 'night' and 'darkness'. In Corinthians 2: verses 6:14 Paul asks 'For what fellowship hath righteousness with unrighteousness? And what communion hath light with darkness?' If there is a fundamental difference between good and bad in the world, this is mirrored in the cycle of light and darkness. Moreover, day and night is also described as forming an essential essence of being human (within Christian theology): 'You are all the children of light, and the children of the day: we are not of the night, nor of darkness' (Thessalonians 1 5:5; See also Koslofsky 2011 p. 10).

Perhaps less familiar, for the Maori of Aotearoa/New Zealand darkness was the result of the sky pressing down upon the earth (Dewdney 2004, p. 10). These two entities, the sky and the earth, were personified by the gods Rangi and Papatu-a-nuka, the other 70 Maori gods were their children. The sky and earth were pushed apart by the 70 gods, by standing one on top of the other's shoulders. This split the darkness, letting in light to create the first day and separate from the initial void of darkness.

Further examples are myriad. When Galileo looked into space with his telescopes at the beginning of the 17<sup>th</sup> century, what he saw confirmed heliocentric theory – the universe did not revolve around the earth, but that the earth revolved around the sun. This discovery profoundly defined the cycle and scale of day and night and had significant impacts for the social standing of science and religion. Different interpretations layer our contemporary

understandings of day and night. On the most basic level, the earth is tilted at approximately 23.5 degrees, which causes the variation of day and night, with relatively little fluctuation at the equator and prolonged periods of seasonal light and darkness at extreme latitudes. Yet in complex ways, day and night come to mean different things in different circumstances.

Take as an example the first week of April 2011, an early period in the researching and writing of this thesis (Gallan and Gibson 2011). In this single week the International Dark-Sky Association celebrated International Dark-Sky Week, an annual event raising awareness of artificial lighting rapidly destroying the dark-sky at night. Meanwhile, in post-tsunami Japan, debate emerged about introducing unusual daylight-savings regulations – forcing companies to shift operating hours for workers – to relieve the stress on the nation’s crippled power infrastructure. Also in the very same week in Australia and New Zealand, Operation Unite – a trans-Tasman police task force aimed at stamping out ‘antisocial’ drunken behaviour during a series of night-time blitzes – scheduled its annual launch. On the surface, these three events – a community organised environmental awareness campaign, a post-disaster relief effort, and a police taskforce – have almost nothing in common. What unites these seemingly disconnected examples across three continents is the way each is about what day and night mean, how they are regulated, and how they in turn shape our everyday lives. International Dark-Sky Week challenges the human impact on the ecological landscape of the night-sky. In this rendering, excessive lighting practices are encroaching on the domain of the night. Post-tsunami Japan’s problem was with energy supply, hence the suggestion to intervene in the human experience of day and night, in the rhythms of production and reproduction, to alleviate peak demand and overloaded infrastructure. Meanwhile, police forces in Australia and New Zealand saw drinking and drunkenness, at night, in the major entertainment districts of cities as a significant social problem. The rendering here is to intervene with law and order to sanitise unruly night-life districts. In academic research too, the ‘night’ can be considered many things: a more convivial time than the structured day (Melbin 1987); with the potential to reorder urban space (Williams 2008); and a temporal realm in which to ‘escape’ the dominant city (Amin and Thrift 2002, pp. 119-123). Each in their own way depends on a notion of what day and night are, and what they should ideally be.

#### 1.4.1 Anthologies of night

It was difficult to know where to begin documenting and disentangling such diversity. Many of the examples of scholarly enquiry into day and night I bundle together in what I term *anthologies of night* (Alvarez 1995; Bogard 2008; Bogard 2013; Dewdney 2004). These sources

outline the numerous ways that humans have tried to make sense of the night. They range from examples of creationist mythologies to children's fairy tales (Dewdney 2004), from the evolving modern science of sleep to attempts to order the night in cities (Alvarez 1995), and to the journey of uncovering darkness, increasingly foreign to the contemporary experience of an over-illuminated world (Bogard 2013). Anthologies of the night do not ignore day – because they acknowledge how day and night are understood in relation to each other – but they nevertheless focus their discussions thematically only on the night<sup>2</sup>.

In such anthologies of night, the lineage of day and night's transformation in the modern world is often romanticised, as a commonality of human existence across hemispheres, continents, nations and cultures. As Dewdney (2004, p. 2) has said, 'deeply, intimately, we are shaped by night. It is part of us. The rhythms of our bodies, the ebb and flow of our moods, the very pulse of our minds, are vitally linked to the daily cycle of light and dark'. Although, in one sense part of a collective culture of humanity, such texts point out how day and night can signify drastically different things in different parts of the globe, so that 'every landscape, every geography, every place on our planet has its own unique flavour of darkness' (Dewdney 2004, p. 3). From the outset then day and night is both universal, and simultaneously highly particular and local.

Anthologies of the night are often nostalgic and reflective. Alvarez (1995, p. 3) offered a lament for the night when he claimed that: 'In the last hundred years we have lost touch with the night'. Anthologies celebrate the night by attempting to bring it into clearer focus, to promote it to their readers, and to prompt a social and cultural revaluing of it (Bogard 2013). This thesis inherits from such work a sensibility towards re-evaluating the night. But critically, I delve deeper into its antonymic other – the day – and their positioning together in a hierarchical binary.

#### 1.4.2 Histories of the night

Historians in particular have taken to the task of documenting the meaning of night (and its relation to day) (Baldwin 2012; Ekirch 2005; Koslofsky 2011; Palmer 2000). Such texts are concerned with how ideas of day and night have changed over time, how these have been shaped by moral and scientific developments, drastically altered by technological innovations and yet have retained some characteristics – such as the night being associated with disorder –

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<sup>2</sup> Each chapter in Dewdney (2004), for example, is focussed on an hour of the night from 6pm-5am.

across centuries and continents. The modern world has shaped, and in turn been shaped by, our experiences of day and night.

In his history of the night in the pre-modern Western world, Ekirch (2005) dispelled the presumption that night was a period of little significance. The night contained more than just crime (Reynolds 1998) and witchcraft (Kors and Peters 2001). In pre-modern parlance the night-time was seen as a distinct 'season' that resisted day's sensibilities, and defied society's norms and habits. Extending beyond the familiar aspects of night such as fear, curfews and night-watchmen, Ekirch focussed on the intimate empowering aspects of night as a time of self-awareness, intimacy and subjective reflection. The dark of night has,

for the greater part of humankind, afforded a sanctuary from ordinary existence, the chance, as shadows lengthened, for men and women to express inner impulses and realise repressed desires both in their waking hours and in their dreams, however innocent or sinister in nature. (Ekirch 2005, p. xxvi)

Ekirch highlighted historical facets of the night-time that are now overlooked, and practices erased from everyday life. One such example (that will recur throughout the thesis), is the long forgotten pattern of segmented sleep. Prior to industrialised lighting, a night's slumber was split into 'first' and 'second' sleeps<sup>3</sup>. The intermittent time was spent with family, social rituals, visiting neighbours, reflecting on dreams and having sex (Ekirch 2005, pp. 300-323; see also Ekirch 2001). Such nocturnal activity disrupts assumptions that humans were essentially diurnal in pre-modern times. At the core of Ekirch's (2005, p. xxix) work is the belief that night should be understood on its own terms, and researched in its own right. For Ekirch (2005, p. 339), 'it is not difficult to imagine a time when night, for all practical purposes, will have become day – truly a twenty-four/seven society in which traditional phases of time, from morning to midnight, have lost their original identities'. Night is invaluable, he argued. To risk losing the night is to risk losing a 'vital element of our humanity' (Ekirch 2005, p. 339).

With a similarly European focus, Koslofsky (2011) explored early modern<sup>4</sup> ideas about the night. His argument focussed on 'nocturnalization', which he defined as the 'ongoing expansion of the legitimate social and symbolic uses of the night' (Koslofsky 2011, p. 2). Koslofsky traced how aspects of everyday life extended into the night alongside a symbolic

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<sup>3</sup> The time in between slumbers would usually be around midnight, depending on when one went to bed.

<sup>4</sup> Defined by Koslofsky as 1450-1750.

shift in night's meanings. The night in religious, spiritual and political imagery, came to be incorporated with positive connotations over the early modern period:

Darkness was slowly transformed from a primordial presence to a more manageable aspect of life, acquiring in the process new associations within mysticism and popular devotion, political display, respectable sociability and learned exchange. In each of these areas nocturnalization encompassed both the triumph over darkness and the deliberate evocation or manipulation of it. (Koslofsky 2011, p. 278)

Baldwin (2012) drew a tighter empirical, temporal and spatial focus in his research. His aim was to document the rich and varied experience of the night in the 'nocturnal cities' of North America (for example, New York City and Philadelphia) between the years 1820 and 1930. This period was significant for Baldwin, as it marked the period in which lighting became ubiquitous in cities. Baldwin (2012, p. 200) highlighted how lighting innovation enabled new forms of labour, sociality and mobility in modern American cities:

Railroads, trolleys, newspapers and steel mills now ran twenty-four hours a day, ensuring that somebody had to be traveling through the streets at any hour. Saloons, restaurants and theatres stayed open later, and a few never closed. Teenagers and young adults stayed up late reading, studying and socializing.

However, Baldwin cautions on drawing a simple causal link between increased lighting and increased activity. For Baldwin (2012, p. 13), 'It was clear by the 1920s that artificial light had failed to 'turn night into day''. The changing experience of the nocturnal city played out differently across class, gender, race and geography. For example, young men were able to enjoy the night whilst campaigns sought to remove women and children from the night through curfew and labour legislation (Baldwin 2012, pp. 189-94). So too, the legacy of nights in the pre-industrial, pre-modern and even ancient worlds continued to influence the 'nocturnal' cities of the 19<sup>th</sup>, 20<sup>th</sup> centuries and beyond. In Baldwin's (2012, p. 203) words: 'night survives as a potent influence on human life'.

Ekirch, Koslofsky and Baldwin all documented night's changing meanings and how the night has been negotiated in the modern world. Enlightenment dispelled the mystical and superstitious renderings of the night, and illumination allowed greater human activity after dark. No matter how intensely the night was illuminated, or how much its meanings changed, a total transformation to nocturnal activity was still questionable: 'Whether the human mind and body could ever adapt to a nocturnal schedule is a question that cannot be answered by

historical evidence and has proved challenging even for researchers in medicine and psychology' (Baldwin 2012, p. 203; cf. Koslofsky 2011).

Taking a different tack, Palmer (2000) explored the enduring qualities of night between medieval and modern times. Over this timespan, night was initially represented religiously and superstitiously as a realm of darkness and a time for deviance to flourish. But through the increasing secularisation of societies, and especially in cities, the night came to represent those marginalised by bourgeois culture and capitalism. Palmer evoked the night as a metaphorical realm, a time and space for histories excluded from the day. The day was, conversely, the 'logic and commerce of economic rationality and the structures of political rule' (Palmer 2000, p. 17).

The aim of Palmer's (2000, p. 6) project was to garner a meta-narrative for marginality and oppression:

In choosing to place transgression at the center of historical analysis, and in plotting its changing contours as a night travel through the ages, I was of course consciously seeking out the actual and metaphorical place where marginality might best be both lived as an experience and socially constructed as representation .

Palmer's account is not then a 'history of the night' as we might consider Baldwin (2012), Ekirch (2005) and Koslofsky (2011). It is instead a Left-critique of dominance and subordination as they relate to the social relations of production; an exploration (both in 'actuality' and 'representation') of cultures of the night that are both dissident and alternative, whilst defeated and downtrodden. Palmer's framework blends the historical materialism of Marx with Foucault's decentering of power. Palmer paid attention to the 'night' rendered as oppressive, exploitative and unjust, akin with conventional Marxist analysis. Meanwhile from a Foucauldian perspective he acknowledged that cultures of darkness, those who inhabit the night, were also subjectively constituted, a rendering of 'night' put towards liberating means.

No matter how eclectic the night has been historically, such histories of the night reveal many similarities of nocturnal meanings and activities. Ekirch (2005, p. xxvii) argued that the night, although characterised by forgotten intricacies, had more similarities than difference across the pre-modern world. The negative association of darkness has endured (see also Edensor 2013a). So too, fears and limitations imposed by darkness were shared across many places and cultures. Together, *histories* and *anthologies* of the night sketch a long transition from the

advent of fire and flame, through the biblical and ancient worlds, to the industrial revolution and contemporary urban experience and meaning of day and night.

### 1.4.3 Contradictions

When we say 'night', we can mean a diverse range of things. In this way, many renderings of the night are antagonistic or contradictory. Such contradictions are manifest throughout the work of Baldwin (2012), Ekirch (2005), Koslofsky (2011) and Palmer (2000). For Palmer (2000), the night is simultaneously ordered and disordered. The darkness of night provides anonymity and seclusion for those wanting to engage in behaviour beyond surveillance – be that licit or illicit, normal or deviant. The long association of the night with disorder has seen a number of practices that have sought to increase surveillance and impose order upon the night. These include institutions such as night-watchmen, the legal requirement to carry a candle or lamp light after dark, and more recent examples such as CCTV networks. However, methods that seek to control the night can only ever be partially successful. Darkness remains a key conduit through which individuals and groups pursue alternate practices (see also Williams 2008).

For Ekirch (2005), the night is both pious and pagan, devout and hedonistic. In pre-modern European life religious authority was paramount. Yet the civic and religious institutions maintaining control shut down at night-fall. Courts, councils and churches played a significant role in the social, legal and administrative matters of everyday life. In their stead, as darkness took over of an evening, prayer was very heavily encouraged by religious authorities. The darkness of night was a time to appreciate the wonders of the day, to withdraw from satanic influence and establish devotion to the Christian god. In the words of Ekirch (2005, pp. 59-60) 'no time made prayer more essential than night, the time of Satan's reign, when persons retired to their beds, entrusting themselves to their creator's care'. Koslofsky (2011, p. 279) adds, 'the night that could unite the soul with God could also unite the body with Satan'.

For Koslofsky (2011), night and day were a fundamental antagonism whose contrasts were mapped on to early modern life. For example, the differences between village and urban life that emerged around the 1700s were understood in relation to the rhythms of night-life in differing geographic contexts. Citing literary and surviving vernacular diary examples, Koslofsky showed how rural or village life was becoming characterised as 'traditional', 'superstitious' and 'deadening' when compared with the 'brighter', 'busier' and less 'mystical' urban night. Such distinctions have a legacy for how we understand day and night today – the bright lights of the city at night still contrast with the comparative darkness of the rural night (see Chapter 10).



The contrast between night and day, light and darkness, was used to order and articulate key cultural aspects of early modern life (Koslofsky 2011, p. 282).

For Baldwin (2012, p. 3), no matter how technological innovations disrupted understandings and experiences of the night 'familiar social conflicts, social customs and power inequalities persisted even as technology offered possibilities for change'. One example crucial to consider here was the manner in which women were denied access to the night, even given the social, cultural and economic possibilities that a changed night provided. Night remained disproportionately a realm of men. Women who ventured into the night were met with suspicion, derision, were assumed to be sexually available, and (if not) were the victims of rape and violence (discussed further in Chapter 8). Although our ideas of night are understood in diverse contradictory ways, familiar social conflicts and inequalities are also mapped onto day and night.

#### 1.4.4 Creatures

The night is fascinating and seductive. Anthologies and histories of the night put their readers in touch with the 'creatures' that are powerful in our imaginary of the night: witches, night-watchmen, prostitutes, shift-workers, artists, drunks, pornographers and ghosts. Fascination with such characters helps explain the continual focus of academic inquiry, artistic and popular interest on the night. Activities and identities that come to be associated with the night continue to fuel the imagination. Night's sense of otherness and alterity marks it as being different from 'normal' society. Poets, musicians, scientists, filmmakers and authors have depicted the night and its creatures, such as: Travolta's *Saturday Night Fever*, Shakespeare's *Midsummer Night's Dream*, and Michael Jackson's *Thriller*. We may fear or marvel the 'unfamiliarity' of the night, but we are intimate with its secrets. The creatures of the night have, at times, been sought out in exploratory expeditions. For example, in 1920s London, the travel writer H.V. Morton (1936) would explore the city streets at night to 'report-back' to the day-time population what mysteries and characters he would find there (see also De Quincey 2008).

This will become a recurrent theme throughout the thesis; that because of such otherness, discussions about day and night mistakenly morph, by default, into discussions about only the 'night'. Fascination with night's exoticness dominates scholarly inquiry while the day remains the implicit norm against which difference is articulated.

Of course, there are very material differences between the day and night. As a species heavily reliant on sight, we negotiate the temporal realms of day and night differently. For example,

when Baldwin (2012, p. 10-11) discussed the rise of night-watchmen from the 1600s onwards, he makes the point that they replaced surveillance that was provided by the public during the day. Night-watchmen were an institution that emerged primarily because of the different activities and behaviours in space and time of the night – low visibility and the ability to behave beyond surveillance. Yet institutions such as night watchmen in turn influenced modern day-time policing that now sees daylight patrols as a common sense activity. Nevertheless, the day has not captivated our scholarly attention and artistic imagination as has the nocturnal.

#### 1.4.5 Melbin's night as frontier

Murray Melbin was an American sociologist involved in many of the early discussions that would give rise to the field of time-geography (see Appendix A). His seminal night as frontier project, conducted during the late 1970s and 1980s, sought to theorise changing experiences of the night in modernity (Melbin 1978; 1987). Melbin argued that time was being colonised. He documented the spread of shift-work, radio programs, television broadcasts, lighting networks, aviation traffic, gas stations, restaurants and department stores from hours of day-time operation to those of the night. In Melbin's (1987, p. 4) words:

Day and night, over thousands of years, reveal to us widening networks of human settlements and illumination being prolonged after dark. The surface is not uniformly occupied. The hours are not uniformly lit. But both are advancing in order. Observing from a distance and long enough, we can recognize a parallel between what we accomplished over the terrain and over the hours.

Melbin thus sought to make comparison between the night as frontier and the frontier line of westward expansion in the United States (Turner 1975). Occurring in the mid-19th century (1830-1880) the frontier line was drawn by the U.S. Census Bureau defined by an area containing not less than two and no more than six inhabitants per square mile. On the east lay settlement. On the west lay wilderness. The Census Bureau stated towards the end of the 19th century that the frontier had come to an end. It was no longer possible to define the edge of the farthest settlement across North America by a line on the map. Yet for Melbin (1987, p. 30), the frontier did not end with terrestrial expansion. Instead,

the Census Bureau's announcement seemed to mark the changeover from space to time as the realm of the most vigorous expansion in the United States, as if the flow across the continent swerved into the night-time rather than spilling into the sea.

Melbin (1987, p. 4) saw direct comparison between frontier expansion across the land and the 24-hour cycle:

We have the same motives as our predecessors who migrated geographically. The daytime is too crowded. Its carrying capacity is being strained, and still it does not yield all that the community wants.

Terrestrial and chronological frontiers had similar qualities of social life. They shared stages of advance, organised sponsorship, a sparse and homogenous population, escape and opportunity, isolated settlements, a wider range of tolerated behaviour, fewer status distinctions, novel hardships, a decentring of authority, lawlessness and peril, policies to exploit and regulate, and interest group conflicts (Melbin 1987, pp. 30-52).

Many of the phenomena Melbin observed were general traits, not local features. There remained local traits in the colonisation of night-time hours such as 'greengrocers in New York to kebab houses in London to telephone hotlines in Moscow' (Melbin 1987, pp. 7-8), yet the 'essentials apply to all parts of the globe' (Melbin 1987, p. 50). To colonise time was 'to annex a band of hours and fill it with active people' (Melbin 1987, p. 51).

Critics of Melbin took issue with frontier terminology and his reliance on metaphor (Livingston and Harrison 1980; Mead 1979). Nevertheless, Melbin's work continues to prompt theoretical engagement. Geographer Rob Shaw (2012, pp. 91-96), has recently excavated the notion of 'incessancy' found in Melbin to develop a more nuanced account of the 24-hour city. For Shaw (2012, p. 94), incessancy 'demands that we look at how the night-time bleeds into the day, and vice-versa, and how rhythms are maintained across this period of time'.

The *Night as Frontier* (Melbin 1987) was a provocative and landmark exploration of the night's changing meaning. It is indicative of the very diffuse boundaries between space, time, rhythm and where they find broader connection in historical, metaphorical and geographic analysis. There remains much of value to be rethought and reworked over three decades since Melbin's initial provocation (Melbin 1978). A number of threads from Melbin's work continue to resonate with night and day in contemporary cities, and in this thesis, particularly ideas around teleology (explored in Chapter 4), metaphor (see Appendix B), and antagonism between diurnal and nocturnal populations (explored in Chapter 8).

#### 1.4.6 Geographies of the night, light and darkness

Increasing historical interest in the night is mirrored in geography. Throughout the years during which this thesis was written, geographers have been calling for increased attention to

be paid to the under-theorised 'night', light and darkness. Such concerns are exemplified by major themed sessions at the American and British Geographers conferences<sup>5</sup>. Conversations within such sessions have highlighted how broadly retheorising 'night' could be interpreted. Some papers surveyed the night-time economy in cities that had previously not been studied (and thus posed a research 'gap') (Alves 2011; Reynolds 2011); some focussed on the historical and contemporary development of lighting technologies (Beamish 2011; Chikamori 2011; Millington 2011; Seiting 2011); some also sought to critically assess values of darkness and how darkness might come to be cherished in urban contexts (Edensor 2011). The 'night' was often a backdrop against which new research could be conducted, for example photographing nuclear and desert landscapes (Marshall 2012; Rosa 2011). Research has ranged in geographic and latitudinal context from Siberia (Simonova 2011) to Manila (Tadie 2011).

Beyond these conferences have emerged nocturnal geographies around four key themes: geographies that deal implicitly with the night, or nocturnal thematic, but whose conceptual focus lies elsewhere; geographies of the urban night; geographies of light and darkness; and geographies seeking to disrupt the binary and dualistic assumptions of day and night<sup>6</sup>.

Where the seductive qualities of the 'nocturnal' are topical for literature and poetry (for example, see Borges 2010), night too is topical in a diverse range of recent geographical scholarship. This includes: nightlife and gentrification (Hae 2011a), sleep (Kraftl and Horton 2008), aviation traffic at night (Oosterlynck and Swyngedouw 2010), nocturnal labour (Sandhu 2006), urban exploration (Sandhu 2010), the visibility of adult industries (Hubbard et al. 2008; Prior et al. 2012), subcultural scenes (Gallan 2012; Gallan and Gibson 2013), street-pastors (Middleton and Yarwood 2013), and safety policies (van Liempt 2013). In these cases night is present, but often the thematic backdrop for discussions of class, politics, identity, gentrification and the rhythms of city life (see example in Appendix C). This strand arguably recognises the importance of night (and day) underlying broader issues, but does not examine day and night conceptually.

More substantially, another strand, has highlighted the neglect of the night in recent urban scholarship. Edensor (2013a, p. 1) highlighted how negative cultural conceptions of darkness

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<sup>5</sup> These have included: *Nightscape: geographies of urban nights* – Schwanen et al. AAG 2011; *Emerging from the dark: explorations into the experiences of the night* – Shaw and Robinson RGS-IBG 2011; *Nightscape: Discourses of nocturnal labor, recreation and leisure, night-time infrastructural landscapes and spatialization* – Palis and Johnson AAG 2012; *Light, Landscape and Place* – Edensor and Millington AAG 2013. I was a participant in most of these sessions.

<sup>6</sup> Geographers have also contributed to literature on the night-time economy. Such contributions are dealt with separately in Chapter 5.

across medieval and early modern periods have led to a ‘persistent nyctophobia’ or fear of darkness. He drew attention to examples that contest dualistic conceptions of light and darkness as positive and negative, to argue for a greater appreciation of urban gloom and darkness as capable of enchanting the urban night. We arguably learn to fear the night as a result of a complex assemblage (Brands et al. 2013). Seeking to dispel preconceptions of fear in the night as suitable categories for planning and provisioning, Brands et al. (2013) critiqued the over-use of surveillance, policing and lighting as a means to manage the night-time urban environment. Meanwhile, debate concerning sexual entertainment venues (especially lap-dancing clubs) reveals the multiple ways in which the night-time city is gendered (Hubbard and Colosi 2013). While lap-dancing clubs highlight patriarchal dominance, arguments for their removal all too frequently reinforce ideas that women are incapable of negotiating the urban night. Thus an argument for gender equality becomes obscured by notions of women’s vulnerability at night. Pottie-Sherman and Hiebert (2013) shifted analysis of the urban night from its traditional association with city-centres to the suburbs. By documenting night markets of Chinese diaspora in Canada they highlight how rhythms of night-time activity migrate into different geographical contexts and can imbue suburban nights with vibrancy and cultural diversity. Shaw (2013) theorised the urban night through a critique of neoliberalism. In this way he explored how some British night-time economy policies seek to ‘govern subjectivities’ by aiming to attract the ‘right’ people to use the night-time city in the ‘right’ ways. In my own contribution to this strand, I sought to theorise – through Foucault’s theory of heterotopia – how the urban night is disadvantaged in planning and policy circles as people fade out of subcultural participation in the urban night due to life-course transitions (Gallan 2013). The urban night is, in diverse ways, being actively retheorised.

In a related, but also increasingly distinct field, geographers are paying closer attention to the presence and absence of light and darkness<sup>7</sup>. Edensor’s (2013a) work on urban gloom and darkness highlights how practices of illumination have become a dominant characteristic of modern cities. As economic downturn, in Britain in particular, means that lighting networks are being reduced, it is timely to re-evaluate the human relationship to light and dark. Such context has led to revaluing darkness in over-illuminated landscapes (Edensor 2013b),

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<sup>7</sup> I highlight light and darkness as related but distinct, as there are similar authors participating in both discussions (most notably Tim Edensor). The two binaries are of course related biophysically. Yet, they may lead in different directions conceptually. Discussions of the urban night are focussed primarily on cities including policy, planning and provisioning. Research on light and dark is less exclusively ‘urban’ in focus, and pays closer attention to the affectual, sensory qualities of light and dark. Geographies of light and dark can, at times, have a much clearer empirical focus on lighting technologies.

contesting classed aesthetics of darkness and light (Edensor and Millington 2009), exploring the role light and darkness play in place-based revitalization strategies (Edensor and Millington 2013), noting changed sensory perceptions of movement and landscape in dark or light conditions (Morris 2011), and understanding the ways darkness is manipulated in domestic spaces (Shaw 2014a). Robinson (2013) meanwhile focused on the cultural and historical geographies of camouflage, particularly during World-War II, to emphasise how darkness produces different appreciations and engagements with the earth's surface. Vannini and Taggart (2013a; 2013b) used the example of 'off-grid' homes to explore the ways in which people become enrolled in their own energy production and how that influences their practices of lighting domestic spaces and quotidian activity (discussed further in Chapter 7).

In a fourth strand, geographers are seeking to explicitly evaluate concepts of night (and its relation to day) in urban and everyday contexts: to reveal and think anew the different modes of order, control and territorialisation associated with night spaces as opposed to day (Williams 2008), to foster appreciative, positive valuations of darkness and light (Edensor 2012; 2013b), to broaden the concept of the urban-night past an emphasis on night-time economy (Shaw 2014b), and to critique the normalisation of the day/night binary (Gallan and Gibson 2011). This thesis sits most readily within this fourth strand of emerging geographies on the night (and day). This strand of research pursues a deeper conceptual agenda for a radically different reimagining of day and night. My contribution to this strand is to emphasise the crepuscular, as a new concept and vocabulary to further push research on day and night, light and dark.

#### 1.4.7 But what of the day?

Are there literatures that explore day in similar ways to those anthologies, histories and geographies of the night listed above? Not to date. Instead, Gardiner has argued that the 'everyday' 'by virtue of its very pervasiveness in our lives, remains one of the most overlooked and misunderstood aspects of social existence' (2000, p. 1). In recent years the significance of everyday experience is increasingly considered, in geography and elsewhere, in debates ranging from climate change to public citizenship (Brace and Geoghagen 2010; Fincher and Iveson 2008; Shove 2003). Gardiner (2000, p. 7) has previously called for more rigorous theoretical understanding of the everyday beyond descriptive ethnographies of the structure of people's quotidian lives:

In developing a critical knowledge of everyday life, we must go beyond merely describing the pragmatic activities of social agents within particular social settings...

We cannot be satisfied with a surface account of ordinary social practices and modes of consciousness.

Gardiner brought together sources he believed contributed to the paradigm of critical everyday life studies including Dada, Mikhail Bakhtin, Agnes Heller, Henri Lefebvre, Michael de Certeau and Dorothy Smith. Such investigations of everyday life do not only seek to document the heterogeneous qualities of the everyday. Critical theories of the everyday are also concerned with transformation, recognising that there are emancipatory and liberating moments within everyday life that provide new possibilities for human social existence. In Chapter 3 of this thesis I explore the central importance of everyday life in the theories of Henri Lefebvre, and use that as one lens of transformation for ideas and experience of day and night.

It could be argued that an implicit rendering of 'day' does indeed appear in theories and explorations of the 'everyday'. It is after all very common for people to describe what they did in a 'day' as 24-hours of activity across the day and night. But there is disparity here. The 'night' does not assume the same stature within theories of the everyday as does 'day'. The sociologist Simon Williams (2005) insisted also on the term 'everynight life' in response to the neglect of sleep in sociological research. Everynight life is enmeshed within the same social and spatial networks as everyday life<sup>8</sup>. Yet, as Amin and Thrift (2002, p. 17) have noted in relation to rhythms and everyday life, 'most readings focus on daytime rhythms, while studies of the city at night only too often focus on the unexpected and dark happenings'. Ideas around night are underplayed within broader theories of everyday life. For everynight life to become a central academic concern would mean moving beyond the stasis that sees night marked only by its difference, that focusses on the deviance and disruptive activities that occur during the night. This points toward a theoretical shortcoming (especially of urban research) where Hubbard (2006, p. 113) has argued that 'dwelling on examples which disturb the established rhythms of the city potentially distracts us from considering the routine business of getting on and getting by in the city'. Responding to such critiques, in Chapter 2, I explore the dominant renderings of night and day that serve to reinforce 'day's' normality and dominant position.

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<sup>8</sup> This is a phrase taken up too by geographers researching sleep and issues around dualisms of sleep/conscious and active/inactive (Kraftl and Horton 2008).





## Chapter 2 – Troubling the binary of day and night

This chapter seeks to trouble the binary of day and night. In the introduction to this thesis I outlined the recent surge in historical and geographic interest in the night. Notwithstanding these valuable contributions, in this chapter I argue that the binary status of day and night has hitherto been ignored by scholars compared with the way other conceptual binaries such as man/woman, white/black, public/private, nature/culture, culture/economy and human/nonhuman have been interrogated and unsettled. This chapter places day and night in the context of geography as a 'critical discipline'. Geography is a discipline that, along with other cognate fields such as cultural studies, has contested conservative and unjust agendas since the 1970s<sup>1</sup>. But more than this, geography's 'criticality' has been concerned with reframing concepts and debates ontologically, as a means to open up new possibilities.

This chapter discusses the important work of geographers (and others) in disrupting binaries. By showing how day and night has been absent from such disruptions, I suggest how day and night might be thought differently. The binary of day and night is one of the most ubiquitous and taken-for-granted aspects of the planet we live on, the cities we live in, and the structure of our everyday lives, no matter our location on the planet. The ubiquity of day and night, like many common occurrences in everyday life, is often overlooked or forms background context without being interrogated in its own right (Chapter 1; cf. Gardiner 2000). But troubling the day and night binary has theoretical and political significance. Previous critiques of binaries have targeted conservative and unjust social processes such as patriarchy, racism, and classism. In this chapter I present a parallel critique, and suggest a new category of daycentrism.

### 2.1 Binaries in geographic knowledge

Binaries are, in their simplest form, an act of categorisation. In order to simplify the world we live in we categorise it, and the simplest form of categorisation is binaries (Cloke and Johnston

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<sup>1</sup> Developments in geographic thought have since the 1970s been driven by Left political concerns and accompanying engagements with critical theory. The development of 'critical' geography over the last four decades has progressed through successive 'turns' within the discipline. The 'Marxist' turn in the late 1960s and early 1970s critiqued the overly positivist flavour of contemporary geography (Peet 1969; Harvey 1973). Geography conservatively modelled spatial patterns with little concern for the social processes that produced them. While Marxist analysis was interested in politicising geography, working towards unsettling the dominant social system of capitalism, at the same time humanist geography sought to include the sensuous subject of the human (Buttimer 1976; Tuan 1978). The 1980s and 1990s then saw the 'cultural' turn which encompassed a rainbow coalition of feminist, anticolonial, queer and post-structuralist influences. This prompted not only theoretical development but epistemological and ontological challenges (see also Creswell 2013).

2005, p. 1). With any object or subject encountered, we attempt to understand what it is by determining also what it is not. Categorisation is a fundamental heritage of Western scientific rationalism that has a continuing influence on how we order, interpret and experience the world (see Jones 2009; Schaffter et al. 2010). Moving beyond this impulse in relation to day and night is a central provocation of this thesis.

With this in mind, early in the process of this research I read Cloke and Johnston's (2005) *Spaces of Geographical Thought*, a key text that spawned ideas developed throughout this thesis. The volume brought together a collection of essays that explored the role binaries have played in the history of geographic thought, including the many ways geographers have contributed to their subsequent deconstruction. Cloke and Johnston's (2005, p. 10) point was that 'human geography's take on the world is replete with ossified binaries that requires serious attention'. Most binaries become so engrained that they structure the way geographers think about, practice, and communicate their research. The binaries included in the book are: agency/structure, state/society, culture/economy, space/place, black/white, man/woman, nature/culture, local/global and time/space. Evidently, there are a great many binaries that can be thought and talked about. In reviewing the book, Muller and Warf (2007) noted that binaries such as urban/rural, quantitative/qualitative, sacred/secular, mind/body, colonial/post-colonial and human/animal were notably absent. So too was day and night.

For Cloke and Johnston (2005, p. 18), such binaries 'are clearly not necessarily dichotomous. What marks them out as significant is the way in which they have become co-constitutive, the one usually being discussed by direct reference to each other'. Binaries, dualisms, dichotomies can take on many different forms but they are similar in having a dependent and *antonymic* relationship.

When two categories are understood as a binary they are often imbued with accompanying positive and negative characteristics. In this manner, one half of a binary is often triumphed with positive connotations, the other relegated as negative. The dominant half of a binary might be known as 'A', but the subsidiary half will most probably be understood as 'not-A', rather than 'Z'. Not-A is then understood as less than or different to A, rather than having its own categorical identification. But there is more at work than just the infusion of positive/negative connotations. Over time binaries become associated with constructed hierarchical dualisms. Take, as an example, the binary of man/woman. Butler (1999) argued that the sexed and gendered binary of woman/man is in no way natural. With a definition based on sex, one can determine the biological categories of male/female. But gender is

instead a social category mapped onto the sexed bodies of male/female, with man problematically triumphed as the dominant half of the woman/man binary. From this standpoint, the pervasive tendency of binaries becomes associated with dualisms in which man is supposedly masculine, hard and rational, woman supposedly feminine, soft and emotional (Connell 2005; Connell and Messerschmidt 2005). Such constructs stereotype, codify, legitimate and oppress: humans are said to be intelligent, nature instinctive; urban is seen as cosmopolitan, rural as 'hick'.

The argument follows that, as binaries become normalised within society, they create systems of dominance. Patriarchy is a set of social relations that enables men to dominate over women, while intersecting with other binaries, creating hierarchical matrices of subjective positions – black, gay, and working class men may in turn be dominated by white, heterosexual, and capitalist men (Hopkins and Noble 2009). As Lynda Johnston (2005) has shown, the normalisation of man/woman in turn influences the binary of sexuality – hetero/homosexual – in which patriarchal society is also heterosexed. The normalisation of man/woman in society by extension then becomes the normalisation of sexuality. If our bodies are 'naturally' male and female, then by the same argument sexual relations between man/woman are also considered 'natural'. Johnston analysed this connection in relation to bodies. Binaries such as woman/man become embodied, yet notions such as 'camp' can reveal the slippages where bodies are performed as simultaneously masculine *and* feminine, troubling adherence to strict dualisms.

Binaries can become embodied, but crucially too for geographers, they manifest spatially. Suburban transformations in the post-World-War II era, for example, became the spatial focus of feminist outrage (Harvey 2008, pp. 5-6). The built environment of suburbia restricted women to the private sphere of the home and domestic duties, while the inner city was the public realm of male work and play – the binaries of man/woman and public/private intersect in this instance. Similarly, infrastructure within the built environment can codify normalised binaries. Public toilets can be a confronting experience for those who feel their bodies do not adhere to the man/woman gender binary (Browne 2004). The binary man/woman informs patriarchy, and heteronormativity. This can manifest in social, spatial and embodied experience. Massey (1992) argued such connotative interrelations reflect a society *adhered* to dualisms.

There are ambivalences. As Smith (2005) has argued, the binary of white/black has helped to identify and articulate racism. It would be difficult to argue against resolving the white/black

binary – for example, promoting widespread understanding of race as a cultural construct and seeking to remove racial discriminations from society. However, as Smith cautions, racism remains divisive in the ‘real’ world. Materialities of colour manifest in embodied, spatial encounters and categories. Such categories matter for anti-racist analysis (Saldanha 2007). In such instances, working with the binary of white/black can be progressive and positive. Smith (2005, p. 98) argued that ‘black’ (but also ‘brown’, ‘colour’, or ‘non-white’) has been a means to articulate what was at stake in race debates. Strategically mobilising the white/black binary highlights the many (sometimes competing) meanings within binaries.

Meanwhile, Cloke and Johnston (2005, pp. 14-17) pointed towards four key attempts by geographers to move beyond binaries – dialectics, third spaces, dualities and deconstructions. The specificities of each are not critical here<sup>2</sup>. What they collectively represent is an attempt to move beyond binary thinking, to offer alternatives in the gaps between binaries, and to extend beyond the limiting notion of either/or thinking associated with the binaries listed above. Dialectics, third spaces, dualities and deconstructions all show how categories can be manipulated in different ways and are open to ongoing interpretations. In the next section I discuss my motivations for connecting binary thinking to the example of day/night.

## 2.2 Discovering the binary day and night

As I began my PhD I initially sought to develop a project that would extend my previous studies into music venues and scenes (Gallan 2012; 2013; Gallan and Gibson 2013). In that earlier work I sought to theorise a music scene and venue in Wollongong – the Oxford Tavern<sup>3</sup> – within a broader project on cultural assets in regional areas (see Gibson et al. 2012). Wollongong is a city that has pursued a creative cities revitalisation agenda (Waitt and Gibson 2009). Through urban development projects, Wollongong City Council has sought to inject the city-centre with cultural infrastructure. As part of this project, the creation of both an entertainment precinct and cultural ‘hub’ were proposed to foster local cultural and creative endeavours. It was from doing research in this context that my curiosity around day and night started to emerge.

The Oxford was considered the home of Wollongong’s local, subcultural live music scene. This scene had developed over two decades through a committed strategy of booking agents who negotiated the difficult terrain of live music in pubs (Gallan 2012). As a cultural endeavour, live original music in Australia is often found in pubs, housed by infrastructure purpose built for

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<sup>2</sup> Although it is worth highlighting that the framework of this thesis draws on Lefebvre’s notion of dialectics, which will be discussed in Chapter 3.

<sup>3</sup> Hereafter named the ‘Oxford’.

drinking, under legislative frameworks designed to manage the responsible service of alcohol and the amenity of residents proximate to music venues (Gallan and Gibson 2013; Homan 2003). In Wollongong, the Oxford was adjacent to the council's proposed entertainment precinct, yet it was excluded, and ignored as part of the city's policy development and planning for a cultural and creative district. The Oxford eventually closed in mid-2010 amidst troubled ownership changes, stalled development projects, and ultimately, the neglect of the music scene that had been so vital to the success of the Oxford for over two decades (Gallan and Gibson 2013).

My initial plans for a PhD were to extend the analysis of the Oxford to other cultural assets that are overlooked by creative city scripts. Yet one quote continued to trouble me from my previous project. One participant vividly described the Oxford as a 'mild-mannered bistro by day, eclectic freak-land at night' (Gallan and Gibson 2013, p. 174). This quote led to a consideration of night-time cultural pursuits and the possibility they were overlooked in favour of those in the day-time. It became clear that night and day was a binary that was implicated in the neglect of the Oxford within strategic planning visions. Yet cultural meaning of day and night also added to the value participants articulated about their cherished venue. In attempting to make policy recommendations out of the Oxford research I kept returning to a problem: no matter how well I could document the venue and scene as a vibrant, positive cultural asset in Wollongong, it was difficult to divorce such value from concerns about nocturnal revelry as a source of intoxication, violence and disorder (see Chapter 5).

The plight of the Oxford was further compounded by participants of the scene valuing the venue as a site of nocturnal transformation, and indeed investing in its status *outside* of city visions. There were thus two renderings of 'night' at play in the case of the Oxford that relied on dualistic assumptions. The night was disordered and antisocial, and the night was a time for marginality (in this case inhabited by subcultures). In considering the binary of day and night the task then seemed not to lay in dismantling a binary, but in developing a framework through which to identify and trouble its restrictive influence. It was at this moment that it dawned on me that although critiques of other binaries (such as those of gender, race and sexuality) had benefitted from the accumulation of sophisticated conceptual advances, the binary of day and night was simply not on the radar. This realisation provided the key impetus for the direction and focus of the remainder of this thesis project.

## 2.3 The binary of day and night

What then are the biophysical and cultural origins of the binary of day and night? The common sense way that we understand day and night is the presence and absence of light within a 24-hour period. Day and night are permanent features of our rotating and orbiting planet that have both seasonal and latitudinal variation across the globe. This variation results in different experiences of day and night in different locations. In Wollongong we experience days of 9-10 hours through the winter with daylight up to 14.5 hours during summer. Equatorial countries have much less seasonal variation. Places in the extreme north and south – for example, the Norwegian town of Longyearbyen – can have total sunlight in the summer months and ‘polar nights’ of 24-hours in the winter. No matter the extreme latitudes, or the extreme seasonal duration of night and day, the cycle is one of the most utterly dependable aspects of the planet on which we live. Though it has not always been the case.

Four and a half billion years ago, the first night and day would have been drastically shorter – mere minutes long – before the gravitational pull of the moon slowed the earth’s rotation. The moon would have sailed across the sky at (what would now be interpreted as) ferocious speed; the stars too would swirl at a much faster pace. The gravitational force between the moon and the earth slows our rotation by approximately two milliseconds per century, or twenty seconds for a million years, and two hours for every three hundred and eighty million years (Dewdney 2004, pp. 12-14.) Projecting these calculations billions of years into the future it is estimated that the earth’s rotation will gradually slow to a halt. When (or if) this occurs – and for a moment making the drastic assumption that humans will be present – there will be perpetual night on one side of the planet, a frigid, inhospitable hemisphere for human life, and perpetual day on the other. The cycle of day and night might not be infinite, but in our everyday experience, and certainly within the human life-course, change to night and day’s seasonal durations is utterly imperceptible. Day and night is one of the fundamental characteristics of the earth. In Cloke and Johnston’s (2005, p. 18) terms, day and night are co-constitutive, being understood in relation to each other.

As with other binaries, we can determine what is day by also determining what it is not. In perceiving light, we categorise it as different to dark; day cannot be night and vice versa. Over time, comparable to other binaries, day and night come to be imbued with certain characteristics, positive or negative connotations. Day is often the dominant discourse against which antonymic night is compared and constituted. This is hardly novel: we have long been acquainted with tales of an ‘othered’ night (Palmer 2000). From time immemorial we have

learnt that day is one thing and night is another. Most often the rendering that day is good and night is bad.

Further, for hundreds if not thousands of years, day and night have been associated culturally with dualisms such as life/death, safety/danger, and activity/inactivity. This is evident across a multitude of texts and circumstances, from dawn symbolising rebirth to a silent death in a night's slumber, from a parent calling a child home at sundown, to feminist Reclaim the Night marches (see Chapter 8). Dualisms are mapped intricately onto the rhythms of our everyday lives, they are also reproduced in systems of regulation. The regulation of day and night in early industrial cities was central to the production of a passive workforce, separated into spaces and times of production and social reproduction – day and night equals activity/inactivity, work/home spaces, productivity/recuperation (Gallan and Gibson 2011, p. 2510; Marx 1990, pp. 340-416). There are a range of dualisms that come to have interconnected connotations (Massey 1992). In this way, we come to understand day as the living, safe realm in which we exist and are active; the night as the dangerous void from which we retreat, to relax and recuperate in the safe spaces of domesticity.

As the antonymic half of the binary, night has also become a source of fascination and seduction. In its distinction from the transparent, safe day, night can also be a magical landscape of wonder and festivity – sometimes dangerous, sometimes enchanting. As outlined in Chapter 1 regarding anthologies, histories and geographies, writing about day and night is predominately themed around the concept of night. As the mysterious half of the binary the night seemingly captures our imaginations in ways that the day may not.

This thesis is concerned with troubling the binary of day and night. In so doing, one temptation might be to ideally resolve the antagonism between the two. One possible outcome is that night would no longer be positioned as the antithesis of day, no longer be positioned as the negatively implicated half of the binary. A similar problem faced early feminist theory – is it an emancipatory project to celebrate and promote feminine characteristics and categories in the context of patriarchy? Or, is there broader scope to disrupt the very notion of gender, developing as it has through a system skewed towards male domination? (Cresswell 2013, pp. 154-6). In troubling the binary of day and night we need to seek out similar hegemonies to that of patriarchy, which legitimate, normalise and limit ontologies, behaviours and identities. In this case, that hegemony concerns the much less mysterious, seemingly transparent and obvious half of the binary: *day*.

## 2.4 Daycentrism

Critical intellectual influences (Marxist, humanist, feminist, queer) each target a limiting orthodoxy. Marxists seek to overturn the social organisation of capitalism. Feminists seek to overturn patriarchy. The notion of more-than-human seeks to overturn anthropocentrism (Braun 2005; Panelli 2010). To disrupt the orthodoxy of normalised dualistic understandings of day and night requires a similar target. A geography then, which seeks to rethink day and night, needs to target *daycentrism*.

Daycentrism can be characterised as a pervasive and malignant social construct in which the day – characterised by the light of the sun, a prolonged period of human wakefulness, legitimated hours of business and labour, and dominant form of the binary day/night – becomes the realm in which behaviours, activities, rhythms, infrastructures, and social interactions are considered ‘normal’. Daycentrism creates positions of normality and shapes regulatory norms, thus far without exposure or critique. It influences how we order, interpret and experience our world. In troubling the binary of day and night it is time to identify and expose daycentrism.

There are a number of perspectives that serve to legitimate daycentrism. In taxonomy and ecology humans are classified as a diurnal species (Harker 1964). The diurnal classification is linked to circadian rhythms (Brody 2011). Circadian rhythms are causal in that they are generated by an internal biological mechanism. Diurnal rhythms are instead descriptive – they can be caused by the circadian rhythm and/or other factors such as patterns of sleep and wakefulness, activity, meals, social contact or light exposure (Klerman 2005, p. 375). Such other factors are capable of ‘entraining’<sup>4</sup> the circadian rhythm. Day and night, as the cycle of light and dark, is the dominant external influence for the body’s circadian rhythm (Duffy and Wright 2005, p. 326).

When isolated from external influences, the circadian rhythm is approximately 24-hours. Science suggests it is not yet known exactly how much exposure to light is needed to entrain the circadian rhythm to the exact 24-hour day as it is difficult to replicate isolation from entraining influences (Duffy and Wright 2005, p. 326). Day and night as well as social factors constantly interact (Roenneberg et al. 2003). Circadian rhythms also intersect with cycles such as REM sleep, menstrual, hormonal and annual cycles (Klerman 2005). Scientists are still coming to terms with the complexity of such rhythms, and conducting research and

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<sup>4</sup> Meaning to be synchronised to an environmental influence.



communicating results relies heavily on abstractions (Beersma 2005). Of such abstractions, diurnal means to be active during the day, nocturnal during the night and crepuscular at dawn and dusk.

And yet, the observation of 'diurnality' relies on a notion of activity, a privileging of mobility over stillness in the constitution of what it is to be human (Bissell 2011). Undoubtedly, we also *exist* in the night no matter our state of wakefulness or activity (cf. Kraftl and Horton 2008; Williams 2005). We are always in either day or night. Both are socially and culturally contingent situations and an environmental phenomenon of the presence and absence of light and darkness, regardless of our state of activity.

Although, as a species, we may be collectively referred to as diurnal, we individually have personal preferences or constraints to our quotidian routines. Being part of a family unit, our employment circumstances, relationships, seasonal variation all influence the way in which our nights and days are structured. However, 'interindividual variation' has been recognised within the circadian rhythm (Roenneberg et al. 2003), meaning that we each have a particular affinity with one part of a continuum that could be defined at its extremes as 'morning' (or day) and 'night' people. And yet the manner in which we are enrolled in other networks means this individual variation can be manipulated.

Ultimately, we need compromises to function as a society, yet daycentrism can be pervasive in such situations. When conflicting rhythms interact, those with a diurnal basis often take precedence. Examples are myriad. In Sydney, power tools, lawn mowers and leaf blowers are permitted between the hours of 7am and 8pm (City of Sydney 2014). In this example the noise and activity associated with such tools are legitimated above practices that run counter to diurnal activity and nocturnal recuperation. For example, those needing to sleep during the day (see Chapter 9). This is just one of a possibly infinite number of examples in urban contexts.

At the whole city scale too, in public imaginaries and place making, the day can often be legitimated or implicitly triumphed. For example, in Wollongong's cultural precinct plan, known as the Blue Mile Vision, an agenda for the development of the city and its adjacent beachside precincts had accompanying promotional and publicity material exclusively depicting the use of space in the day (see Box 2.1). Areas of the Blue Mile Vision are also physically restricted during night-time hours. Roads and car parking spaces are barricaded to prevent young drivers with loud cars from accessing the precinct – a reaction to complaints from local residents that in turn renders young people, their cars and driving practices as

abject from the 'normal' night. The implication of the Blue Mile Vision's daycentrism is that a significant segment of Wollongong's public space is envisaged primarily for day-time usage.

**Box 2.1 The Blue Mile Vision: an example of daycentric urban planning**



**Figure 2.1** Artistic impression of the Blue Mile Vision's harbour front (Source: Wollongong City Council 2007, p. 12).

Wollongong City Council's (WCC) Blue Mile Vision (BMV) is part of the 25 year strategic plan of Wollongong's future that envisages the city as a 'prosperous, vibrant and attractive regional city' (WCC 2007, p. 1). The BMV has been named as such 'to depict the unique stretch of coastline with the ocean, sandy beaches, picturesque harbour, dramatic headland and recreational parklands edging the city centre' (WCC 2007, p. 1). In particular the BMV aims to 'revitalise' Wollongong's city-centre and beachside precincts as a critical component of the city's overall growth. Included in this plan is the development of seven defined precincts along the city's foreshore.

Although WCC (2007, p. 2, emphasis added) state that the BMV can ‘accommodate intensive and frequent use and provide a range of leisure and recreation activities both *day and night*’ here I consider how it can be seen as an example of daycentric planning and provisioning.

All seven of the precincts earmarked for development are accompanied within the planning documents with artistic impressions of their future appearance (Figures 2.1 and 2.2). All depict activities in the day. The implication is that the design of the BMV exclusively promotes day-time use of public space.



**Figure 2.2** Artistic impression of the Blue Mile Vision’s beach walkway (Source: Wollongong City Council 2007, p. 10).

More than just favouring day-time use of public space, areas of the BMV are actively restricted for night-time use. One example is the parking spaces within the BMV where parking restrictions are in place between different hours of the night (Figure 2.3). Part of the motivation for instigating these restrictions was to exclude the presence of ‘car enthusiasts’ (WCC 2007, p. 3), a polite term for car users otherwise stigmatised as ‘hoons’ (Warren and Gibson 2011, p. 2706). Wollongong has a custom-car culture that

Warren and Gibson (2011) identified as an overlooked and marginalised form of creativity within Wollongong. Yet, similar to the case of the Oxford Tavern custom-car culture has not been incorporated into official planning and policy – indeed it is excluded – due to association with nocturnal street-racing.



**Figure 2.3** Parking and driving restrictions during the night-time, Wollongong's South Beach (Source: Author)

Other restrictions discourage camping and shelters being used in night-time hours, where they are permitted in daylight (Figure 2.4).





**Figure 2.4** Day shelters permitted, night shelters restricted, Wollongong’s North Beach (Source: Author)

Meanwhile, the BMV is a well-known public green space in Wollongong where personal trainers work with clients. As Figure 2.5 shows, some of these sessions utilise space at night, especially around Flagstaff Hill, specifically where custom car culture is actively discouraged. The examples of fitness and training activities in the early hours of the evening shows how the BMV is not devoid of activity at night, but rather that those activities occur outside the sanctioned or *promoted* uses of the space from WCC.



**Figure 2.5** The Blue Mile, 7pm (Source: Author) Note group personal training session in background left

Why this daycentric nature of the BMV ultimately matters is because it is a clear example of where planning and policy favour the hours of the day as somehow more desirable. So too, based on conservative perceptions, the BMV outlines which activities and people are 'normal' and 'belong' in that space in the hours of day and night.

A final example of daycentrism is sleep deprivation. Some people are more suited to sleep/rise early and some to sleep/rise late. These can be generalised as 'morning' and 'night' types. Such distinctions can be thought of as the extremes of a continuum in which the majority of people are intermediates (Kerkhof 1985, p. 85). Along such a continuum, people reach peak capacity at different times across the 24-hour cycle (Bodenhausen 1990). Our proclivities for particular times lead to a range of social issues such as memory and intellectual performance (May et al. 1993). For example, we are prone to 'stereotype' and make generalised assumptions when we are not at capacity, meaning our mental abilities are hindered (Bodenhausen 1990).

Roenneberg et al. (2003, p. 80) argued that the majority of people are sleep deprived during the working week which can affect 'learning, memory, vigilance, performance, and quality of life'. Of this majority, evening types accrued the most significant sleep debt. Such a finding indicates that while the majority of our individual rhythms are not satisfied if sleep deprivation is present, due to daycentrism, those who prefer the evening are most significantly impacted. The ways in which sleep is debated and rethought is discussed further in Chapters 7 and 9.

As Ekirch (2005) has shown, forgotten practices of the night suggest we could have been far more 'nocturnal' prior to industrialisation than previously thought. Diurnality may just be a false divide, and the binary of day/night, diurnal/nocturnal may simply not have the adequate semantic depth to describe the rhythmic patterns of human activity across the 24-hour cycle (cf. Beersma 2005). Yet as histories of the night remind us, the other half of this equation means that anything that is not 'day' (i.e. the night) is met with suspicion. Daycentrism means not only that the day is legitimated, but as a stubborn construct also sees night marked as different, as exceptional. As a limiting orthodoxy, daycentrism restricts day and night emerging differently conceptually or practically.

Could we transition to something different to diurnality? What possibilities might arise from unlearning the deep, entangled behaviours and practices that have evolved from our relationship to day and night?

## 2.5 Beyond the binary of day and night

In response to such questions this thesis asks how we might think day and night differently. I do so by engaging deeply with the conceptual framework provided by Henri Lefebvre. Before moving on to such engagements, it is worth highlighting a number of obstacles.

Although there is variation between individual's circadian rhythms, day and night are not thought of as a social group or a person. Although there are 'morning' and 'night' people, they are not as clearly connected to encompassing subjective identities as binaries such as man/woman and white/black have been. Daycentrism has not yet been identified as the target of emancipatory politics in the manner of patriarchy (Women and Geography Study Group of the Institute of British Geographers 1984), whiteness (Hage 2000), and heteronormativity (Hubbard 2000). Day and night is a much harder dualism around which to develop politics. A binary critique is thus different for day and night. There are cultures that use the night for particular purposes. But there are also clear instances of where night and day deeply influence or even determine expressions of uneven power relations. There are those in precarious economic and social circumstances that *must* work night shifts in order to put food on the table (Presser 2003; Sharman and Sharman 2008), or call-centres in Asia that work in rhythms suited to the business hours of the United States (Poster 2007; Tadie 2011). Wildlife is harmed by excessive lighting of the urban night (Matthew 2001). Likewise, many people are excluded from the night on the basis of racial (Talbot 2007), gendered (Valentine 1989) and class (Hae 2011b) distinctions.

But would taking issue with such circumstances and seeking to change them mean promoting a cause for *someone* or *something*, rather than on behalf of the 'night' or indeed the 'day' itself? An agenda for emancipation from rigid understandings of day and night is not easily articulated, nor easily reconcilable with conventional notions of injustice or oppression. Rather, discussions are prone to becoming siloed, in that there are discussions not about day and night, but specifically about light pollution (International Dark Sky Association 2012a), the politics of night shift-work (Sharman and Sharman 2008), or the management of the night-time economy (Talbot 2007). Yet through engaging with the work of Lefebvre I argue that daycentrism is political in that it serves to foreclose on possibilities and restricts our ontologies.

Moving beyond the binary of day and night does not necessarily require a suspension of the thought that the cycle of day and night is perpetual. But rather, that our present experience of day and night in everyday life need not be thought of as anywhere near as permanent as the cycle of light and darkness. To begin a journey towards a new horizon, a crepuscular horizon, we now turn to Lefebvre and considerations of alienation, the urban and utopia. Through engaging with Lefebvre's method of transduction, it becomes possible to imagine future worlds within which we encounter day and night differently.



# Chapter 3 – Lefebvre’s transduction: becoming crepuscular

‘Rigour in invention, knowledge in utopia.’

(Lefebvre, 1996, p. 151)

Following the contextual foundations provided in Chapters 1 and 2 this chapter now departs – through the work of Lefebvre – on a journey towards rethinking day and night. In this chapter I first explain the preference for Lefebvre as a key theorist, and outline the concepts central to a Lefebvrian ‘sensibility’. I then develop Lefebvre’s method of transduction as a means to build on the previous and current understandings of day and night (as outlined in Chapters 1 and 2). Transduction is concerned with the construction of ‘virtual objects’, realising the impossible through dialogue with the possible. For this thesis the virtual object is *becoming crepuscular*. As a method, transduction is heuristic as much as it is conceptual. In the final section of this chapter I then discuss the way transduction shapes the structure of the remaining thesis.

## 3.1 Why Lefebvre?

In Chapter 1 (section 1.2) I outlined how climate change and economic crises have produced a heightened sense of urgency around imagining changing worlds and changing futures. This context has prompted imaginative artistic and scholarly responses (Chatterton 2010; Weisman 2007). Lefebvre’s life and career occurred in a similar context. Born in 1901, in Hagetmau, in the French Pyrenees, and dying in 1991 in Paris, his life spanned almost the entire 20<sup>th</sup> century, and some defining events of the modern world, including World-War I, World-War II, the Cold War; many economic recessions; the rise of post-war consumer capitalism; communism; rapid suburbanisation and the changing urban form; as well as the events in France surrounding May 1968<sup>1</sup>. Lefebvre responded to such events with optimism, and with a profound Marxist belief that everyday life and the cities in which we live could fulfil all human desires. Geographers are

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<sup>1</sup> There are a number of biographical accounts of Lefebvre in English, including critical appraisal of his work (Merrifield 2006; Shields 1999; Stanek 2011). Lefebvre’s ‘official’ biography in French was written by Remi Hess (1988) in addition to Lefebvre’s autobiographical *La somme et le reste* (1959) – both of which have not been translated to English. Geographers such as Andy Merrifield, David Harvey, Stuart Elden, Neil Brenner, Mark Purcell, Neil Smith, Eleonore Kofman and Elizabeth Lebas have played a major role in the translation and adaption of Lefebvre’s work (Lefebvre 1991; 1996; 2003a; 2003b; 2004; 2009a; Merrifield 2006; Purcell 2013). For these authors, placing individual works of Lefebvre in the broader context of his life – and career – has been of utmost concern. Adapting Lefebvre’s work posthumously has seen many of the translations fleshed out with extensive biographical details connecting theoretical development back to the social, political and cultural context in which it was produced.

using Lefebvrian frameworks to theorise contemporary crises –establishing a thread between both Lefebvre’s changing worlds and futures, and our own (Brenner et al. 2012; Brenner and Elden 2009, pp. 31-41; Purcell 2013).

Lefebvre authored over 60 books and hundreds of articles ranging from Marxist theory to sociology, philosophy to literature. This included reflections on Marx, Hegel, and Nietzsche, and critical explorations into time, the state, everyday life, rhythm, urban processes, the production of space and beyond (See Lefebvre 1991, pp. 432-4; Shields 1999). In disentangling such diversity, Kipfer et al. (2013, p. 127) argued that in reappraisal of Lefebvre’s work ‘sustained points of contact should be maintained to Lefebvre’s open, integral, and differential Marxism and the dialectical urbanism that helped shape it’. In such an argument, there are enduring qualities throughout Lefebvre’s work that must be acknowledged to gain a sense of clarity in his broader project. Alternatively, Kofman and Lebas (1996, p. 8) have said that to be ‘Lefebvrian’ ‘is more a sensibility, rather than a closed system’, owing to Lefebvre’s dynamic oeuvre. A Lefebvrian sensibility is pivotal to this thesis<sup>2</sup>. The sections that follow outline Lefebvre’s concepts of alienation, the urban and utopia. These three concepts are central, I argue, in a ‘Lefebvrian sensibility’ and underpin the philosophical perspective of the thesis. Following that, I will discuss Lefebvre’s method of transduction, which leads to the notion in this thesis of *becoming crepuscular*.

### 3.1.1 Alienation

By 1947 Lefebvre (2008a) had published his first volume of the *Critique of Everyday Life*. Everyday life, he said, was becoming increasingly alienated by modern consumer capitalism. Lefebvre had an enduring belief in the power of everyday life to be the realm where alienation in the modern world could be most readily interpreted. Moreover, with his characteristic optimism, everyday life held the greatest possibility for change. This project would continue for the remainder of his life. Volumes 2 and 3 were published in 1962 (Lefebvre 2008b) and

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<sup>2</sup> Lefebvre has been described by Andy Merrifield as a ‘man of the sun’ – a moniker in reference to his eternal optimism. Merrifield uses this metaphor numerous times to differentiate the politics and personalities of Lefebvre and Guy Debord (see 2005, p.75; 2006, p. 33; 2009, p. 384). For Merrifield, the two represent a duo of dark and light, Faust and Mephistopheles. Lefebvre, the eternally optimistic ‘man of the sun’, was haunted and inspired for much of his life by an image of the ‘crucified sun’ (Lefebvre 1995, pp. 95-101). Debord on the other hand, is the brooding ‘prince of darkness’. Lefebvre’s work too is infused with a number of metaphors that invoke the powerful imagery of the sun in everyday life (for example 1995, p. 97; 1996, p. 148; 2008b, p. 75). As this thesis attempts to invoke more careful consideration of day, within a new imagination of day and night, Lefebvre is an apt companion.

1981 (Lefebvre 2008c) respectively. One of the core themes that spread across all volumes of the *Critique of Everyday Life* was Lefebvre's theory of alienation.

Lefebvre's distinct working of Marxism<sup>3</sup> led to his interest in the concept of alienation.

Lefebvre (2008a, p. 165) sought to build on Marx's notion of alienation, as it referred to labour, where 'the wage-earner works for the employer and the proletarian class works for the capitalist class'. In Lefebvre's (2008a, pp. 178-9, emphasis in original) words, where alienation takes hold in capitalist society,

money, currency, commodities, capital are nothing more than relations between human beings (between 'individual', qualitative human tasks). And yet these relations take on the appearance and form of *things* external to human beings. The appearance becomes reality, because men [sic] believe that these 'fetishes' exist outside of themselves they really do function like objective things. Human activities are swept along and torn [alienated] from their own reality and consciousness, and become subservient to these things.

And yet, Lefebvre stressed that traditional Marxist conceptions such as alienated labour and commodity fetishism were just one aspect of alienation. In the rise of consumer capitalism in the post-World-War II era, Lefebvre (2008a pp. 29-42) theorised alienation as extending also to leisure, private life, family life, and the imagination. Alienation is not class-based in that it only serves the capitalist class, at the expense of the proletariat. Rather, 'alienation appears in day-to-day life, the life of the proletarian and even of the petty bourgeois and the capitalist (the difference being that capitalists collaborate with alienation's dehumanizing power)' (Lefebvre 2008a, p. 167). All everyday life is alienated. Accordingly, humans do not realise that their realities – the state, legal, economic, and political institutions – are all purely human products. They conceive of these being external objects, things, pressures upon life. What this meant for Lefebvre (2008a, p. 169) was that real human endeavours, powers or essences were obscured by this 'unreality' of alienated society and daily life:

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<sup>3</sup> One major difference to his contemporary Marxists was that Lefebvre insisted Marx's early and later writings should be read in dialogue. Rather than dogmatically adhering to Marx's later 'scientific' writings (of which he criticised the French Communist Party), Lefebvre also valued earlier humanist and philosophical work (Lefebvre 2008a pp. 176-178; Lefebvre 2009b). In turn, Lefebvre developed his own distinctive, and wide-ranging, critique of capitalism that combined Marx, Lenin and the Surrealists, with a plethora of non-Marxist thinkers including Nietzsche, Hegel and Heidegger, plus many more (Brenner and Elden 2009, p. 7). Lefebvre's Marxism was humanist, dialectical and utopian.

This unreality appears to be infinitely more real than anything authentically human. And this appearance contributes to alienation; it becomes real, and as a result a great abstract 'idea' or certain form of the State seems infinitely more important than a humble, everyday feeling or a work born of man's [sic] hands.

Lefebvre's *Critique of Everyday Life* was emancipatory in that he sought to theorise what people could do about alienation, and how they could progress past a social system totally colonised by alienating powers of capitalism. Lefebvre (2008a, p. 184) knew this would prompt scepticism. In his words, 'If I have learned to think or to love, it is in and through the words, gestures, expressions and songs of thirty centuries of human alienation'. Hence,

how can I come to grips with my self, or how can we retrieve our selves once more? If I stay on my guard and strip myself of everything suspect, I am left naked, dry as dust, reduced to 'existing' like someone who refuses to be hoodwinked by anything; and what will become of me and my wariness? (Lefebvre 2008a, p. 184)

To which his response was:

Nothing. Alienation is an ordeal that our era must undergo, there is no means of escaping it. Only later will future human beings, freed from alienation, know and see clearly what was dehumanized and what was worthwhile about the times we live in... And so our entire life is caught up in alienation, and will only be restored to itself slowly, through an immense effort of thought (consciousness) and action (creation). (Lefebvre 2008a, p. 184)

Lefebvre emphasised that this 'immense effort' would be a long process. Hence there was a dual meaning behind his emphasis on everyday life: alienation encompassed all of everyday life, but it is only in the realm of the everyday that life can become disalienated. And so

This obliges us to search documents and works (literary, cinematic, etc.) for evidence that a consciousness of alienation is being born, however indirectly, and that an effort towards 'disalienation', no matter how oblique and obscure, has begun. (Lefebvre 2008a, p. 66)

Lefebvre's dialectical Marxism was open ended, and purposefully brought the contradictory and conflictual together in an effort to reveal tension between alienation and disalienation. Yet he never sought to resolve that tension. Like Marx, Lefebvre purposefully used provocative examples to push his dialectic. Such a perspective is why his search for evidence of a 'consciousness of alienation' was widespread – in theoretical texts, art, poetry, governmental

policy, music and history (Box 3.1). The process of becoming disalienated was always characterised by movement. For example, in *Critique of Everyday Life (Volume 2)* he emphasised 'there is perpetual movement: 'alienation-disalienation-new alienation' (Lefebvre 2008b, p. 207). There is no end point to disalienation but a new relation that can be pushed further dialectically. As Lefebvre (1996, p. 153) argued 'descriptions, analyses and attempts at synthesis can never be passed off as being exhaustive or definitive'. In this way Lefebvre's Marxism pursues a horizon, not a fixed point that can ever be attained. Progressing towards disalienation becomes a central part of the *critique of our everyday lives*.

The horizon that the process of disalienation moved towards is illustrated in Lefebvre's concept of *l'homme total* (the total man [sic])<sup>4</sup>. Lefebvre's (2009b, p. 139) concept of the total human marked, for him, the beginning of disalienated beings. In this way, humans realise their diverse and multiple essences, the 'independence' of economic forces is brought under control, ideology is transcended, and any 'natural inequality'<sup>5</sup> between humans will be valued and provided opportunity to fulfil itself. Hence, 'the total [hu]man is a free individual in a free community. He [sic] is an individuality which has blossomed into the limitless variety of possible individualities' (Lefebvre 2009b, pp. 151-152). Pursuing the total human becomes central to all everyday life.

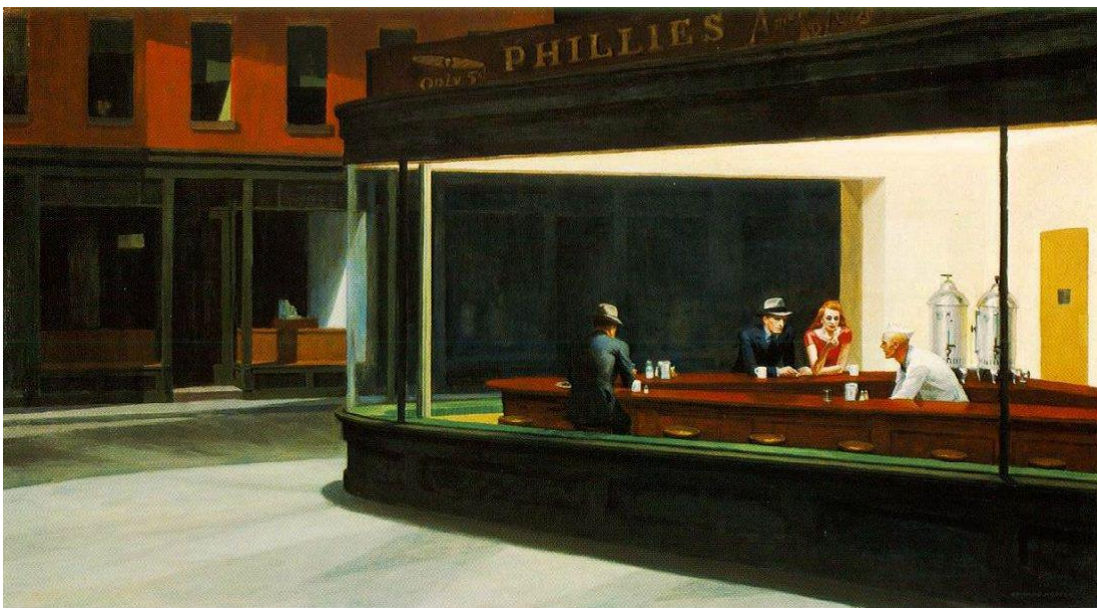
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<sup>4</sup> Hereafter named 'total human'. Lefebvre also did include 'total human' in his discussions of the 'total man' though they retained slightly different meanings, and are filtered by questions of language, meaning and translation from French to English (see Lefebvre 2009b, p. 151-3). The term 'total man' is obviously out-dated when considering current academic standards of gender neutral language. However, it provides a chance to reflect on the question of gender within a Lefebvrian framework. Reading Lefebvre often requires having to overlook a number of now dated terminologies – particularly those terminologies he used to refute what he saw as 'dogmatic' Marxists (Lefebvre 2009b). But Lefebvre's position on gender has caused concern. He was not overtly sexist. The *Critique of Everyday Life (Volume 2)* argued that the colonisation of daily life by consumer capitalism was disproportionately affecting women (Lefebvre 2008b). Here we can see Lefebvre sympathetic to gender oppression. However he remained entrenched in normative heterosexual gender relations and categories, seeing the world A/not-a (i.e. male/not-male), and never extending this (despite his infatuation with triads) to A/not-A/neither (Shields 2004; see also Blum and Nast 1996). Despite such limitations, Kipfer et al. (2013) have pointed towards feminist engagement with Lefebvre's work including Kristin Ross (1995), Mary McLeod (1997) and Doreen Massey (1994).

<sup>5</sup> Such a term could be interpreted to have roots in social Darwinism, however for Lefebvre (1996, p. 34) 'difference' was a key motif, and particularly within his urban writings, that he thought should be one basis of the right to the city, the right to difference, to celebrate it, not wash over it.

### Box 3.1 Edward Hopper: capturing consciousness of alienation in art

Edward Hopper (1882-1967) was a commercial artist and illustrator who developed a career, and oeuvre that 'combined the currents of American realism and Modernism in finely calculated renderings of typical everyday scenes, thus giving them a universally valid meaning' (Westheider and Philipp 2009, p. 227). Hopper would eventually become one of the most influential 20th century American artists, known for his moody paintings (most famously, *Nighthawks*, 1942 – see Figure 3.1) depicting solemn figures in ordinary urban landscapes, his techniques of cropped architectural geometries, 'characteristic stillness' (Westheider and Ansenk 2009, p. 11) and use of light and darkness to evoke emotions of estrangement (Figure 3.2). According to Göring (2009, p. 7), 'the effects of the modern age on people led him to take as his themes the experience of alienation and loneliness, the inability to make contact with others, and the melancholy of existence'.



**Figure 3.1** Edward Hopper, *Nighthawks* (1942, Art Institute of Chicago)

Hopper's art features people in familiar city contexts including cinemas, offices, apartments and subway cars, 'usually downbeat places in faded neighborhoods, in images that create vast spatial and psychological distances within the frame' (Zurier 2009, p. 14). As part of the 'Ashcan School' of modern 'precisionists' painting in the 1920s and 1930s, such work 'brought into American art a wealth of new urban subjects, including construction sites, prize fights, tenements, cheap fashions, urban entertainment from the stylish roof garden to the working-class nickelodeon, department stores, and low-priced restaurants where working women

enjoy a night out. No American artists had depicted cities in this way before' (Zurier 2009, p. 15).



**Figure 3.2** Edward Hopper, *Seven A.M.* (1948 Whitney Museum of American Art)

Hopper was never a Marxist. Indeed, his formal political leanings (believed to be more conservative) were never overtly declared nor featured strongly in his art. Instead his art was much more about personal, psychological worlds within cities ('reproduction of the world that surrounds me by means of the world that is in me' – quoted in Nonnenmacher 2009, p. 8): the isolation of strangers, oblique angles and almost voyeuristic peering into private lives, snapshots of scenes hinting at urban stories not known. Through his use of light and shadow he 'marked out complex spatial zones that emphasized the figures' isolation and the drudgery of their labor' (Zurier 2009, p. 22; Figure 3.3). They are a prime example of an artist at work with what Lefebvre (2008a, p. 66) would call a heightened 'consciousness of alienation' in the modern city. As presented here in this box, and later throughout this thesis, Hopper's art also draws the links between alienation and the rhythms of day and night: his are urban scenes at midday and midnight, at dawn and dusk, where the use of lonely human figures and a shifting interplay of dark and light grasps at, and exposes, the emotional alienation of daycentrism.





**Figure 3.3** Edward Hopper, *Office at Night* (1940, Whitney Museum of American Art)

A focus on alienation and the everyday is crucial for a thesis on day and night given their constant presence in our quotidian routines and rhythms. This thesis argues that day and night are quintessentially *everyday* in the Lefebvrian sense: they are both an overlooked – seemingly mundane – presence in our lives, but, as I argue in this thesis, so too are they fertile and radical co-ordinates for realising a possible disalienated existence.

Lefebvre's *Critique of Everyday Life* and his concept of alienation influenced the events of May 1968 in France (discussed below). As part of Lefebvre's changing worlds and changing futures these events would in turn influence his focus on the urban – another key concept in a Lefebvrian sensibility, and a key precept of this thesis worth detailing here.



### 3.1.2 Lefebvre's urban<sup>6</sup> emphasis

May of 1968 saw the largest general strike in history, bringing France's economy to a halt (Knabb 2006, p. 487). The government attempted to quell initial student dissent and protest that subsequently spread through a number of factories, involving workers, and culminated in over 11 million people (some two-thirds of the workforce) on strike for two continuous weeks. France's President Charles de Gaulle fled the country during the turmoil, but would eventually win the next elections, by a stronger margin than ever before. The events fuelled belief amongst the Left that the world was on the verge of revolution. Such fervour subsequently dissipated in the following months. Some of the agitating that led to May 1968 began in Lefebvre's lecture theatres at Nanterre University (Merrifield 2006, p. 39-42). In particular, his *Critique of Everyday Life* (Lefebvre 2008a) and *Introduction to Modernity* (Lefebvre 1995) had helped to articulate disillusionment and grievances many felt with consumerist culture in the post-war period. But the events of May 1968 subsequently provoked Lefebvre to more deeply consider the concept of the *urban*. Lefebvre in some ways influenced this event and was in turn influenced by its outcomes (Harvey 1991, p. 430).

Between 1968 and 1974 Lefebvre published seven books on urbanization such as *Right to the City* ([1968] 1996) and the *Urban Revolution*<sup>7</sup> ([1970] 2003a), culminating in the *Production of Space* ([1974] 1991). As Harvey (1991, p. 430-431) has commented, the events during 1968 'alerted' Lefebvre to the way politics had developed in a distinctly urban spatial context – contra traditional Marxist emphases on workplace politics. For Lefebvre, demanding the means of production, fighting the marginalisation of social groups, seeking political representation and accessing the central spaces of the city were issues that required a theoretical reframing around the concept of the urban. The events of May 1968 highlighted urban problems, played out in urban settings. In the words of Frank Cunningham (2010, p. 273):

Placing cities at the centre of one's analyses invites attention to the actual loci of life, work and politics rather than exclusively to historical periods and class relations in general, as Lefebvre thought Marx did in largely ignoring the realm of the urban.

It is helpful to elaborate that Lefebvre's concept of the 'urban' juxtaposed his concept of the 'city'. Lefebvre drew a distinction between the city and the urban in the following way: the

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<sup>6</sup> The Anglo-appraisal of Lefebvre's work, particularly by geographers, has focussed on his urban research. The *Production of Space* has been a central text in this adaption, given its spatial emphasis, although it remains relatively unknown in the Francophone world (see Merrifield 2006, p. xxxii).

<sup>7</sup> Both of which contain the most in-depth discussion of transduction (discussed below).

historical 'city' can be divided into a number of different phases that all produced their own space: for example the political city, the merchant city, and the industrial city. The phases between the different forms of cities are characterised by transitions. For example:

The *merchant city* succeeded the political city. At this time (approximately the fourteenth century in western Europe), commercial exchange became an urban *function*, which was embodied in a *form* (or forms, both architectural and urban). This in turn gave urban space a new *structure*. (Lefebvre 2003a, p. 10, emphasis in original)

Heading towards the 'critical zone' (which exceeds the industrial city) the city is totally transformed. There is an exodus from rural areas, the city expands and simultaneously concentrates power centrally. The agrarian, rural and nature become completely subordinate to the *urban*. In Lefebvre's (2003a, p. 11) words:

From this moment on, the city would no longer appear as an urban island in a rural ocean, it would no longer seem a paradox, a monster, a hell or heaven that contrasted sharply with village or country life in a natural environment.

*The Urban Revolution* opens with the hypothesis that 'society has become completely urbanised... An urban society is a society that results from a process of complete urbanization. This urbanization is virtual today, but will become real in the future' (Lefebvre 2003a, p. 1). This might not seem contentious in 2014, when over half the world's population now lives in cities (Merrifield 2013). But in the 1970s this depth of theoretical engagement with a distinct conception of the urban was uncommon (Smith 2003, p. viii). Lefebvre thought that total urbanisation posed a new theoretical problem. His distinction between the city and the urban sketched how urban life could flourish into something beyond the notion of a city as an object to be managed and ordered. The city is the unquestionable logic of private property, where people are consumers rather than citizens, governed by planners, politicians, architects and institutions that seek to control economic growth and development. In the city, dissent and action are co-opted under capitalism (see also Lefebvre 1991).

On the other hand, 'the urban' (short for urban society) is that which is yet to come. For Lefebvre, it is a society in which the rights of property, economic growth and development are trumped by the notion of the total human, free of alienation. The urban celebrates difference and diversity, encourages disagreement, and fundamentally promotes a new means of urban life. Urban society subsumes the contradictions and conflicts within everyday life, always moving towards human subjects free of alienation, free of the state, that recognise use value

over exchange value, and production as creative, personal and emancipatory rather than exploitative.

Nevertheless, the city hides the urban from view. The built form, social relations, pre-eminence of exchange value over use value, and protection of private property all become normalised so that our view of urban society becomes obstructed. This was the central argument in the *Production of Space* (Lefebvre 1991; see more Chapter 5). The rationalist conception of the city as an object, under capitalism and the state, comes to produce its own abstract space. That abstract space imposes itself on everyday life – but crucially erases the vibrancy and inconsistency of life itself. To progress towards urban society citizens must become active in the production of space. Lefebvre knew that the urban was difficult to understand and even more so to achieve. But this was ‘hardly sufficient grounds for denying its existence’ (Lefebvre 2003a, p. 120).

Lefebvre’s formulation of the urban is relevant to this thesis, because many of the dominant renderings of day and night are urban (see Chapters 4 and 10). The linear narrative of human advance from day into the night runs parallel to an advance of urban modernity (cf. Koslofsky 2011; Melbin 1987). In Chapters 1 and 2 I discussed the many contradictory ways that day and night have been understood throughout history, the dichotomous nature of day and night representing polar opposites, and understood through a number of interrelated dualisms that manifest through modernity. Rather than seek to resolve these tensions, a dialectical urbanist approach to alienation and disalienation provides a conceptual framework to work *with* contradictions (cf. Merrifield 2002). Following Lefebvre’s formulation, we have realised, and documented in scholarly work, night and day in the *city*. The task remains to envisage an *urban* day and night (see more section 3.2).

Lefebvre’s concept of alienation and the urban were also concerned with the foreclosure of possibilities, in that the alienated individual and society no longer recognised their capabilities to enact change in their own lives, different than the ones currently provided by capitalist social relations. It is an acknowledgement of this foreclosure of possibilities in relation to day and night that infuses the rest of this thesis. Because of their seemingly ‘natural’ omnipresence in our lives, we have collectively foreclosed possibilities that our interactions with day and night in the city could be experienced differently. This brings the discussion to the final concept in a Lefebvrian sensibility relevant to this thesis – that of utopia.

### 3.1.3 Utopia

A Lefebvrian sensibility is 'utopian'. In 1962, Lefebvre (1995, p. 356) argued:

Utopianism lives again. It is acting out its old role: to disappoint, but also to stimulate. It is exploring the possibilities of a praxis... those possibilities are there waiting for us and calling to us. Imagination is adopting or rediscovering a creative power.

Even so, Lefebvre was sceptical of the term utopia. 'Who is not a utopian today?' (Lefebvre 1996, p.151) he asked. In his words:

Only narrowly specialised practitioners working to order without the slightest critical examination of stipulated norms and constraints, only these not very interesting people escape utopianism. (Lefebvre 1996, p. 151)

This led Lefebvre to suggest that there was no theory without utopia (2009a, pp. 178-179). Any theory without utopia would be content to merely document and record what exists before our eyes. And yet, Lefebvre argued that utopia unfairly attracted criticism because it was 'abstract' and not related to reality. In Lefebvre's formulation, utopia meant a rigorous commitment to excavating the possible futures that were revealed dialectically between the impossible/possible. In his formulation of utopia, abstract/concrete, and the impossible/possible were not set in opposition to each other, nor utopia as far off and distant, with reality here and now. This process was dialectical in that,

the impossibilities do not differ from the possibilities in the way that the abstract differs from the concrete, and vice versa. That's an erroneous theory. The impossible can be perceived only via the possible, and the possible can be appreciated only by the impossible. The two meet; not only do we conceive of the one via the other, but we perceive them both in their contradictions... The possible refers you to the impossible, the impossible refers you to the possible. (Lefebvre 1995, p. 380)

Rather than abstract speculation, for Lefebvre (1995, p. 357) utopia was,

no longer a question of one leap into the distant future over the head of the present and the near future, but of exploring the possible using the present as a starting point. You should also note that the possible and the utopian method can no longer be synonymous with foresight, prophecy, adventurism or the vague consciousness of the future. We can no longer see utopianism as an abstract principle like hope, projection,

willpower or goodwill... philosophers who see utopianism in this way are lagging behind what is possible and the idea of what is possible.

The emphasis on utopia is scattered throughout Lefebvre's texts, however its presence cannot be understated. According to Coleman (2013, p. 349), 'Utopia is the lynchpin of Lefebvre's enterprise... his ethics, his ideas on practice and the methods he elaborated, are fundamentally utopian'. And yet, notwithstanding his careful and deliberate elaboration on what utopia should mean and its relation to both the possible and the impossible, utopia has remained a maligned concept. David Pinder (2013, p. 5) has argued this is due to an 'understandable anxiety about the escapist, reactionary, or authoritarian role of utopias'. Yet scholars are returning to Lefebvre's notion of utopia to make sense of the world's current predicaments (Chatterton 2010; Coleman 2013; Pinder 2013; Purcell 2013). For example, rethinking consumption-orientated cities that contribute to the impacts of climate change (Chatterton 2010, p. 239), or redefining democracy in the face of economic and political crises (Purcell 2013). As I argued in Chapter 1 (section 1.3) day and night might not have the same urgency as environmental or financial crises, but utopian thought is vital to help reframe such a ubiquitous and taken-for-granted aspect of everyday life.

### 3.2 Transduction: rigour in invention, knowledge in utopia

The discussion of a Lefebvrian sensibility has thus far set the scene conceptually for this thesis. This thesis is grounded philosophically, politically and methodologically in Lefebvre's concept of alienation, the urban and utopia. To translate this into a novel argument structure and 'method' for this thesis, I now turn to Lefebvre's under-utilised transformational strategy, transduction.

Transduction was initially sketched by Lefebvre in the *Right to the City* (1996 [1968]) and developed more fully in the *Urban Revolution* (2003a [1970]). Lefebvre saw transduction as a means of thinking contra the intellectual traditions of deduction or induction, focussed as they are more on 'models', simulations or statement of a hypothesis. Instead, transduction creates a 'possible' or 'virtual' object, that Lefebvre argues should be derived from 'reality', or from any problematic caused between the 'virtual' and the 'actual'<sup>8</sup>. The 'virtual' is utopian and 'is to be considered experimentally by studying its implications and consequences on the ground' (Lefebvre 1996, p. 151).

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<sup>8</sup> The 'virtual' should not be confused with emerging 'virtual geographies', which focus on 'materially grounded geographical studies of the digital' (Kinsley 2014, p. 365).

As a method, Lefebvre thought transduction could shape 'spontaneous' mental operations of the architect, planner, politician, and philosopher. As this chapter's epigram put it, for Lefebvre (1996, p. 151), transduction ensured 'rigour in invention, knowledge in utopia'. Transduction is thus a method to progress from the already actualised world, towards the possible world yet to come. At its heart is utopian forward thinking for new disalienated ways of living that spring dialectically from concrete examples in the world and everyday life. Transduction highlights tensions, moments and ideas that already exist – within the realm of the actual – that can point as a compass towards future possibilities. In Lefebvre's (2003a, p. 6-7, emphasis in original) words:

[Transduction] attempts to open a path to the possible, to explore and delineate a landscape that is not merely part of the 'real' [actual], the accomplished, occupied by existing social, political, and economic forces. It is a *utopian* critique because it steps back from the real without, however, losing sight of it.

Transduction was Lefebvre's method to progress from the city towards the urban (Lefebvre 1996; 2003a). The urban was,

preferable to the word "city", which appears to designate a clearly defined, definitive *object*, a scientific object and the immediate goal of action, whereas the theoretical approach requires a critique of this "object" and a more complex notion of the virtual or possible object. Within this perspective there is no science of the city (such as urban sociology or urban economy), but an emerging understanding of the overall process, as well as its term (goal and direction). (Lefebvre 2003a, p. 16)

The industrialised city, for Lefebvre, represented the 'actual' object that existed in reality. For Mark Purcell (2013, p. 23), Lefebvre's 'actual' can be thought of as 'realized both as concrete built form and as a set of normalized social relations, habits of action, thought, and common sense'. The 'virtual' is instead a vision of things to come. But the 'virtual' object is only a horizon to move towards dialectically:

The urban... can therefore be defined not as an accomplished reality, situated behind the actual in time, but, on the contrary, as a horizon, an illuminating virtuality. It is the possible, defined by a direction, that moves toward the urban as the culmination of its journey. To reach it – in other words, to realize it – we must first overcome or break through the obstacles that currently make it impossible. (Lefebvre 2003a, pp.16-17)

Transduction was Lefebvre's means to proceed from the city to the urban. The horizon of urban society, that transduction proceeds towards, can never be met, it can only be strived for. As with Lefebvre's concepts of alienation, the urban and utopia, transduction is a process rather than an attainable end point – a philosophy to live by and infuse urban life continually.

But, how do we know if we are on the way to the urban society? How can we notice progress? For Lefebvre, transduction created incessant feedback between conceptual and empirical observations. Urban society may be difficult to envisage, but it exists. In the midst of the 'actual' city there are moments, existing objects, instances of cooperation, discord, relations and practices that point towards urban society. Incessant feedback means that the further we move towards the urban horizon, the easier it becomes to envisage that future in clearer *resolution*. The more we develop an idea, the more we develop a vocabulary around the virtual. Through transduction our senses become honed, not only identifying where the virtual exists, but where it can be nurtured and allowed to flourish in space and time.

For Purcell (2013), the feedback from transduction is affirming. Once we begin to look for emerging practices that point towards the virtual object they become ever more apparent. In Purcell's (2013, p. 148) words 'that is good for our psyche, because it makes the world seem quite a lot less dark'. As a method, transduction can be uplifting, empowering, positive 'especially when compared to a method like critical political economy that focusses intently on cataloguing, often meticulously, the many forms of oppression and apparatuses of capture' (Purcell 2013, p. 148).

In Purcell's formulation he used transduction to define a more radical and open idea of democracy. What we think of as contemporary democracy, Purcell prefers to call oligarchy. Democracy, for Purcell, is far more radical than existing liberal democracies. But the question remains:

"How can we achieve it?" This question is less troubling for a liberal democrat, since there are many examples of actually existing liberal democracies to point to. But radical democracy is rarer. Some would even say a utopian fantasy, a nice thought but impossible to achieve. (Purcell 2013, p. 20-21)

Democracy is perpetually moving, needing to be redefined, needing to be acted. Transduction is thus, for Purcell (2013, p. 20-27), a pursuit of the virtual object of an *active democratic autonomy*, from the actual object of *passive heteronomous oligarchy*. What Purcell showed with his use of transduction is that there are many 'virtual' objects beyond Lefebvre's urban

society that we can strive towards. They are each characterised by a different horizon, with existing social practices they seek to extend, and each has a similar practical and conceptual commitment to pursue. But virtual horizons need not stand alone. They are connected with other virtual objects – both in practice and in thought (Purcell 2013, p. 148-149).

The virtual is not offered as fully formed. The tasks, through transduction, remain to identify those behaviours and activities pushing towards the horizon, to articulate common actions, and to imagine the virtual/or the urban society fully formed. Key, is a desire to push debates about the city and politics into potentially foreign vocabularies that may attempt to address issues beyond the observable reality as we know it. This ontological reframing is a theme to which geographers regularly return, prompting an appetite to think in bold new ways about cities (Chatterton 2010; Hubbard 2006), economy (Barnes 2001; Gibson-Graham 2008), politics (Davidson 2012; Davidson and Martin 2013), time and space (Massey 1992; 1999), and modernity (Head and Gibson 2012). Shared too, is a desire for such utopian ideals to remain connected to everyday life, or to spring from the world as we know it. This is a continual tension that a Lefebvrian sensibility and method of transduction helps to address: how to remain utopian, sketching possible futures of a better world, while remaining genuine and practical; to remain committed to progressive ideals but achieve those within everyday life, and more modestly to communicate and develop those ideals in the means of academic practice. Transduction is the method for pursuing such a vision in this thesis.

### 3.3 Becoming crepuscular

The virtual object that this thesis pursues is *becoming crepuscular*. Becoming crepuscular means to orientate our everyday lives more creatively around day and night – embracing both in all their contradictions, embracing darkness, embracing light. That does not mean to worship day and night as some form of anthropomorphic gods, like Ra of ancient Egypt – the god of the sun, or Nyx of ancient Greece – the beautiful, shadowy personification of night. Becoming crepuscular means to use day and night as coordinates for a more sustainable, fulfilled, and just everyday life and urban existence.

Becoming crepuscular is premised on the realisation that we are alienated from the cycle of day and night. Although our circadian rhythms tie us back to a fundamental relationship to the perpetual cycle of day and night, what they have come to mean in the everyday life of contemporary cities reflects a schism with this earthly force. Sleep debt, standardised time zones, excessive illumination, skin-cancer, vitamin D deficiencies and excessive ordering of night-time sociability are all examples of this alienation. Becoming crepuscular means to have



gained a consciousness of alienation and to realise value in a disalienated relationship to day and night. Becoming crepuscular is the process of attempting to recover and honour our relationship to day and night, and to make this task central to the dreams of our cities and everyday life.

Becoming crepuscular cuts a path out of an actual object characterised by daycentrism. Daycentrism means that the day is favoured and that the binary of day/night is restricted from emerging differently. As I have reviewed in Chapters 1 and 2, what is known about day and night has been characterised by disproportionate emphasis on night in contemporary research. Daycentrism and disproportionate emphasis on night in scholarly research can be thought of as ‘what has been realised’ in contemporary society and thus forms the *actual*. The pursuit of becoming crepuscular encourages us to push thinking about day and night into different directions. The task of this thesis then lies in developing that lens of the virtual object.

Becoming crepuscular is a pursuit of a disalienated relation to day and night. As I have reviewed earlier in this chapter, for Lefebvre, alienation was all pervasive in the modern world. Our society under capitalism has effectively colonised every element of everyday life. But more than this, Lefebvre emphasised alienation because he believed that alienated society served to foreclose on the notion of what was possible in everyday life. Seeing through alienated eyes – or, from the context of the actual – means our view is already skewed, our perspectives dulled, our desires shaped by our alienated form. This is important for this thesis. I argue that, to date, research on day and night has been lacking in desire for what might seem impossible about day and night. I believe that this has roots in the fact that day and night have a deep cosmological basis that leaves them ontologically secure when compared to other binaries (Chapter 1, section 1.2). In the chapters that follow, I recurrently draw on Lefebvre’s notion of alienation. For example, in Chapter 4 I explore how humans are increasingly alienated from cyclical notions of day and night, as the domination of modernity’s linear time becomes paramount. Chapter 6, crepuscular lives, discusses practices and behaviours that intersect with day and night, such as sleep, that are currently being contested in a search for a more fulfilled sense of everyday life. Chapter 7 examines the technologies and infrastructures that both alienate and disalienate humans from day and night.

The virtual object, becoming crepuscular, is utopian in the Lefebvrian sense. But as Lefebvre (2003a) stressed, the method of transduction helps to pursue alternate ways of being in the world, without resorting to abstracted utopias. The chapters that follow draw on existing

literature, debate, places, practices, and technology that have unique, different, or unusual relationships with day and night. Put differently, these are the instances in which day and night is already being contested, but they come from some diverse and disparate contexts. So too, they are not always articulated as being specifically *about* day and night. I use these examples to draw out ideas and possible directions where humans are already experiencing or thinking day and night differently. These are examples that highlight an alienation from day and night, or, as in the transduction method, are evidence that a disalienation ‘no matter how oblique and obscure, has begun’ (Lefebvre 2008a, p. 66). Drawing disparate contexts together helps to establish rigour in the virtual object of becoming crepuscular, and deepens the vocabulary through which we can unsettle day and night’s normative renderings.

Striving towards becoming crepuscular is connected to other virtual objects as a means to pursue urban society, the right to the city, the ‘total human’ that is freed from alienation, from industrial and capitalist constraints on day and night, towards producing our own space – one informed by conflicting and divergent days and nights. Becoming crepuscular is a perspective on life and thought, and, like the total human, it can never be fully realised, only strived towards.

The questions virtual objects like urban society, democracy and becoming crepuscular share are enduring questions of critical geography: of greater democratic functioning of the cities we live in, of greater sense of community, of less emphasis on the mechanisms of capitalism, of greater social inclusion and diversity, or of ontological reframing that can illuminate new ways of being in the world. Such questions are not resolved finitely here, but rather it is acknowledged that the connection between virtual objects helps to situate the conceptual and methodological framework of this thesis within a broader intellectual strand<sup>9</sup>.

In the chapters that follow, transduction will help to develop the virtual object of becoming crepuscular. Some elements of becoming crepuscular may seem impossible, they may never be reached. Rather, through transduction the ability we have to identify the possible and impossible in regards to day and night is in a constant state of development and critique.

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<sup>9</sup> The broader intellectual connections also include poststructuralist and feminist research on the very *becoming* of individual subjects. Rather than view subject positions as ‘fixed’ or ‘stable’, subjects are instead viewed as constantly becoming through intersections of identities, encounters and physical proximities (Hopkins and Noble 2009). The focus in this thesis on ‘becoming’ crepuscular therefore shares a similar phenomenological sensibility with otherwise disparate studies of subjectivity and governmentality (see for example, Connolly 2002; Gibson 2001).

Becoming crepuscular is not therefore intended to be prescriptive. Instead, through transduction, becoming crepuscular is borne out of the context of increased interest in the night and identification of daycentrism (as in Chapters 1 and 2). There is a context of greater attention and critical interrogation of night (and day). Becoming crepuscular is a framework to imagine how far we might want to push a re-evaluation of day/night. As with the critiques of utopia mentioned above, I am also wary of the danger of authoritarian utopias. It is intended that this thesis instead offers an innovative conceptual framing for themes of day and night, at a time when disciplinary focus has been on exploring an undertheorised 'night'.

This thesis thus tells the story of embracing the crepuscular to rethink everyday life through day and night. But becoming crepuscular does not stand alone as a virtual object. It is pursued, like many others, as a means to become disalienated; to find a more fulfilled sense of everyday life; to know, respect and cherish our fellow humans; and to imagine and demand more political control and participation in the cities in which we live.

### 3.4 Transduction as method

Transduction runs throughout the remaining chapters. Chapter 4 shows where the actual needs to be contested; Chapter 5 where the virtual is obscured by the actual; Chapter 6 and 7 outline where transduction helps to reinterpret examples of the actual that contain elements of the virtual; Chapter 8 views where the actual disrupts the virtual; Chapter 9 shows where the previous steps of transduction resonate with everyday life; and Chapter 10 where the virtual and actual exist side-by-side. In each, a mix of examples and conceptual explorations have been collected and interpreted. There is a dual focus throughout on how the material relates to day and night and additionally how it can be interpreted through a Lefebvrian framework and the lens of transduction. Transduction has driven the research process as much as the presentation of the final thesis.

The feedback of transduction – where the actual and the virtual disrupt each other, but also where the virtual object becomes a vision increasingly honed – has been facilitated by a mix of data collecting methods. These included blogging and social media, mainstream media analysis, critical interpretation of policy texts, autoethnographic daily diary keeping, and in-the-field participant observation in Wollongong, Sydney and Lake Tekapo, New Zealand. Eclectic data collection is often important in projects utilising qualitative methods, and can be seen as integral to ongoing project development. In the words of Bailey et al. (1999, p. 170): 'Due to the dynamic nature and varied epistemologies and methods of qualitative research, the criteria for the evaluation of individual projects must arise from the research process

itself'. Such methods have been developed with transduction as part of the evolving research process.

Following on from my earlier interests in live music venues and the night, I traced the contours of a growing debate about the night-time economy in NSW between March 2010 and November 2013. This involved collecting materials from a variety of sources including official policy documents, mainstream print media articles and press releases. Such materials appear in the thesis in Chapter 5, where I focus on this debate within broader Lefebvrian analysis of day and night in the production of space.

During the development of this thesis, AUSCCER<sup>10</sup> made a concerted effort to embrace the possibilities for academic research provided by social media (Gibson and Gibbs 2013). Social media such as blogging, twitter and facebook have the potential to change where and how scholarship is practiced, how connections are forged between researchers and institutions, and how research is communicated.

For my thesis topic, social media was invaluable as a repository for materials related to day and night. I wrote a blog related to my thesis, exploring crepuscular themes (Gallan 2014). This enabled initial conceptual explorations, the gathering of photographic material and feedback from other interested parties. Twitter, meanwhile, provided an outlet for the dissemination of academic research papers, connecting my research concerns to contemporary contexts, and archiving media and scholarly articles that deal explicitly or implicitly with day and night. As an online repository, 'retweets' and 'favourites' allowed quick referencing and archiving of many items related to day and night (Bagley 2012). This helped facilitate one aim of this thesis to bring many diverse renderings of day and night into dialogue.

As a result, I had a constant 'stream' that provided the 'incessant feedback' needed to develop the virtual in dialogue with the actual. Such 'data' streaming from blogging and social media supported the feedback process across several of the thesis chapters, but especially material on sleep and technology in Chapter 6 and 7. Likewise, in Chapter 4 a teleological exploration of linear versus cyclical time is supported by collected photographic, blog and media examples, and in Chapter 8 a discussion of politics and antagonisms includes a mix of examples again sourced from social media streams.

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<sup>10</sup> Australian Centre for Cultural Environmental Research – the research centre where I undertook this PhD.

Chapter 9, meanwhile, illustrates a discussion of daily rhythms by drawing upon an extended autoethnography. Autoethnography entails researching issues that are central to your life experiences, and has been the source of some debate in social sciences regarding empirical rigour (Banks 2003). In this thesis, autoethnography is not intended to be viewed as a primary empirical source, but rather as a means to illustrate the key conceptual elements of that chapter. Autoethnography involved keeping a detailed diary over the entire four-year process of conducting this research. In Chapter 9, selected excerpts from this diary are presented to illustrate instances of where crepuscular thought and practice collide.

Finally, in Chapter 10, research involved field work at the Aoraki Mackenzie Dark-Sky Reserve. Whilst there I took part in both night and day tours offered by a local tourism operator, I interviewed a manager and tour guide of a local astro-tourism operation, and spent time at the internationally renowned local observatory. Chapter 10 draws on an autoethnographic account of tourism, and compliments that with an interview, local policy documents, and the supporting documentation for park designation to highlight where an example of the virtual and the actual exist in a contemporary context. The next chapter – crepuscular moments – begins the feedback steps of transduction through which we can get closer to – and clearer vision of – becoming crepuscular.



## Chapter 4 - Crepuscular moments: the linear and cyclical day and night

This chapter theorises crepuscular moments. In so doing, I focus on cyclical and linear time as they relate to day and night<sup>1</sup>. The rotation of the earth as it orbits the sun producing daylight and darkness is a hallmark of cyclical time. Linear time for day and night is captured in urban and modern conceptions of time – the working day, the working week and distinctions between time for leisure and labour.

In exploring the interplay between linear and cyclical time (as they relate to day and night) this chapter draws on Lefebvre's theory of moments. The theory of moments provides a framework for uncovering temporalities that trouble the dominance of linear time. I discuss Lefebvre's theory of moments to draw out how it can help to interpret crepuscular moments. I then focus on how crepuscular moments in the form of sunsets and solstices are instances where the cyclical becomes most evident in everyday life. Moments such as these show where day and night are an enduring presence in our lives – no matter our geography or latitude. Through this chapter I highlight how, where and why different renderings of temporality emerge in relation to day and night and where they can contribute towards becoming crepuscular. In terms of transduction, an emphasis on moments is important to reveal where cyclical notions of day and night continue to exist within the linear. The examples I use to illustrate crepuscular moments also show how transduction can reveal where the virtual can emerge from the actual.

### 4.1 Linear versus cyclical time

'Linear' and 'cyclical' is a distinction Lefebvre used to distinguish between conceptions of time (2004, pp. 8-9; 2008b, pp. 47-51)<sup>2</sup>. Cyclical time can be traced to cosmic timescales: days, nights, monthly cycles, annual cycles, seasons, the waves and tides (Lefebvre 2004, p. 8). In the pre-modern world, such notions of time had significant influence over humans, tying them, in Lefebvre's (2008b, p. 47) words, 'back to nature'. The linear is instead characterised by social

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<sup>1</sup> This chapter has a temporal focus whereas Chapter 5 places greater emphasis on space, hence the two chapters pursue two different Lefebvrian theories that emerged at different times of his career (1991 [1974]; 2008b [1961]). In a sense, the division of these chapters into spatial and temporal themes is false. Sequestering discussions into different chapters is a mechanism of the thesis structure, a heuristic device rather than ontological distinction. Time and space, like day and night, must be thought together (cf. Appendix A and Chapter 9).

<sup>2</sup> Linear and cyclical is a distinction used by other Marxists and scholars (see for example Debord 2010, Chapters 5 and 6).

and human activity, a notion of humans separating themselves from cyclical time in the transition to modernity (Lefebvre 2008b, p. 48). For Debord (2010, 151), cyclical time had been transformed to linear by industry, becoming a consumable commodity in the process. The linear can be broken into divisions such as economic, political, and private time. We place specific values on these segments. Linear time is thus fragmented.

Cyclical and linear time can be separated from each other conceptually, but in everyday life interfere with each other constantly (Lefebvre 2004, p. 8). For Lefebvre (1991, p. 203-5; 2004), the relationship between linear and cyclical was evident in the body. In the body, linear and cyclical time is lived and not thought. Not matter the degree that humans are subjected to industrialised time, instincts to eat, to sleep, even to have sex, for Lefebvre, remained as embodied forms of the cyclical (see also Lefebvre 2008b, p. 48-9; explored in this thesis further in Chapter 9).

In a slightly different interpretation, Debord (2010, 150) argued that ‘pseudo-cyclical [linear] time leans on the natural remains of ancient cyclical time...’. He highlighted the ability of the industrialised, linear, time of the ‘spectacle’<sup>3</sup> to mimic the cyclical nature of day and night. This means that linear time has an ability to mimic what we think of as cyclical time. In this guise, days and nights of modern, capitalist society appear to be similar to the days and nights of ancient, preindustrial or early industrial periods. As the days and nights of capitalist modernity mimic those of more ancient times it lends weight to the thought of day and night’s inevitability: that our experience of day and night as it is now, is as it has always been – give or take a few technological innovations, or a few gradual cultural, economic or social changes. For example, referring to the spread of industrialised lighting as an indicator of the changing night and day, Bogard (2013, p. 9) has said ‘that increase has been gradual enough that it would be easy to imagine our nights are still as dark, or nearly so, as they ever were’. The presence and influence of the cyclical day and night on our lives now, in urban modernity, is nowhere near as potent as in the pre-modern world.

In becoming crepuscular the distinction between cyclical and linear time is important. The passage of day and night, as the cycle of the sun’s light, is a clearly identifiable example of cyclical time. Cyclical time is the duration of seasons, years, days and nights as they would exist whether or not humans were on the planet. However, in our everyday lives the linear notion of

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<sup>3</sup> The ‘spectacle’ is a social relation between people that described the historical point at which commodities effectively colonize every aspect of life. Life is no longer ‘authentic’ but merely a representation (Debord 2010).



day and night comes to dominate over the cyclical. Our lives become orientated around constructions such as the 9-to-5 working week (Chapter 6). Linear time alienates us from the cyclical. As linear time assumes a mantle of 'naturalness', this lends weight to the notion that day and night are not able to be pursued differently. For example, as Melbin (1987) suggested, the patterns of human night-time development are settled and inevitable – there is no going back (discussed further in Chapter 8). Yet a linear day and night is not 'natural', but an inherently urban and modern rendering of day and night.

#### 4.1.1 The urban, modern day and night

The human relationship to day and night is most often understood teleologically: as a process of technical, social, cultural and economic progress. This teleology is reproduced in diverse and disparate literatures such as creationist mythologies, narratives of industrialisation and modernisation, social history and also popular literature (Baldwin 2012; Bryson 2010; Ekirch 2005; Marx 1990; Melbin 1987; Palmer 2000; Schivelbusch 1995). The mastery of fire and flame is characterised as disrupting the essential distinctions between the darkness of night and the light of day. As a species heavily reliant on sight, light allowed humans to penetrate darkness in new ways. Fire provided humans with the means for cooking, warmth, protection from predators and also became a source of social focus after dark. This is often signposted as the beginning of day and night's teleology: 'The discovery of fire, sometime in our prehistory, was the beginning of our *conquest* of night' (Dewdney 2004, p. 97, emphasis added). Fire remained the only source of artificial light for hundreds of thousands of years.

Akin to a narrative of modernity, the industrial revolution looms large in the teleology of day and night. The shift towards industrial societies initiated profound changes to labour, technology and enlightenment that altered the experience and understanding of day and night. This is best summarised as stemming from three factors. The first is the prolonged 'working day' under capitalism. Marx analysed the lengthening of the working day under the capitalist mode of production in early industrial England (Marx 1990, p. 340-416). The capitalist seeks to extract maximum value of the worker's working day, constricted only by two things: the physical limit to human labour-force in the 24-hour cycle, with time needed also to wash, feed and sleep; and that the worker must also realise the social and intellectual requirements of their society or civilisation. Accordingly, 'capitalist production therefore drives, by its inherent nature, towards the appropriation of labour throughout the whole 24 hours in the day' (Marx 1990, p. 367). What resulted under such conditions were prolonged periods of labour for exploited men, women and children. Shift-work was also initiated as a means to

continue production throughout the 24-hour cycle. The experience of day and night over the 24-hour cycle was thus categorically changed for fragments of society under the capitalist mode of production. Some worked long days away from home. Work for many bridged the crepuscular hours of dawn and dusk. And, for others, the experience of day and night was inverted so that day-time hours were predominately now used for sleep and recuperation while the night was a time of toil. Marx signalled the transition from an existence coordinated by cyclical time to the days and nights of linear time. That transition was normalised under capitalism.

Extending industrial labour into the night relied heavily on a second factor: lighting innovations. As Schivelbusch (1995, p. 9) described: 'In factories, night was turned to day more consistently than anywhere else'. Extensive lighting networks were used to light factories and make shift-work efficient. It might seem strange now in our over-illuminated cities, communities and houses but it took far longer for lighting networks to be considered useful outside of factory settings. Light continued to penetrate darkness in ever increasing intensities, eventually extending to streetscapes and the domestic sphere (discussed at length in Chapter 7).

Capitalists extended the working day and industrialised lighting illuminated the workplace at night. But the modern world also had little tolerance for seemingly irrational, 'magical' elements of the night, such as the association with ghosts and witches. This constitutes the third factor: in the modern city, fear and mythologies associated with the night began to be unsettled as scientific rationalism spread with the Enlightenment. The term 'night season' fell out of parlance (Ekirch 2005, p. 324-5). Night began to be conceptualised as a conquerable 'realm', colonised by advances in modern society. This is the transition that Koslofsky (2011) defined as 'nocturnalization', in which human activities increasingly penetrated the night.

At its extreme, conquering the realm of night envisaged the utter obliteration of light and darkness as limits to human activity. Schivelbusch (1995, pp. 128-134) documented one such example, Jules Bourdais' Tour Soleil (Sun Tower)<sup>4</sup>. It was a common belief in late-19<sup>th</sup> century France that light could be produced in unlimited quantities. It was therefore only a matter of time before night could be turned into day once and for all – epitomised by the Sun Tower. Bourdais' vision aimed to completely light the streets of Paris at night. The Sun Tower failed to materialise, supposedly because the citizen's feared being blinded by the bright lights. However, the very suggestion that the Sun Tower would be technologically possible if the

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<sup>4</sup> The Sun Tower was a major competitor to Gustav Eiffel's famous Parisian tower.

social desire was willing, is testament to the extent modernists considered their grasp over the world's future nights.

In contrast, Glennie and Thrift (2009) have sought to unsettle the emphasis on modernity and industrialisation, as purported indicators of drastic, revolutionary changes in time. They instead highlight how the transmission of 'new' ideas about time owed as much to *gradual* technological innovation as it did to circulating discourses on the nature of time. Accordingly, I do not want to suggest the previous examples of industrial lighting, the extension of the working day, and the fantastical Sun Tower can be taken as instances where day and night were drastically altered in an *instant*, or through one particular *innovation*. Instead, they serve as indicators of how the human relationship from day into night has been popularly and increasingly conceptualised as a teleological notion of progress.

In Lefebvre's formulation we embody both cyclical and linear time. However, there is a pervasive tendency for ideas about day and night to be understood as the urban, modern day and night – linear time – by default. The urban, modern day and night as a teleology is a spectacular rendering of day and night (opposed to the cyclical, or the metaphorical) but if it remains untroubled it serves to suppress alternative temporalities of day and night from emerging (Box 4.1; see also Crang 2001, p. 189). The contemporary experience of night and day is undoubtedly different in many ways to pre-industrial nights. That is not to say, however, that we cannot return to lives more fully integrated with cyclical time (for instance, for ecological reasons or in response to earthly volatility). Nor should such returns to the cyclical be necessarily considered an anti-modern, anti-urban, or a backward step. This chapter outlines how Lefebvre's theory of moments can help to draw out the distinction between different temporal interpretations of day and night.

**Box 4.1 Borges: *The History of the Night***

Jorge Luis Borges was a Latin American writer famed for his crepuscular themed poetry. He suffered from degenerative blindness, losing sight in his mid-50s, which meant that the last three decades of his life were spent in comparative darkness. Borges thus had a unique perspective for interpreting day and night, light and darkness in prose – spending different parts of his life in light, and others in darkness. Many of his poems, such as *Break of Day*, *Afterglow*, *Insomnia*, and *The Cyclical Night* are poetic examples that trouble the ontological security of day and night.

In the *History of the Night*, Borges (2010, p. 135) framed day and night's teleology:

Down through the generations  
men built the night.  
In the beginning it was blindness and sleep  
and thorns that tear the naked foot  
and fear of wolves.  
We shall never know who forged the word  
for the interval of shadow  
which divides the two twilights;  
we shall never know in what century it stood as a cipher  
for the space between the stars.  
Other men engendered the myth.  
They made it mother of the tranquil Fates  
who weave destiny,  
and sacrificed black sheep to it  
and the cock which presages its end.  
The Chaldeans gave it twelve houses;  
Infinite worlds, the Gateway.  
Latin hexameters gave it form  
and the terror of Pascal.  
Luis de Leon saw in it the fatherland  
of his shuddering soul.  
Now we feel it to be inexhaustible  
like an ancient wine  
and no one can contemplate it without vertigo  
and time has charged it with eternity.  
  
And to think it would not exist  
but for those tenuous instruments, the eyes.

Borges traced evocative renderings of night in this poem and documented how night has continuously been imbued with many meanings. He argued that we feel night to now be 'inexhaustible' and that 'no one can contemplate it without vertigo'. Questioning the dominant teleology requires considering the history of the night *without vertigo*.

## 4.2 Lefebvre's moments

In order to unsettle the dominance of linear time I turn now to Lefebvre's revolutionary temporal motif – moments. For Lefebvre (2008b, pp. 340-358), a moment was full of possibility and revolutionary potential. In everyday language, the 'instant' and the 'moment' have almost identical meaning as a very short span of time. Lefebvre made a distinction between the two: an instant is something fleeting, ephemeral, and nondescript. A moment is instead more profound. The moment is characterised as privileged, important, and with a higher form of repetition than the instant.

Lefebvre used the example of the word 'love' to illustrate this difference. How has the word love changed in meaning throughout human history? Love is felt, communicated, symbolised in many different ways. Yet, Lefebvre (2008b, p. 342 emphasis in original) added: 'through all the changes, 'something' remains. We would say that 'something' is the *moment*'. There remains a coherence or consistency that aligns different 'loves':

The moments that an individual person can experience are developed (formed or formalized) by the whole of society of which [they are] a member, or by some social group that spreads its collective creation (such as a ritual, or the forms of feelings, etc.) throughout society. (Lefebvre 2003b, p. 173)

For Lefebvre (2008b, pp. 344-47), the moment cannot be completely defined but there is instead a 'constellation' of moments, which he places under seven headings. First, the moment is separated from entanglement or confusion in everyday life, it 'stands out'. Second, it has a specific duration. In 'standing out' the moment wants to endure, but cannot endure forever. This gives it an intensity, we can notice when we are in a moment but this also makes its end apparent. Third, it has a memory; entering a moment means drawing on particular memories, to contextualise the current experience. Fourth, the moment has a content. Fifth, the moment has a form. Form and content are linked in that the moment arises out of external circumstances; 'content' partly gives the moment its originality. Equally 'form' and 'the rules of the game' are imposed on a moment's content. Sixth, the moment becomes 'absolute' – 'what love worthy of the name does not want to be unique and total, an impossible love?' (Lefebvre 2008b, p. 346) Finally the moment becomes alienation, in that it separates from everyday life and is destined to fail, thus becoming alienating. The impossible is curtailed by the possible.

Moments are '*the attempt to achieve the total realization of a possibility*' (Lefebvre 2008b, p. 348, emphasis in the original). The possible (or as in transduction, 'the virtual') is revealed in moments, yet in becoming revealed, also becomes exhausted. Why, then, is the moment important? Through illuminating the possible, the moment also illuminates limitations.

'Moments make a critique – by their actions – of everyday life, and the everyday makes a critique – by its factuality – of paroxysmal moments' (Lefebvre 2008b, p. 356). Moments are revealed in the everyday but cannot be sustained. This facet of moments is another indicator of Lefebvre's idea that the impossible and the possible are known only through each other – the moment is an attempt to realise an (im)possibility, but even when that can be glimpsed, it is shut down by the everyday determining what is possible. The relevance to this chapter is that notions of cyclical time can be revealed to be in contest with the linear through moments.

The virtual can emerge in contest with the actual. Merrifield (2006, p. 28) argued that Lefebvre's moment 'disrupted linear duration, detonated it, dragged it off in a different, contingent direction, toward some unknown staging post'.

Lefebvre (2008b, p.347-8) rendered moments with his own crepuscular metaphor:

In the light, or the half-light, of the everyday, the constellation of moments cannot be seen. But when something disturbing casts a shadow on the everyday, the constellation rises to the horizon. We each choose our star, freely, but with the impression of an irresistible inner necessity. No one is forced to choose. There is no astrological explanation for the constellation of moments: freedom has no horoscope. In this day and age, everyday life is lit by false suns: morality, the state, ideology. They bathe it in a phoney light, and even worse, they lower it to depths where possibilities cannot be perceived, and keep it there. Sadly, the stars of what is possible shine only at night. Sooner or later the everyday must dawn, and the suns must rise to their zenith (including the black sun of empty anguish). Until such time as mankind [sic] has transformed this light and this darkness, stars will shine only at night.

Here Lefebvre is describing the ability of moments to contribute to a process of disalienation in the transition towards the total human and urban society. But I am also drawn to this quote for its crepuscular metaphors: evoking the dark and light of night and day, the notion of dawn as rebirth, the cultural value of star light, and the horizon as a transitional vista between day and night. Lefebvre's moments do not specifically need to focus on day and night, but commencing from this crepuscular metaphor, this chapter now focusses on theorising crepuscular moments.

### 4.3 Crepuscular moments

What is the quintessential crepuscular moment between day and night? Perhaps the first rays of the morning sun as they break the horizon, replete with associated metaphors of the rebirth, the fresh start, the new dawn. Perhaps romantic lovers watching the sunset from some vista in an exotic city, seemingly absorbed in nature, absconding from their regimented hours of employment. Perhaps it is the bleary eyed, coffee swilling driver inching along in bumper to bumper traffic, commuting to work in the same routine every morning. Perhaps the corporate high-flyer that feels a pang of hunger (or anguish at being distant from their family) yet continues to work as day becomes night, ever towards a deadline. Or perhaps a newborn baby begins to get restless, craving warmth and milk from their mother, before settling into an

early evening sleep. There are many examples that vividly illustrate the daily crepuscular hours around dawn and dusk. For me, one example sticks out above all others. It is the second that automated streetlighting blinks on of an evening, or blinks off in the morning. On cue, entire blocks and cityscapes of streetlight sentinels are called to arms to guard the night, or laid to rest during the day.

Streetlights as a crepuscular moment represent an intersection of the quotidian rhythms of city life: commuting workers finishing a day-shift or beginning the night; an example of the urban infrastructure through which these rhythms take place, the technological automation of lighting systems – a thoroughly human object that marks and defines the distinction of day and night. It is also theatrical, as the flick of light signals the moment day supposedly shifts to night in the automated world. This moment occurs at its most vivid when the lighting is fleetingly out of sync with sunset and sundown: seconds or minutes out of order as seasonal variation edges dawn and dusk incrementally towards the solstices; or, when low-cloud of dark-days ‘tricks’ streetlights into turning on during the day – artificial light alienated from the night (Figure 4.1). The other moments listed above represent an intersection between the biological, environmental, social, economic, political and imaginative renderings of what day and night mean. Crepuscular moments reveal the interplay between day and night, the contradictions between the two opposites. They are at once something so mundane and something teeming with possibility, quintessentially *everyday* in the Lefebvrian sense.



**Figure 4.1** Automated streetlight ‘tricked’ into use during the day by dark clouds (Source: Author)

In crepuscular moments, time is neither strictly day nor night. These moments all have their own unique content, but their form is one in which the distinction between day and night is blurred. Crepuscular moments are examples where the virtual can emerge from the actual: in becoming crepuscular, imagine the scenario of everyone turning around and doing the exact opposite of what they were doing when the streetlights of a city blink on in the evening. A coordinated moment<sup>5</sup> across a city where those returning home from work go back to the office, shutters of shops just beginning to fall are raised again for eight hours trade, the

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<sup>5</sup> Such a scenario could also be an example of a ‘situation’, the revolutionary motif of Guy Debord and the Situationist International. The similarities between ‘moments’ and ‘situations’ were a point of contention between Lefebvre and Debord (Merrifield 2006, pp. 31-35).



maintenance teams about to scrub a city clean overnight go home to sleep or share the evening with family and friends. In this crepuscular moment individuals could rethink their own days and nights, their routines and how those shape and are shaped by and within the city. In the conceptual sense of moments, this crepuscular variation could be a dislocation of each and every citizen's linear routine and temporality. Of course, after this dislocation, new routines would emerge and recommence. A new 'alienation' would become imminent. But in its place, might this alienation-disalienation-realienation dialectic provide a new means to understand day and night in the city? Crepuscular moments exist briefly in the space and time between night and day. They are moments in which we can contemplate day and night's meanings in our lives as open to contestation.

Focussing our lens through transduction provides a clearer focus for seeing the imminent crepuscular possibilities in examples such as streetlighting. Transduction can take us further still towards the virtual object. Dawn and dusk are ubiquitous and thus prone to being overlooked in the everyday. Yet there are other examples of crepuscular moments around dawn and dusk that gain greater traction in the popular imagination, crepuscular moments on a 'grander scale'. In what remains of this chapter I discuss crepuscular moments associated with vistas, with cyclical time on its cosmological, and universal scale. I argue that they are key instances where divergent days and nights are revealed and can be pursued in becoming crepuscular. But more than this, they are moments in which day and night can be communicated as coordinates for more just and sustainable living.

#### 4.3.1 Sublime crepuscular moments

The literal crepuscular transition – between dawn and dusk as the time in which the sun sets or rises – is a stimulating sensory experience. Indeed, the 'pursuit' of a sublime sunset experience is a burgeoning element of the tourism industry (Weaver 2011; Herbert 2013). Santorini in Greece and San Esteben in Mexico are argued to be two of the most 'sublime' sunsets in the world (Herbert 2013; see also Chapter 10). In Darwin, Australia, a popular tourist experience is to congregate at Mindil Beach at sunset, coinciding with the city's oldest and most successful outdoor market (Figure 4.2).



**Figure 4.2** Tourists congregate for Mindil Beach's famous sunset, Darwin (Source: Chris Gibson)

Sunsets and sunrises vary across the globe dependent on latitude, mountains or escarpment, elevation and pollution. Dewdney (2004, p. 3) was quoted in Chapter 1 as saying 'every landscape, every geography, every place on our planet has its own unique flavour of darkness'. So too every landscape, geography and place has its own 'unique flavour' of sunset and sunrise.

Due to their limited frequency across the annual calendar, solstices are imbued with a higher significance than ubiquitous sunrises and sunsets. In the words of environmentalist and writer Richard Heinberg (1993, p. 11):

The Solstices divide the year into two halves – six months of waxing Sun, followed by six months of waning Sun. These two half-yearly sub-cycles constitute a pair of complementary opposites – like day and night, light and dark, heat and cold, positive and negative... They are mysterious and magical... This is why Solstices, as hinges of the seasons, were always regarded as... times of danger and opportunity; times for special alertness and aliveness.

Solstices are an example of how cultures draw upon *unique* days in the annual cycle. In the Egyptian Temple of Abu Simbel the sun's rays illuminate three of its four statues on the 22<sup>nd</sup> of October and 22<sup>nd</sup> of February (Ptah, the god of the underworld, is purposefully left in the dark). One theory is that these dates represent the birthdate and coronation of the pharaoh who built the temple (Freeman 2004, p. 74). In another example, since 2000 the Maori of Aotearoa/New Zealand have been reviving their cultural tradition of Matariki. Matariki is the Maori word for the cluster of stars known also as the Pleiades<sup>6</sup>. The Maori term means 'eyes of god' or also 'little eyes'. The constellation is visible in the sky once a year just before sunrise between late May and early June. Traditionally, this was a time in which the Maori remembered those who had passed away in the preceding year, but it was also a celebration with singing, dancing and feasting after crops and seafood had been collected and stored. In contemporary times, Matariki is being revived as the 'Maori New Year', and there are ongoing calls for it to be recognised as a national holiday (see Meredith 2012).

Examples such as the temple of Abu Simbel and Matariki are in essence unique – in Lefebvrian terms they have unique content. But they also have a form. Their form is characteristic of a trend that celebrates rituals coinciding with lunar, solar and cosmological annual events – examples also include full moon parties (Saldanha 2002, p. 45) and summer solstice at Stonehenge (Cresswell 1996, pp. 62-96). Such rare events stand out against the ubiquitous sunrises and sunsets that occur in different spectrums each and every day wherever on the planet. More than this, such celebrations and rituals are *moments* where day and night on a cosmological scale are used as coordinates, annual cues, for defining an element of everyday life. In the example of Matariki this is used for gratitude and remembrance. In Abu Simbel, homage is still paid by sunlight to a pharaoh deceased for thousands of years. Such events are instances when the perpetuity of day and night are revealed as an enduring presence of the earth.

#### 4.3.2 Solstice as cleansing

In another instance, a crepuscular moment was used in an attempt to raise environmental awareness. In the *Illawarra Mercury* on the 22<sup>nd</sup> June 2012 (the day following the winter solstice) Barbara Wolak (quoted in Langford 2012) announced:

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<sup>6</sup> Matariki, the Pleiades, are known by many names throughout the world where they are attributed different meanings (see Branch 2008). The car manufacturer Subaru, is the Japanese name for the Pleiades. An image of the constellation is also their symbol.

This solstice is... activating that cleansing, helping humanity overcome negativity. We are actually becoming aware of our planet – it is in need of us to start taking care of it, not destroy it.

This was not media coverage of a politician making an announcement, a commentary on national or international affairs, a major accident or sporting event in the region. This story (Figure 4.3) focussed on a woman swimming in a local seaside pool. The *Mercury* had interviewed Wolak at the same pool three years earlier during the spring equinox of 2009 – a day remembered locally when much of the state was covered in a red dust storm. The tone of the article was ‘quirky’ in that Wolak drove from her property near Young in south-west NSW to the coastline pools of Austinmer in the Illawarra to welcome the solstice (approximately a 3.5 hour drive). She had brought with her a collection of crystals and trinkets, which were all displayed in one of the pictures accompanying the article.

On the surface, this article might seem irrelevant to a thesis on day and night. Through the theory of moments, however, this ‘quirky’ good news story from the *Mercury* carries a much deeper, meaningful message. In the context of environmental degradation and climate change, the perspective Wolak provides gives impetus for the need to recognise the cycle of the sun and moon in planetary alignment as coordinates for a more just existence and more wholesome relationship with the planet that sustains our life<sup>7</sup>. This particular version of day and night rendered by the solstice is crepuscular, in that it evokes through day and night the pursuit of a virtual object. The crepuscular moment of the equinox on the 21<sup>st</sup> June 2012 could, for Wolak, nurture a human sense of empowerment, and was full of revolutionary potential.

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<sup>7</sup> Wolak’s account resonates with the Gaia hypothesis, in the words of James Lovelock (1972, p. 579) that ‘life at an early stage of its evolution acquired the capacity to control the global environment to suit its needs and that this capacity has persisted and is still in active use’. The hypothesis is contentious (see for example Clark 2011, pp. 14-15).

## Barbara's message to the world crystal clear

Spiritual connection: Barbara Wolak of Cootamundra travels to Austinnner Beach to worship at the rising of the sun on the day of the winter solstice.  
Picture: KIRK GILMOUR

## Bright start to shortest day

BEN LANGFORD

BARBARA Wolak believes she was guided by a spiritual force to Austinnner Beach yesterday morning, where she witnessed this glorious beginning to the year's shortest day.

Ms Wolak, 59, who lives on a property near Young in the state's southwest, brought her crystals to Austinnner for yesterday's winter solstice, a time which she believes can unleash a new sense of caring for our planet.

There she encountered the very same *Mercury* photographer, Kirk Gilmour, whom she had met at that beach on the spring equinox in 2009 - a day which locals remember

*This solstice is like activating that cleansing, helping humanity to overcome negativity*  
- Barbara Wolak

for the red dust storm which covered much of eastern NSW.

It was a chance meeting but one which strengthened Ms

Wolak's belief that things happen for a reason.

"Your paper is the messenger," she said. "You are *Mercury*, the messenger of god."

In this case, the reason was the ability for her to spread her message - that this is a time of empowerment to clean up the world.

"This solstice is like activating that cleansing, helping humanity to overcome negativity," she said.

"We are actually becoming aware of our planet - it is in need for us to start taking care of it, not destroy it."

Yesterday, the sun made a late appearance and left early - rising at 7am and setting at 4.54pm.



Clarity: Barbara Wolak with some of her crystals in June 2012.



Cloudy: Barbara Wolak enveloped by dust in September 2009.

## Gillard cools utopian hopes for Rio+20

PAUL OSBORNE

PRIME Minister Julia Gillard has talked down the prospects of a global environment summit delivering immediate results, after receiving high-level praise for Australia's effort to tackle climate change and poverty.

Ms Gillard addressed the three-day United Nations sustainable development conference - nicknamed Rio+20 as it comes 20 years after the landmark Earth Summit - yesterday, a day after she did the

rounds of leaders and business chiefs in Rio de Janeiro.

The Prime Minister said she welcomed a draft document that set out a commitment to replace the Millennium Development Goals (MDGs), which expire in 2015, with a new set of goals known as the "sustainable development goals".

But she admitted the final agreement - which covers issues from deforestation to clean energy - was a compromise.

"Officials have been working

long and hard to get a text that can be agreed among all of the nations of the world," she said.

"I'm not going to stand here and pretend what is in that text is going to make some indelible mark on the world's history from tomorrow on."

"But I do think it is putting the spotlight on sustainable development - and oceans."

Ms Gillard, the first Australian Prime Minister to visit Brazil, was praised by United Nations Secretary-General Ban Ki-moon

as he appointed her to co-chair, with Rwanda, a body that will make the final push towards meeting the MDGs.

"I really count on the prime minister's strong visionary leadership and commitment," Mr Ban said after meeting Ms Gillard.

A week ahead of the carbon tax starting, he said Australia was "leading by example" in addressing climate change.

Australia has delayed meeting its MDG target for a year to deliver a budget surplus in 2012-13. AAP

## Qld tiger Mo dies

MOHAN the white Bengal tiger has been put down on the Gold Coast after being plagued by incurable kidney disease.

The gentle giant, 17, was among the first cubs brought to Dreamworld in 1995. He fathered Rama, Sita, Sultan and Taj - all still on Tiger Island.

Life Sciences head Al Mucci said tigers in the wild could live to about 12. "Mohan was 17, so he has enjoyed a great life here ...," he said. Mo helped raise more than \$1.4 million for endangered tigers. AAP

www.illawarramercury.com.au

ILLAWARRA MERCURY, Friday June 22, 2012 7<sup>+</sup>

Figure 4.3 A 'moment' in the *Illawarra Mercury*: the solstice as cleansing (Source: *Illawarra Mercury* 2012)

The exact moment in a Lefebvrian sense is difficult to locate here; its content is too unique – Wolak, the pool, the unusual journey, the equinox. But there is a form, in raising environmental awareness, Wolak is asking us to realise the scale of our planet, to appreciate earthly forces, to take more responsibility and a sense of stewardship as a means to guide more holistic actions<sup>8</sup>.

Wolak's interpretation of the winter solstice highlights how transduction helps to hone our perspective of the virtual object. At first glance, the article on Wolak in the Mercury could be interpreted as humorous and unrealistic. But seen through the context of becoming crepuscular Wolak's message signals an intent for a more holistic, aware and just existence – and crucially, this can be directed and coordinated through a crepuscular moment. For example, if we were not pursuing the virtual object of becoming crepuscular how could we interpret Wolak's message? As one colleague suggested, 'it's hippy, crystal crap'. Wolak's call is an indication of where the virtual can emerge in contest to the actual.

Wolak's moment does not endure. However, its failure, its exhaustion is an inevitable element of it being identified as a moment. This does not relegate it to irrelevance. The desire that Wolak articulates is what ultimately remains important. As Lefebvre (2008b, pp. 351-2) said, judgement of moments cannot begin from a failure (remembering that moments inevitably exhaust themselves) but must begin from the *endeavour* that led to the moment.

#### 4.4 Crepuscular moments and the emergence of the virtual

This chapter explored different interpretations of day and night as temporality. The cyclical time of day and night on a cosmological scale is suppressed by the linear time of urban modernity. Linear time renders day and night as urban and modern, a rendering that comes to assume predominance. This chapter explored how a sense of linear time can be distorted and how suppressed temporalities of day and night, as cyclical time, could be recovered. In terms of transduction, this chapter has shown where the virtual can emerge from the actual. Through everyday sunsets and sunrises, there is a celestial, crepuscular moment, where the cycle of

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<sup>8</sup> Wolak's interpretation of the solstice is given greater meaning in that appearing on the same page was a report of the outcomes from 'Rio+20', the UN sustainable development conference. The article reported a concession by Australia's (then) Prime Minister Julia Gillard that the outcomes of the conference were a compromise on lofty ambitions. Gillard (quoted in Osborne 2012) warned that limited international cooperation meant the goals agreed upon at Rio+20 were unlikely to have 'some indelible marks on the world's history from tomorrow on'. Gillard's comments relate to the limits of nation state politics and international cooperation, and to the political election cycle where results are traded off between immediate needs of a global community and maintaining popular support to form government. These two articles offer a direct contrast between the virtual and the actual.



the earth, the sun, the moon around our universe can open up the dialogue and coordinates for possibility in everyday life.

The solstice, as a crepuscular moment, clearly focusses on a notion of cyclical time.

Crepuscular moments offer comparison to the linear time of urban modernity and the actual. As the examples that focus on solstice have shown, these are extraordinary temporalities throughout the annual cycle that hold special significance to rethinking the human place on earth. Through the lens of transduction Wolak's notion of the equinox provides a moment to rethink politics and our obligations to the planet that sustains our lives. The solstice for Wolak provides a radical break. Wolak is but one example.

The closer we can get to the virtual object of becoming crepuscular, the emphasis on dawn, dusk, the crepuscular could diminish. Crepuscular moments could lose the literal association with dawn and dusk and instead reveal themselves throughout what we know now as the entire 24-hour and annual cycles. Crepuscular moments would herald imminent possibilities for different days and nights. Transduction has a crucial role to play in this. Greater attention to moments and rhythm as they relate to day and night and the crepuscular, are an example of feedback that can develop between virtual and actual objects. As the virtual object becomes honed, the examples of crepuscular moments listed in this chapter become more explicitly about day and night. Examples of commuting, the restless hours of a baby at dusk, automated streetlights and enjoying a sunset show everyday life is teeming with crepuscular moments.

I began this chapter discussing the difference between cyclical and linear time. Reinstating the cyclical over the linear is a task fraught with difficulty. If we take Lefebvre's perspective that we embody both the cyclical and the linear, that they can be separated out in thought but not in practice, then the reality is we cannot simply triumph one conception of time over the other and sustain that within everyday life. Yet, linear time has come to be the dominant conception of time in modern society. In this guise the rendering of the urban, modern day and night assumes precedence. Becoming crepuscular is instead more attuned to cyclical time – the cycle of day and night becoming more influential on our everyday life.

Moments are crucial in the path towards the realisation of becoming crepuscular. They are the signposts towards the possible future and key examples where the virtual can emerge in contest to the actual. If we appreciate that the cycle of day and night exists in perpetuity on a level beyond human agency then crepuscular moments become eternal coordinates to be uncovered. No matter how much linear time distorts our appreciation of ancient-cyclical

rhythms, day and night exist with the imminent possibility of uncovering, of revealing temporalities anew.



## Chapter 5 – Crepuscular spaces: renderings of day and night in the production of space

This chapter focusses on crepuscular spaces, drawing on Lefebvre's theory of the *Production of Space* (1991). Theorising crepuscular spaces is a way to examine how different renderings of day and night influence space. In this chapter I argue that competing renderings of day and night are involved in the production of space. They are especially evident within debates about the night-time economy and night-time city. As we do not yet have a critical approach to reveal and interrogate competing renderings of day and night, their presence can often go unnoticed in debates. For example, (sometimes) it is in the political interest of police organisations to portray the night as deviant, out of control and full of intoxication and violence. At other times, councils may try to foster new economic, social and cultural development in their city by rendering the night as full of commercial possibilities, a flexible time and space in which to enact new policies. As the binary of day and night often goes ignored, such renderings do the work of particular vested interests, but remain critically uncontested.

Ignoring different renderings of day and night leaves the virtual obscured by the actual. In this chapter I first review Lefebvre's theory of the production of space before discussing one example where competing renderings of day and night are at play: debates about the night-time economy in the Australian cities of Sydney and Wollongong.

### 5.1 The production of space

The *Production of Space* was Lefebvre's attempt to resolve divergent notions of space, primarily between notions of 'mental' space and 'real' space (Lefebvre 1991 [1974]). 'Space', Lefebvre (1991, pp. 36-37) argued, was originally understood geometrically as an empty area that had its basis in mathematics. He instead argued that space is a social product. *The Production of Space* sought to shift attention from a conception of things (humans and objects) in space to the production of the space we inhabit. All societies produce their own space :

The city of the ancient world cannot be understood as a collection of people and things in space; nor can it be visualized solely on the basis of a number of texts and treatises on the subject of space... For the ancient city had its own spatial practice: it forged its own – appropriated – space. (Lefebvre 1991, p. 31)

As space is produced, and different societies produce space differently, then the *Production of Space* concerns history. For Lefebvre (1991, pp. 46-47), this did not mean a sequential chain of events, but rather an intention to shift historical and Marxist analysis from the forces and relations of production – nature, labour, the organization of labour, technology and knowledge – towards the productive process of space:

Since ... each mode of production has its own particular space, the shift from one mode to another must entail the production of a new space. Some people claim a special status for the mode of production, which they conceive of as a finished whole or closed system; the type of thinking which is forever searching for transparency or substantiality, or both, has a natural predilection for an 'object' of this kind. Contrary to this view of matters, however, examinations of the transitions between modes of production will reveal that a fresh space is indeed generated during such changes, a space which is planned and organized subsequently.

In the *Production of Space*, Lefebvre (1991, p. 33) introduced three key aspects to understand space as a social product – spatial practice, representations of space, and representational spaces. Spatial practice is space as it is *perceived*. Perceptions of space make daily life legible – they reveal the places set aside for particular activities, such as work, leisure, 'private' life, and 'public' life. For example, we make distinctions between our home space, work space and the networks (such as transport) that connect these different spaces. Spatial practice, or perceived space, only functions with a level of cohesiveness<sup>1</sup>, in which the space and relations within that space make *sense* to us. Spatial practice is thus the common sense interpretations of the space we live in – what is permissible, what is reasonable, what and who belongs where.

Representations of space refer to space as it is *conceived*. This is the aspect of the production of space utilised by professionals such as planners, urbanists, social-engineers, and architects (Lefebvre 1991, p. 38-39). Conceived space is layered with ideology. Such systems have an impact on our lives as they practically modify and mediate space. Lefebvre argued that because such systems modify space, questions then arise as to whose interests are served. Who and what is space being conceived for?

Representational spaces are *lived* spaces, or 'space as directly *lived* through its associated images and symbols, and hence the space of 'inhabitants' and 'users'' (Lefebvre 1991, p. 39, emphasis in original). In addition to inhabitants and users, Lefebvre also saw representational

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<sup>1</sup> Although Lefebvre made clear that cohesive doesn't necessarily mean logical.

spaces as the space of artists, writers and philosophers. Lived space is dominated by conceived space. Lived space is the space in which the 'imagination seeks to change and appropriate' (Lefebvre 1991, p. 39). Representational spaces do not need to have cohesiveness like spatial practices, or obey 'rules' to the extent that representations of space do.

By introducing these three aspects of space, Lefebvre sought to bring the various kinds of space into a single theory. The perceived-conceived-lived triad (or spatial practice, representations of space, representational spaces) are not meant to be used as an abstract model. Any member of a society moves between all three aspects of space. Lefebvre argued that without a theory of the production of space, theoretical practice and 'mental' space becomes separated from social practices in space. In this way, conceived space situates itself as the 'central reference point of Knowledge' (Lefebvre 1991, p. 6).

Conceived space obscures lived space. In terms of transduction, here we can see a connection to the actual and the virtual. The actual becomes a dominant form of space in which the virtual is reduced, at times, to symbolism – or retains an air of 'unreality' when in direct contrast to the 'reality' or 'cohesiveness' of the actual. Such tensions emerge in the city in contemporary debates about the night-time economy.

## 5.2 Renderings of night in the night-time economy debate

In the last two decades, analysis of cities at night has been dominated by the night-time economy concept, the development of which has been extensively debated (Chatterton and Hollands 2003; Hae 2012; Shaw 2012). The night-time economy concept emerged in the 1960s, when Jane Jacobs forecast a trend of cities and neighbourhoods becoming devoid of lively activity (2011 [1961]). Empty streetscapes were claimed to foster crime and dissatisfaction with city life. Jacobs argued that enlivened sidewalks across day and night greatly increased the security and vitality of urban space. In this way, she argued that 'surveillance' could most effectively be provided by people enjoying the streets as an antidote to inactivity:

The basic requisite for such surveillance is a substantial quantity of stores and other public places sprinkled along the sidewalks of a district; *enterprises and public places that are used by evening and night must be among them especially*. Stores, bars and restaurants, as the chief examples, work in several different and complex ways to abet sidewalk safety. (Jacobs 2011, p. 46, emphasis added)

Jacobs' perspective gained renewed momentum in Britain in the early 1990s. There, planners and researchers sought to reinvent the worryingly vacant centres of economically depressed

city-centres – particularly those of the deindustrialising north (Comedia 1991). The formative night-time economy concept positioned the traditional ‘nine-to-five’ hours of city-centres as restrictive to cultural, social and economic development. As urban economies transitioned from production to consumption, initiatives were sought that promoted leisure and entertainment industries, broadly associated with the night. The aim was to create inclusive city-centres attractive to a diverse population – a vision of entire families enjoying the cultural and social opportunities of a revised night-time city.

Early academic work focussed on the revitalisation and safety strategies required for shifting time-use of cities (Heath 1997), the comparative experience of European cities (Bianchini 1995), and connection to broader reconceptualisations of city life (Lovatt and O’Connor 1995). Lovatt and O’Connor (1995) showed how the night-time economy emerged at the same time as discourses of competitive global cities and the valorisation of arts, leisure and culture, both of which renewed interest in city-centres. This work positioned night-time economy policies as one segment of the changing nature of cities.

How to proceed with night-time economy strategies was subject to debate. Bianchini (1995) asserted that night-life in different cities should be the detail of comparative empirical studies. Comparative urbanism would reveal different connections between night-life, in a general sense, and the feasibility of enacting night-time economy policies. Bianchini (1995, p. 124, emphasis added) set an agenda for ‘dependable research assessing the economic and social importance and impact of night-life *and* night-time economies’. Night-life should inform night-time economy policy, dialectically, rather than prescribed ‘top-down’ planning. The night-time economy script was thus seen as an innovative and exciting theoretical possibility. Yet doubt remained of the compatibility between policy rhetoric and the lived culture of cities. Cities of southern France and Sweden for instance had drastically different climates and cultures that influenced when people worked, ate, slept and socialised.

Nevertheless, the night-time economy policy script dispersed as part of a wider embrace of neoliberal agendas, becoming part of increasingly ubiquitous urban revitalisation strategies (Chatterton and Hollands 2003; Holden and Iveson 2003; Shaw 2010). Despite the lofty ambitions of the night-time economy, it became synonymous with high concentrations of themed bars, pubs and nightclubs with an economy based heavily on alcohol consumption. As ‘spectacle’ (cf. Debord 2010), the night-time economy sees revellers intentionally shift in and out of control in forms of ‘calculated hedonism’ (Featherstone 2007, p. 111) and ‘voluntary risk taking’ (Lyng 1990). This seemingly transgressive behaviour, Hayward and Hobbs (2007)

argued, is central to the experience of the night-time economy, and is both performed and consumed by participants. An element of disorder is thus essential to the economic functioning of the night-time economy.

What began as well intentioned – even utopian – plans to enable more cosmopolitan and democratic city spaces had been subverted by commercial forces, and mutated into a vision of hedonistic consumerism. Moral panics and dystopian renderings of the chaotic, drunken night-time city soon followed. According to Hadfield et al. (2001, p. 300):

The concept of the ‘24-hour city’<sup>2</sup> is not in good health. It’s 2.15 on a Saturday morning in an English city centre and the ‘Mass Volume Vertical Drinker’ has assaulted the concept and all its good intentions, leaving it for dead in streets splattered with blood, vomit, urine, and the sodden remains of takeaways.

This was the *problematic of the night-time economy*. It represents the tension between a pursuit of economic growth and the need to maintain social order, in the face of seemingly unruly youth, ‘antisocial’ behaviour and the binge drinker. The problematic of the night-time economy spurred a subsequent body of literature offering socio-technical solutions focussed on: lighting (Cozens et al. 2003), fear (Thomas and Bromley 2000), comfort (Eldridge and Roberts 2008), residential experience (Adams et al. 2007; Tallon and Bromley 2002), governance (Hobbs et al. 2000), security (Hobbs et al. 2003), and licensing (Hadfield 2007).

Academic research into the night-time economy shifted from policy development, to critique of enacted outcomes (Shaw 2010; 2012; 2013). Critics have explored the results of corporatised night-life by focussing on racial (Talbot 2004; 2007), gendered (Waitt et al. 2011), and subcultural (Gallan 2012; 2013) exclusion from the night-time economy; youth violence, suicide and anxiety (Winlow and Hall 2006); spectacle (Hayward and Hobbs 2007); and gentrification (Hae 2011a; 2011b). Others have attempted to reframe discussions through research on geographies of alcohol (Jayne et al. 2006), neoliberal subjectivities (Shaw 2010; 2012), greater emphasis on the ‘urban night’ rather than night-time economy (Shaw 2014b) and unequal rhythmic experiences of the night-time economy (Schwanen et al. 2012).

For Roberts and Eldridge (2009), economic forces were responsible for the night-time economy failing to create inclusive city-centres. The ‘ideal’ night-time economy included,

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<sup>2</sup> Synonymous for ‘night-time economy’ in this instance

places to sit and talk in comfort with friends, to eat out, to listen to live music, places to go out as a whole family and to enjoy the magical and spontaneous, as exemplified by a street festival or the experience of ice-skating. (Roberts and Eldridge 2009, p. 223)

While that ideal remained elusive, they continued:

Above all, what was wished for was contact with other people. These are not new forms of solidarity, but reconfigurations of familiar activities, made possible by a rise in disposable incomes, some leisure time and technological advancement. It is a sad indictment of our approach to urban development in the UK that these simple pleasures are so difficult to achieve. (Roberts and Eldridge 2009, p. 223)

In the night-time economy debate there are thus two dominant renderings of night. One rendering is that of the night being able to facilitate social and cultural alternatives for public space – the night as a vacant canvas. The other rendering is that of the night-time economy being, by commercial necessity, hedonistic and out-of-control – the night rendered as disordered, in need of order. These competing renderings have come to dominate discussions about the night-time city. They become ‘actual’ in that planning and growth of the (night-time) city need to be managed. But there is a glimmer of the virtual in that underneath night-time economy planning and policy there are visions of an alternative social and cultural agenda.

Central to the problem is the disparity between notions of the night-time economy and its ability to understand night-life. The night-time economy concept has mutated into a strategic policy and planning tool that has sought to ‘reinvent’ city-centres with new purpose – promoting growth and development – at night. Night-life, on the other hand, can be considered more anthropologically, as the nocturnal activity of the city that may include defined night-time economy precincts but also people’s rhythmic preferences, climate and latitudinal positioning – incorporating dining and sleeping cultures. Night-time economy policies are imposed or constructed, and as top-down planning, they can be compatible or incompatible with existing or idealised night-life. The night-time economy can be thought of as a conceived space, while night-life is more easily associated with lived space. In terms of transduction, the night-time economy can be thought of as the ‘actual’ in that it is concerned with economic growth, development and law and order. Night-life, as it is lived and idealised, contains elements of the virtual.

The difference between night-time economy and night-life is important because it signals where renderings of day and night become implicit in the production of space. There are a

number of different renderings of day and night. Many of these renderings are what ‘makes sense to us’ or gives the ‘cohesion’ of spatial practice. If, as in this thesis, the desire is to test or to move beyond normative understandings of day and night, it is necessary to adopt an interpretation that is more ‘critical’, in the sense that we identify where existing renderings of day and night are mobilised for specific agendas in the production of space. In what remains of this chapter I discuss how this dynamic is at play in a specific case – recent discussions of Sydney and Wollongong’s night-time economy – before returning to argue that to become crepuscular, beyond an abstract thought or ideology, would mean effectively producing a crepuscular space.

### 5.3 Competing renderings of night<sup>3</sup> in Wollongong and Sydney

I now focus on the Australian cities of Sydney and Wollongong. Both have recently seen high profile debates about the night-time economy, similar to other global examples. But there have also been distinct differences, stemming from their very materiality and proximity (Waitt and Gibson 2009). Sydney is Australia’s largest city with a population over four million. Wollongong, the major city of the Illawarra region, is smaller in comparison, with a population around 280,000. The cities are only 80 kilometres apart, with Wollongong’s north and Sydney’s south separated by The Royal National Park. This physical buffer distinguishes the Illawarra region from the greater Sydney region, and acts as a cultural and mental barrier.

Debate about the night-time city/economy in these two cities escalated during the time of writing this thesis. They drew in the New South Wales (NSW) state government, local councils, emergency services, the Australian Hotels Association, residents, and night-time economy producers and consumers.

In Australia concern over the health and social implications of alcohol is growing (Chikritzhs et al. 2003). Such concerns are raised over drinking patterns in both domestic and public spaces but are particularly heightened around licensed premises such as pubs that are ‘subject to overlapping negative public discourses: excessive drinking and alcohol-related violence, smoke-free legislation, and national debate about gambling addiction and the regulation of poker machines’ (Gallan and Gibson 2013, p. 176). How, where and why people drink is the

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<sup>3</sup> This section admittedly focusses empirically on ‘the night’, a bias I have been critical of already in this thesis. The emphasis on ‘night’ here is to identify an instance where the binary of day and night is implicitly troubled. In this case, the stakeholders concerned did so through the terminology of the ‘night-time city’. Later in the chapter I argue how such thinking can be extended to the day. Daycentrism means that the night is seen as flexible, the day is not. This is reflected in the empirical focus of this chapter.

subject of much debate and intervention by government and policy makers who seek to ameliorate perceived negative effects of drinking and drunkenness (NSW State Government 2010). However, an overemphasis on alcohol within research on the spaces of the night-time economy and urban night has led to the field being characterised by ‘a tendency towards a *reductio ad alcohol*, which brings all of the political and social issues related to the urban night down to issues surrounding alcohol retail and legislation’ (Shaw 2014b, p. 90). In this chapter then, the emphasis is less on alcohol than on the ways in which the night is rendered in debates that surround alcohol. Such debates culminated in Sydney and Wollongong in a new state-wide campaign, *Hassle Free Nights*.

### 5.3.1 Hassle free nights

In March 2010 The NSW State Government announced its *Hassle Free Nights* campaign aiming to better manage popular ‘entertainment’ precincts in cities such as Sydney, Wollongong and Newcastle. Priorities included ‘growing cities and centres as functional and attractive places to live, work and visit’ (NSW State Government 2010, p. 3). Yet emphasis on the management of the night-time economy problematic remained the dominant feature. As such, the service and consumption of alcohol and associated ‘anti-social behaviour’ was the campaign’s major focal point. The campaign sought to frame ‘local solutions’ to ‘local problems’ rather than criticise a more elusive concept of Australia having a cultural drinking problem (cf. Dingle 1980; Kirkby 2003). Night-life districts had distinct ‘local’ qualities, specifically the manner in which licensed premises were distributed in urban centres. Consistent in such precincts was a predominately high concentration of bars, pubs and nightclubs connected by streetscapes, parks and malls. In Sydney, given its size, a number of precincts were identified – such as Kings Cross, Oxford St and the Rocks. Smaller cities such as Wollongong had just one, primarily their city-centres. Campaign publications drew the connection between alcohol-related assaults and distribution of venues, identifying ‘hot spots’ of violence. A number of restrictions on licensed premises were introduced, surveillance was increased, movements in public space between venues were more intensely policed, and late-night transport away from city-centres was expanded. In each city there was a clearly defined precinct in which the night-time economy, and by extension the night-time city, was said to be located (cf. Bell and Jayne 2004). Debates were spatially confined.

*Hassle Free Nights* represents an attempt for a socio-technical solution to the night-time economy problematic. The NSW government sought to resolve antagonisms between various stakeholders (licensees, consumers, emergency services and council) under the banner of



combating 'anti-social' behaviour associated with violence and intoxication. For example, whereas venues debated that 'correct' civil behaviour at night was the responsibility of individual patrons, the council and police argued that licensed premises, supplying alcohol, should take more responsibility. Resolving these tensions was deemed essential for ensuring the continued operation of the night-time economy. *Hassle Free Nights* thus enrolled tactics and technologies that imprint upon cities in specific ways: through restrictive measures for movement and policing; infrastructural investments such as lighting and CCTV surveillance; and barriers within the CBD. In this rendering of night, the economic activity of licensed premises is legitimated and encouraged as part of state sanctioned urban development. Stakeholders are compelled to cooperate to ensure 'anti-social' behaviour does not restrict or derail the particular vision of the night-time city. The conceived space of *Hassle Free Nights* is one in which the state can effectively control participants' behaviour in the night-time economy to ensure continued consumption whilst ameliorating behaviour that threatens the status quo. Nevertheless, that status quo would be drastically disrupted when, within a year, incidents of violence and intoxication reared their head in public debate.

### 5.3.2 Videoed violence

In February 2011, unsatisfied with the progress of the *Hassle Free Nights* campaign, the Police Association of NSW (PANSW) took the unprecedented step of publicly releasing, via YouTube, a five minute video of violence in the state's night-time economy (Essential Media Communications 2011; Figures 5.1 and 5.2). The video compiled highly graphic CCTV footage from a period of four years. In one scene a man is sat on and repeatedly punched in the face (over 30 times). Another is continually kicked in the head after being rendered unconscious. The violence depicted is often between large groups; rarely does the compilation show how an altercation began, or how it ends.



**Figure 5.1** Video recorded violence in Wollongong, lower Crown Street Mall (Source: Essential Media Communications 2011)



**Figure 5.2** Video recorded violence in Wollongong, upper Crown Street Mall (Source: Essential Media Communications 2011)

The impetus for the release of this footage centred on the PANSW's (2011, np.) dissatisfaction with the Government's attempts to curb violence, stating:

Time and time again we've been told by politicians from both sides that alcohol fuelled violence isn't a problem in NSW... Here is the footage the politicians didn't want you to

see. This is what happens at night on our streets, and this is why the community overwhelmingly wants their politicians to take action.

Although the release of the video was premised on state-wide concerns, and presented as such, the footage contained in the clip was drawn exclusively from Wollongong's Crown Street Mall – a pedestrianised mall that by night connects a number of pubs and nightclubs in the city's centre, and by day connects shops, the local council offices and businesses. The footage was filmed via the city's extensive CCTV network. The video was skilfully edited to give the impression that this type of activity is happening any night of the week. The footage from Wollongong is not 'a night out' but a montage of incidents spread out over months. This rendering of the night is indicative of the antagonisms between stakeholders of the night-time city. In this instance, part of the PANSW's motivation was to criticise the relationship between the Australian Hotels Association (AHA, peak body for Australia's hotel and liquor industry) and NSW state government. As (former) NSW Premier Kristina Keneally (quoted in NSW State Government 2010, p. 4.) stated: 'licensed premises are an important part of the social and cultural fabric of our community and are a significant contributor to the NSW economy'. The state benefits substantially from taxation revenues, which causes a continuing ethical quandary in night-time economy provisioning (see also Hayward and Hobbs 2007, p. 451).

The PANSW's rendering of night was of out-of-control wild drunkenness and violence that had exceeded the state's control. In this rendering the previous measures taken by the NSW state government were criticised as inadequate to order the supposed chaos created in public spaces by drinkers and licensed premises. Furthermore, they mobilised this rendering by disseminating it publicly through video to elicit a reaction from other political actors. Competing renderings of the night jostled for prominence in the production of space. As the debates progressed, it became increasingly circular, the night as dialectically ordered and disordered.

### 5.3.3 The night-time is the right time?

In turn, another rendering of night came from Wollongong's primary regional newspaper, the *Illawarra Mercury*. The day after the PANSW's YouTube clip was released the *Mercury's* front page headline read: 'Exposed to the world: the worst of Wollongong – SHAME' (*Illawarra Mercury* 2011a; Figure 5.3). Accompanying editorials and articles asserted the need to 'reclaim the streets' and reclaim the city-centre as a matter of civic pride. Hyperbolic editorials speculated that the 'Gong' had the world's worst nightlife.

REVEALED GREAT PLANS FOR OUR GREAT LAKE - NEWS, REVIEW +

# ILLAWARRA MERCURY

SINCE 1855

WEEKEND EDITION, February 19-20, 2011

\$2 (incl GST)

Exposed to the world:  
the worst of Wollongong

# SHAME



## MERCURY SAYS

We love the Gong. However, this morning the rest of Australia must be wondering why after police released images of sheer unadulterated brutality on our streets. Police say our politicians have failed us - and new curbs on pubs and clubs must be introduced. We agree. It's time to fight back. Time to reclaim our streets. Time to reclaim our CBD.

REPORTS Pages 4, 5  
EDITORIAL Page 32

## MAGAZINE

### BORN AN ADDICT

COVER STORY



## BENNETT

### I'LL STAY THE COURSE

SPORT SPECIAL



TODAY Partly cloudy



28°

TOMORROW Rain at times



26°



DRAGONS 28



BULLDOGS 14

Figure 5.3 Front page, *Illawarra Mercury*: Wollongong's night-time 'shame' (Source: *Illawarra Mercury* Feb 19-20 2011)

The *Mercury's* role in discussions of Wollongong's future cannot be understated. The print media has long been identified as a means to create a public sphere that actively shapes discourse in consensus rather than providing a source for open and unstructured debate (Habermas 1991). In a more contemporary context, McCann (2004) has also noted the key role the media has in circulating dominant discourses of place-based branding and ranking strategies. The suburbanization of Wollongong's retail landscape, has since the 1960s, made it difficult for central Wollongong to maintain its status as the centre of the region (Robinson 1977, pp. 33-34). So too, Crown Street Mall has become the subject of fierce debate within a city in identity crisis attempting to distance itself from its heavy industrial legacy. Exactly what kind of city Wollongong 'should' be, or attempt to become has been a perennial question, bound up in contested visions of industry and built environment (Robison 1977; Waitt and Gibson 2009). In such a context, the *Mercury* (2011b, np.) argued that

Crown St Mall has a special place in the greater CBD [central business district] narrative. It should be reclaimed as "the place to be" for a variety of shopping needs, entertainment, food and a cultural experience. Here is the opportunity for the Wollongong CBD to shed its status as the ugly duckling of Australian cities.

The 'ugly duckling' metaphor was characteristic of a deep underlying inferiority complex in Wollongong, brought about by economic restructuring, high unemployment and a 'lurking classism' that seems a steadfast feature in Wollongong (Gibson 2012, p. 7). The *Mercury's* statement inspired a special themed edition of the paper in November 2011 aimed at reinventing Crown Street Mall. There were suggestions to retrofit the mall's infrastructure; introduce traffic to the pedestrianised sections of the mall; and include more eating and entertainment options. A constantly resonating theme was the potential that 'night' held for the city, including different consumption, entertainment and social alternatives. As one contributor suggested:

string fairy lights or something of the like between the buildings and open some restaurants, tapas bars and a few little 'funky' places to try and bring some vibrancy at night ... keep the lower part of the mall closed to traffic with water features and more nightlife activities that are not nightclubs i.e. Bowling Alley, Cinema, Restaurants, coffee, ice cream shops etc. (Ryaneco 07/11/2011 *Illawarra Mercury* 2011b, forum)

In various guises, the potential of night in spaces of the city such as Wollongong's Crown Street Mall remained persistent and pervasive. This is a rendering that has often been cited in night-time economy discussions (Roberts and Eldridge 2009). In this rendering the night is a flexible,

vacant canvas which can be invigorated with the injection of culture (e.g. 'tapas bars' and 'funky places').

After initially criticising Wollongong's night-life following the PANSW's videoed violence, the *Mercury* subsequently sought to re-render the night. Space was in effect, continually *produced* through a circularity of renderings. *Hassle Free Nights* rendered the night as capable of being ordered; the YouTube clip of the PANSW rendered the night as unordered, violent, out of control; the *Mercury* sought to re-render the night with more positive cultural connotations. A mere 18 months after framing Wollongong as the 'world's worst night-life', and without any extant changes to the night-time economy or landscape in the city, the *Mercury* returned with a front page that welcomed Wollongong City Council's instalment of a new working group (Figure 5.4). This working group was set to strengthen the night-time economy suggesting that Wollongong's nightlife was 'moving on up', and that the 'quiet night-time scene could become a thing of the past.' (Thompson 2012, p. 4). These front pages (Figures 5.3 and 5.4) are two starkly contrasted renderings of Wollongong's night-time economy – one casting the city as out of control, the other a city as quiet, sleepy and ripe to be activated with an injection of night-time culture and vitality. In one, the night as disordered is a source of shame for the region. In another, *the night-time is the right time* to help Wollongong establish a positive reputation.



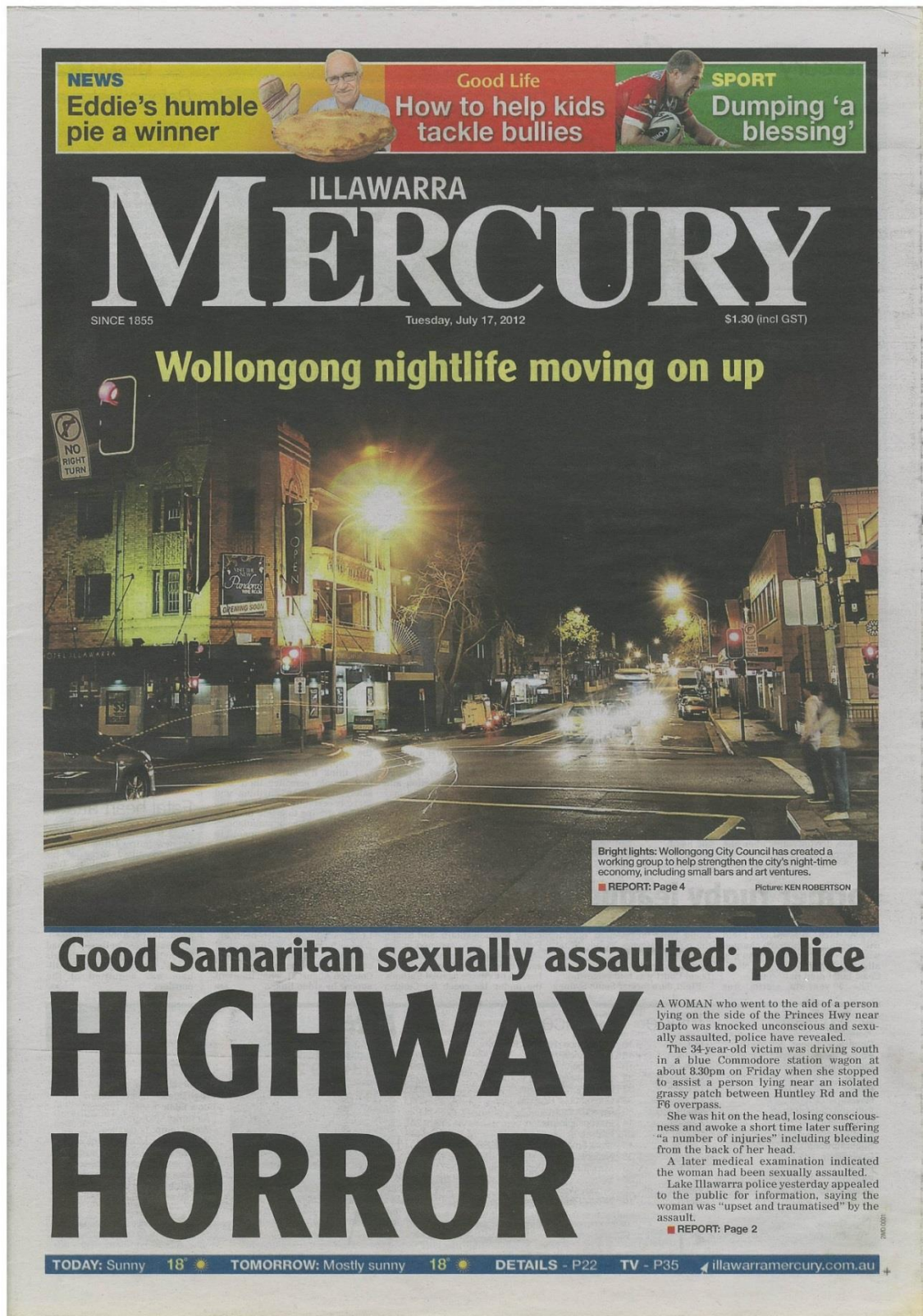


Figure 5.4 Front page, *Illawarra Mercury*: reinterpreting Wollongong's night-life (Source: *Illawarra Mercury* July 17 2012)

#### 5.3.4 Sydney: a world class night-time economy?

Meanwhile, discussions of the night-time city in Sydney took a different turn after the release of *Hassle Free Nights*. In late 2011, the City of Sydney (2011) released a discussion paper, *OPEN Sydney*, which outlined their plan for the night-time economy over the next 20 years. The plan sought to deliver a world class night-time economy with improved transportation, diversity, safety, and sustainable growth. This was a significant undertaking by the City of Sydney – the consultation process was extensive, and the proposed objectives grand. In the words of Sydney's mayor Clover Moore (quoted in City of Sydney 2011, p. 1):

Doing nothing is not an option because of the potential risk to Sydney's reputation as a global city... Done well Sydney's NTE [night-time economy] could be the best in the Asia-Pacific region, renowned for its unique dining, diverse shopping and culture, its tolerance and safety, its many pop-up events and its beautiful streets illuminated with artworks and creative designs all year round. Sydney could be known as the city that got it right, balancing the needs of residents and businesses to the benefit of both.

It was refreshing that hospitals, libraries, grocery stores and university lectures were included in Sydney's definition of the night-time economy, alongside the notorious triumvirate of pubs, nightclubs and bars. The *OPEN Sydney* discussion paper formed a stage of the consultation process and welcomed feedback as part of a promised ongoing debate about the night-time city. In the subsequent publication, the City of Sydney (2013, p. 3) cited that participants had praised the city for its major events and festivals, its dining culture and emerging small bars scene, and the use of consultation. The priorities highlighted after public consultation included improved transport, new CCTV, more bins, toilets, 24-hour library, more 'civilised' drinking culture and less regulation for innovative night-time ventures. Also high on the priority list for the action plan was the promotion of Sydney as Asia-Pacific's premiere dining and live music location (City of Sydney 2013, p. 2-3).

Many of the public participants in *OPEN Sydney's* consultation process rendered the night as full of potential for social and cultural alternatives. One participant stated: 'At midnight, we should be able to eat dinner or visit a bookstore' (City of Sydney 2011, p. 20). Many responses also drew connection between the vibrant night-life of other cities as something to which Sydney should aspire or even replicate, as one participant suggested: 'Paris has beautiful lighting – why don't we? Use the city as a canvas' (City of Sydney 2011, p. 24). Another stated: 'gallery nights in Amsterdam and Berlin are amazing where all the galleries open their doors til



really late and have drinks, nibbles and music – very cool’ (City of Sydney 2011, p. 23). Sydney’s ‘discerning’ citizens effectively reproduced a ‘cultured’ rendering of the night-time economy.

Here were elements of the virtual – utopian desires for aesthetic and cultural alternatives for the night-time experience of their city. Nevertheless, alternatives had to be pitched in a format that stressed economic growth and an over-riding emphasis on competitive city strategies (i.e. hallmarks of the actual). There is evidently a desire to change the city. The perversion is that desire is rendered in the night-time economy. The possibilities become restricted to the ‘actual’ of the night-time economy.

#### 5.3.5 A fatal rendering

One aspect of the *OPEN Sydney* plan suggested restricting growth in some of the city’s hot spots of alcohol fuelled violence (as identified also by *Hassle Free Nights*). The suggestion was for a more dispersed night-time economy across the city. Kings Cross in particular was identified as the most problematical, densely populated example of a night-time economy area within Sydney.

In the months following the release of the *OPEN Sydney* discussion paper an 18-year old man, Thomas Kelly, was fatally punched in the Kings Cross precinct (Figure 5.5). The fatality occurred at 10pm on a Saturday night and it was not clear whether alcohol was involved, who the attacker was, or if they had been in a pub or nightclub. Notwithstanding, this incident triggered intense debates about the night-time economy problematic. What followed was a week of moral panic and hyperbole in the Sydney and national media. The government, police and council were all vocal after the incident, but media attention and widespread interest meant this case became viewed as a ‘watershed’ moment for the city. According to legal academic Julia Quilter (2013, p. 441):

The response to Thomas Kelly’s death was different. Perhaps it was the absolute randomness of his death, the waste of such a young life and the dignity of his parents (Ralph and Kathy Kelly) that turned their son’s death into a resonating tragedy and the need to respond *differently*, not just with more law and order.

What followed revealed in clearer light the politics between stakeholders’ attempting to coordinate socio-technical management strategies for the night-time economy.

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**Top Aussie athletes on drugs watch list**

PHIL ROTHFIELD & MIKE HURST

AUSTRALIAN Customs, doping agencies and federal police have been monitoring thousands of our top athletes, including our entire London Olympic team, in a bid to snare drug cheats.

Australian Olympic Committee president John Coates has revealed all local anti-doping authorities have the names and addresses of every member of the Olympic team as well as those additional contenders nominated on the so-called shadow team.

Their reach spreads across all the professional football codes, with clubs duty-bound to inform the Australian Sport Anti-Doping Authority (ASADA) of their players' whereabouts.

Mr Coates, one of three Australian members on the International Olympic Committee, said no one could guarantee London's Games would be clean.

"But there is now great co-operation between government agencies and the sporting testing agencies," he said.

"Here, Customs has a list of players from the football codes and our shadow (Olympic) team and they worry that up with imports of drugs that come from overseas.

"The federal police can get involved. They can go and watch who picks up the package from the post office, things like that."

Mr Coates said every medalist in London would be tested.

"There will also be out-of-competition testing on sports where it's more likely to be a

➤ CONTINUED PAGE 4

**KINGS CROSS BASHING**

**'I'll be careful Mum'**

**Teen's final words before a night out turned fatal**

HE arrived in Kings Cross at 10.05pm — his first night out on Sydney's notorious Golden Mile.

It took just two minutes and one vicious, unprovoked punch from a total stranger to end Thomas Kelly's life.

Yesterday the 18-year-old's devastated parents raised the question that will haunt them forever: Why did he die?

➤ FULL REPORT PAGES 4-5



Thomas Kelly killed by a complete stranger in Kings Cross and (inset) his final moments before being king hit.

**DON'T MISS THE BIG ONE**

ON THE BACK PAGE.

NS2335FP

Figure 5.5 Front page, *Daily Telegraph*: a fatal night out (Source: *the Daily Telegraph* July 11 2012)

The debate over the fatality culminated in a public panel to discuss the 'problems' of King's Cross. The panel included Assistant Police Commissioner Mark Murdoch; City of Sydney council, led by Mayor Clover Moore; NSW hospitality minister George Souris; Federal MP for

Wentworth (where Kings Cross is located) Malcolm Turnbull; Spokesperson for the Australian Hotel's Association Paul Nicolaou; and the director of the Bureau of Crime Statistics Don Weatherburn (*Sydney Morning Herald* 2012). The panel discussed drugs, alcohol, liquor legislation, political influence of the AHA, lack of transport options from the 'hot-spots' of violence, insufficient CCTV technologies, societal problems with escalating violence, and antisocial behaviour. No clear consensus was made about how to progress.

The focus on Thomas Kelly's death returned night to a rendering in which hotspots of violence and antisocial behaviour were paramount, in stark contrast to *OPEN Sydney's* 'blue sky thinking'. Instead, the night returned back to *Hassle Free Night's* 'problem' precincts. After the incident and subsequent hyperbole, Assistant Commissioner Mark Murdoch (quoted in Ralston and McKenny 2012, np.) notoriously stated: 'Those who stay out after midnight are either going to become one of two things: they are going to be a victim or an offender'. This effectively straightjacketed the discussions that *OPEN Sydney* had sought to open up. Despite its utopian ambitions, *OPEN Sydney's* elements of the virtual remained obscured by the actual. Questions of what could happen at night, or what was possible, were sidelined by tragic incidents that rendered the night primarily as needing order. Sadly, despite the need to respond differently, the debate returned to the familiarity of the 'actual' and the night-time economy problematic.

## 5.4 Dispelling renderings

The examples of night's renderings in Sydney and Wollongong show how debates about the night-time economy recur in a circular manner. *Hassle Free Nights* rendered the night as capable of being collaboratively managed to ensure economic growth; the PANSW video rendered the night as chaotic and exceeding the state's control; the *Illawarra Mercury*, while at first critical of Wollongong's night-time economy consumers and producers, then rendered the night-time as the right time to boost Wollongong's reputation; *OPEN Sydney* rendered the night as full of social, cultural and economic potential capable of enriching everyday life and enhancing Sydney's global reputation; while Assistant Police Commissioner Mark Murdoch rendered those in the night as being one of two things: victims or offenders. These renderings of the night play out publicly as debates about the actual: about managing violence and crime, intoxication, economic growth, competitive cities strategies, law and order in public spaces. This is problematic for three reasons.

First, such renderings of night are mobilised for political gain, and support claims over urban space. The night-time economy is not a stand-alone object, it is bought into being by the policy

makers and academics that develop the concept and critique its outcomes (cf. Mitchell 2008). In the instances of Crown Street and Kings Cross there is no definitive or singular causal connection between the night-time economy and the victims subject to violence. In the case of Wollongong's mall it was not clear whether those subject to violence were in pubs and clubs previously, or were intoxicated. Yet this is inferred by the specific rendering of night being deployed. Flashpoints of violence become inflated when night is rendered with an emphasis on disorder. Such renderings are used to bolster political claims for the city. Crucially, such renderings also implicitly draw on the assumed enduring qualities of the night – danger, deviance, hedonism – that feature in histories of the night (Chapter 1). We are familiar with these accounts of day and night in the city – they are actual. Yet, we need to be mindful of where they are mobilised to obscure the virtual.

Second, in seeking to become crepuscular we need to become literate in competing renderings of the night. In this way, renderings that position the social and cultural potential of night ought to be interrogated as rigorously as we might critique edited montages of violence, leveraged for political influence. In becoming crepuscular the night-time economy should not assume precedence in discussions of urban life. It could be argued that replicating the night-time economy script as a solution to save city-centres detracts as much from progressive visions of public space as does the perceived threat of disorder, circulated by videoed violence. Both in their respective ways selectively renders the night without an underlying appreciation of night's complexity. An absence of such a stance denies interrogation of the dominant daycentric city. Without an understanding of the circular interplay between night's renderings, we assume we could find other forms of cultural expression and sociality in new night-time spaces if only violent youth, alcohol and corporate bars had not derailed a collective utopian vision of the city (cf. Iveson 2007). To rethink day and night it is vital to remain reflexive about the models of day and night underpinning claims for public space, extending our imaginations and bringing to light normative assumptions that stymie what could be fundamental debates about the place of the human and the urban on an orbiting planet.

Finally, the night is too often heralded as malleable. As conceived space it is assumed to be far more manageable and flexible than is the day. Quite why these imperatives to find new forms of sociality should be restricted to the night-time city remains unanswered. In the example of *OPEN Sydney* there are instances where day seeps through the emphasis on night. For example: 'Overcrowding of footpaths is a growing challenge for many cities at night (and day)' (The City of Sydney 2011, p. 25) and 'People told us there were not enough public toilets across Sydney at night (and day)' (The City of Sydney 2011, p. 28.). Such appendages – 'and

day’ – begin to show how framing urban solutions through discussions of the night is inadequate for a city’s broader concerns. The night-time economy continues to be mobilised as essential to Sydney’s global status aspirations, but seeping through the participant’s responses are a number of holistic issues overlooked by the emphasis on night. The rendering of the night as a flexible canvas attracts enduring wider public dissatisfaction with the city. In the Lefebvrian sense, the ‘city’ is an object to be managed by city authorities, not the ‘urban’ to be managed by citizens producing their own space across both day and night.

In this way, night cannot be thought of as intrinsically able to produce an alternative public space. Night does not inherently provide social and cultural alternatives to alienation and dissatisfaction with urban life. This leads to a question: Why is there not a similar project or vision for Sydney’s ‘day’ for the next 20 years?

## 5.5 Producing crepuscular space

Returning to the *Production of Space*, Lefebvre (1991, p. 53, emphasis in original) argued:

If indeed every society produces a space, its own space, this will have other consequences... Any ‘social existence’ aspiring or claiming to be ‘real’, but failing to produce its own space, would be a strange entity, a very peculiar kind of abstraction unable to escape from the ideological or even the ‘cultural’ realm. It would fall to the level of folklore and sooner or later disappear altogether, thereby immediately losing its identity, its denomination and its feeble degree of reality.

In the context of this thesis, becoming crepuscular would thus involve superseding the strict, literal transition from day to night, extending the desire for cultural or social alternatives (seeded in visions of night-life, over night-time economy) to all hours of the 24-hour cycle. The day can be vacant too, in many ways that go unproblematised or do not trigger strategies to enliven space (see Box 5.1). But these hours are also potential sites for imagination and the virtual – for artistic and cultural expression in public space, greater social interaction in both day and night, more evenly spread activity and inactivity across the 24-hour cycle so as Friday and Saturday nights do not become pressure valves – the only time the city can ‘let off steam’ (cf. De Quincey 2008, pp. 46-47).



### Box 5.1 The vacant day



**Figure 5.6** Edward Hopper, *Early Sunday Morning* (1930 Whitney Museum of American Art)

Hopper's *Early Sunday Morning* (Figure 5.6) depicted a row of shops along New York's Seventh Avenue. The painting was inspired by Hopper's morning walks through Greenwich Village, although in his words, it 'wasn't necessarily Sunday. That word was tacked on later by someone else' (quoted in Kuh 2000, p. 134). The painting is devoid of activity and depicts the crepuscular hour just after dawn. The businesses are not revealed, except for the inclusion of a barber's pole. Hopper considered including a person in one of the upper-story windows but decided against it to embellish the sense of desolation.

The heightened sense of empty-streets resonates with an argument about crepuscular spaces. Instead of rendering the night as full of possibilities and potential for urban and everyday life, *Early Sunday Morning* is a simple illustration of day being vacant. *Early Sunday Morning* evokes the day-time hours as devoid of activity, ripe for reinterpretation, and full of potential for social and cultural alternatives. I invite the reader to imagine their own crepuscular space within *Early Sunday Morning*.

The night-time economy – as policy – governs actual, conceived space, with 'proper' planning and provisioning said to guide increased human activity at night. In turn, this activity is envisaged as profitable for economic growth and development, but also safe, free of violence, intoxication and anti-social behaviour. As the night-time economy policy script becomes predominant it feeds into our spatial practice. We in turn interpret the night-time economy as

the way in which we *should* inhabit urban space. This is exemplified by the way in which participants in Roberts and Eldridge (2009) and *OPEN Sydney's* research reproduced the formative visions of the night-time economy concept.

However, when the night-time economy script informs spatial practice this obscures the virtual. Both renderings of night – one of social and cultural alternatives, the other of socio-technical solutions to the night-time economy problematic – rely on governments and planners to manage space. But underneath such debates remains an element of the virtual evident in the calls for social and cultural alternatives. Becoming crepuscular we could enact such desires ourselves, across all hours of the day and night.

In this chapter, I showed where competing renderings of night are implicit in the production of space for 'night-time' cities. I did so within the night-time economy debate. Progressing from the stasis of this debate means paying closer attention to the way in which night and day is negotiated. As I have shown, the 'night' is too often summoned up uncritically in two ways. First, as a distinct temporal realm, different from the day, in which alternative social and cultural goals can be pursued and achieved. Second, as 'out of control', full of unruly youth, violence and intoxication that needs to be carefully planned and forcefully ordered. The nuanced interplay between these 'nights' is neglected as stakeholders such as planners, police, governments and councils seek to structure the night for their respective political agendas.

In terms of transduction, the notion of the virtual that is seeded within some visions of the night – those rendered as full of potential – becomes obscured when the actual reimposes itself. The virtual is obscured in instances such as the police calling for increased regulation of the night (in the case of the PANSW's videoed violence). The virtual is also obscured when the desire for social and cultural alternatives for everyday life become engrained within the aims of the night-time economy that aims for the 'actual' – for growth and development, for competitive city status, and law and order. I have worked with this tension to argue that while such discussions remain focussed *only* on the night-time city, and not a broader redefinition of urban existence that draws on day *and* night, they will remain elusive. One task in becoming crepuscular is to produce a crepuscular space, one in which competing renderings of day and night are understood, and one in which virtual days and nights can emerge.





## Chapter 6 - Crepuscular lives: health, happiness and productivity

Thus far, through transduction, I have explored moments and spaces of the crepuscular. Moments considered how the virtual can emerge temporally. Spaces examined how the virtual is obscured by the actual. This chapter focusses on crepuscular lives and how we divide our individual quotidian activity. It takes disparate everyday practices –especially sleep –and through the lens of transduction interprets how meanings for day and night are rendered in everyday life. I first review Lefebvre’s concept of the right to the city, which rather than a narrow call for legislative rights, calls for a broader consideration of the factors humans need to live a fulfilled everyday life. I draw particularly on debates about sleep as an example where the routines of day and night in everyday life are open to reinterpretation and contestation.

A discussion of sleep is relevant to rethinking day and night. New research continually uncovers and argues for a more nuanced understanding of sleep across all of the 24-hour cycle. This chapter links to such research, and examines how existing social practices and behaviours influence everyday routines of day and night. In so doing, I question what kinds of lives we envisage living in terms of utopia, disalienation and the virtual object of becoming crepuscular. Sleep is one such example where rethinking day and night can lead to healthier, happier and more productive lives.

### 6.1 The right to the city: what kind of humans do we want to be?

Lefebvre’s (1996) right to the city referred to the equal right of all urban inhabitants to participate in the future city, and to remake it as they see fit. Lefebvre (1996, p, 177-8) argued that planners, governments, and architects are principally concerned with managing growth and (quantitative) development of cities. They emphasise consumption and reinforce the dominance of private property. Thinking about cities in terms of property and consumption ignored what Lefebvre saw as the basis of societal needs, the foundation of what it *should* mean to be human. In this sense, the ‘right’ to the city cannot be thought of as rights in a traditional legal sense, for equitable access to the actual city as it already exists. Lefebvre (1996, p. 147) argued that cities, and rights, ought to be conceptualised as ‘needs’ that were oppositional, yet complimentary, such as,

the need for security and opening, the need for certainty and adventure, that of organisation of work and play, the needs for the predictable and the unpredictable, of

similarity and difference, of isolation and encounter, exchange and investments, of independence (even solitude) and communication, of immediate and long term prospects. The human being has the need to accumulate energies and to spend them, even to waste them in play.

Lefebvre saw modern humans longing for a return to a perceived 'natural' state of being in 'nature', external to the city. Here, Lefebvre's essential critique was of industrial capitalism's complete transformation of 'nature' – a thread that would directly inform Marxian political ecology in the 1980s (Smith 1984). Yet, rather than advocate for a simple 'return' to 'nature' by fleeing the 'mundane' and 'oppressive' city, Lefebvre urged for a revised concept of 'urban' being. If there is a state of well-being that humans can achieve in relating to the 'natural' world, and that is a given right of human beings, then we should strive towards attaining such rights in our urban existence – that is the right to the city. In achieving such a vision, our fundamental societal needs would be facilitated by our cities. Lefebvre (1996, p. 179, emphasis in original) stressed, however, that such rights were not well recognised in capitalist cities and were far more likely to become customary rather than legislated in formal legal codes:

They would change reality if entered into social practice: right to work, to training and education, to health, housing, leisure, to life. Among these rights in the making features the *right to the city* (not the ancient city, but to urban life, to renewed centrality, to places of encounter and exchange, to life rhythms and time uses, enabling the full and complete *usage* of these moments and places, etc.).

This quote is an example of Lefebvre's thoroughly 'humanist' variant of Marxism. In hindsight, in light of more-than-human thinking, it also reveals the limits of Marxian humanism and the need to consider the rights of nonhuman others to well-being, and to the city (see Appendix D). Nevertheless, such a perspective does in a utopian sense point towards the individual and the collective possibilities for greater autonomy over everyday lives and the production of space.

Lefebvre's remarks about 'needs' in the right to the city emphasised balance. The oppositions that Lefebvre lists, such as isolation and encounter and similarity and difference, prompt a more careful consideration of what we actually require to live a fulfilled life. Lefebvre wanted to provoke a desire for a renewed sense of everyday life which goes straight to the core of his virtual object of urban society: what kinds of humans do we want to be? Within the context of this thesis, this chapter seeks to highlight how a quotidian practice can be reframed as another step on the path towards the virtual object of becoming crepuscular.

## 6.2 Monotonous and homogenous everyday life

In everyday life, the virtual object of becoming crepuscular could be thought of as transcending one of Lefebvre's (1996, p. 159) accounts of the actual:

One only has to open one's eyes to understand the daily life of the one who runs from his [sic] dwelling to the station, near or far away, to the packed underground train, the office or the factory, to return the same way in the evening and come home to recuperate enough to start the next day.

This daily experience for Lefebvre was a picture of 'generalised misery'. The very notion of monotony is, for many, a familiar routine of day and night – commuting between home and work, and having to repeat this day after day, week after week, year after year. In London, some commutes are 75 minutes long. 75 minutes a day equates to five continuous weeks in a year commuting (O'Doherty 2012). In Sao Paulo it is even worse, two to three hours a day each way can be consumed with cramped commutes (Snyder 2013). Breakdowns are common with networks overloaded beyond capacity. Such conditions recently sparked some of the largest protests ever seen in Brazil.

As economic globalisation inter-connects corporations and the spaces of work for greater numbers of people, these notions of the nine-to-five job and the normalcy of commuting have migrated from origins in northern Europe to the rest of the world, including regions of different latitude where quotidian rhythms of day and night were previously structured differently (Shove 2003, p. 61). The combination of nine-to-five work, commuting and standardisation of office indoor environments has effectively 'freed people from a shared regime of diurnal and seasonal change' (Shove 2003, p. 169). Such processes are increasingly alienating humans across diverse latitudes from daily rhythms geared around earthly forces. Contra to the importation of northern European norms of daily work and commuting rhythms,

in much of southern Europe, shop shutters drop at noon only to re-open in the late afternoon. Schools and offices follow suit for the temporal order of these societies still revolves around the siesta. Giving up and retreating during the heat of the day is a simple, low-cost method of managing climatic variation. It is a long established tradition and one that structures the distribution of traffic jams, the scheduling and duration of meal times and the coordination of social interaction. (Shove 2003, p. 61)

Nevertheless, such diverse quotidian patterns are increasingly threatened by commuting and standardised hours of work – the encroachment of dominant, linear conceptions of time. The

result is a shift towards regimented experiences of day and night, longer commutes, and urban residents approaching ‘tipping points’ of stress (Bissell 2014), hostility and aggression (Hennessy 2008). How best to plan for transport and commuting times within cities is a question that encompasses environmental, social, health, economic and aesthetic concerns (Rickwood and Glazebrook 2009, pp. 171-2). In the context of this chapter, exploring practices, rhythms and behaviours that intersect with our daily activity are also part of a deeper questioning of what kinds of humans we want to be, and also what kinds of days and nights we might also want to have.

The dominant, linear conception of time that I discussed in Chapter 4 renders a notion of ‘productive’ time as tied closely to industrial activity, and to the maximum production of economic goods per unit of time. From a Lefebvrian perspective, and in becoming crepuscular, such conceptions of time as linked to productivity would need to be troubled. The definition of productivity here ought not, in a narrow economic sense, only refer to the efficiency of labour to create products. Lefebvre’s notions of production, products and productivity were more closely tied to everyday life, in that humans ‘produce’ their own life, art, knowledge for use and not exchange (See Lefebvre 1991, p. 68-79; Lefebvre 1996, p. 75 and 215). Lefebvre was accordingly troubled by redefining ‘free time’ in cities, as: ‘it is a delicate question which supposes the mastery of each person of their time, with a multiplicity of possibilities. The disjunction which we make between ‘productive time’ and ‘free time’ is very symptomatic’ (Lefebvre 1996, p. 215).

It remains provocative and fanciful that we could have total autonomy over every hour of our lives. We have demands for work, for family, for recreation that are seemingly segmented into different parts of our lives. Nevertheless, a necessary step of transduction is to envisage the very lives that might be possible in becoming crepuscular – including those that currently seem impossible. The elusive ‘mastery’ of each person over their time will, for now, have to be suspended in the context of pursuing the virtual. Mastery of our time is something to strive towards, to believe possible, even if our contemporary context, the actual drudgery of routine work and commuting, renders it impossible.

In Lefebvre’s urban society, the individual and the collective population would have far greater autonomy over their everyday lives and the production of space. As I have argued thus far in this thesis, in becoming crepuscular, such autonomy would need to be focussed more clearly around day and night. Rethinking everyday practices can help to develop new relationships to day and night and pursue the virtual object of becoming crepuscular. So too, observing

everyday practices through the lens of transduction helps to identify where elements of the virtual already exist. For example, one of the major quotidian practices we engage in, to which this chapter now turns, is that of sleep.

### 6.3 Sleep: a contested practice

Sleep is highly contentious. Too much is socially stigmatised, too little can lead to illness such as depression, and the best practice of sleep is a source of ongoing debate (McCarthy and Welsh 2012). Kraftl and Horton (2008, p. 509, emphasis in original) have argued that ‘over one third of most human lives – and hence one third of human geography – is spent *asleep*’. And yet, much about sleep has remained a complete mystery. Kroker (2007) documented how sleep research transitioned from an ancient preoccupation with dreaming, to a modern emphasis on managing sleep scientifically. The dominant focus of sleep research prior to the 20<sup>th</sup> century was on the interpretation of dreams, as a factor of personal psychology. The rise of modern sleep science has separated itself from this concern with dreaming, in turn interpreting sleep as an issue of public health requiring medical intervention.

In the context of increased sleep science and anxiety over sleeping habits and patterns, Williams (2005; 2007) has argued for a ‘sociology of sleep’. Although in one sense sleep can be thought of as the most significant withdrawal from the social world, that which is deemed appropriate and inappropriate and ways of sleeping are all learned, as a means of social etiquette. According to Williams (2005), every society is forced in some way to organise –and even institutionalise –sleep. The how, when, why and where of sleep therefore becomes socially and culturally defined.

Sleep deeply influences our health. A lack of sleep and disrupted sleep patterns have long been associated with health problems –such as cardiovascular disease, obesity and cognitive impairment –but recent research is continuing to uncover impairments such as immune and inflammatory responses in the body (Moller-Levet et al. 2013). Sleep also has repercussions for our state of mind. While becoming tired invariably means we do not have the energy required to complete desired tasks, being tired for prolonged periods of time can have damaging effects (McCarthy and Welsh 2012). For example, disruptions to circadian rhythms have been associated with neuropsychiatric disorders such as bipolar and major depression. Prolonged and rotating shift-work have been associated with a whole range of health issues including sleep deprivation and disorders, poor dietary habits, digestive problems, stress, and cardiovascular disease, as well as exacerbating existing issues and disorders (Knutsson 2003; see also Chapter 7). Shift-work has been cited as putting immense stress on family functioning

(Presser 2003). In Chapter 2, I briefly reviewed the ways in which sleep, and widespread sleep debt, was evidence of daycentrism and an alienated relationship to day and night. Those with an inclination towards being ‘night owls’ rather than ‘morning people’ suffer most from this.

How best to manage sleep has, as a result, become a well organised industry. The Australasian Sleep Association (ASA) for instance represents scientists, clinicians and researchers broadly concerned with sleep. Their mission is to promote sleep health and sleep science across Australia and New Zealand. The ASA (2014) envisage a community that ‘recognises the importance of good sleep to health, public safety, productivity and quality of life’. Other similar bodies designed to assist and educate on sleep and related disorders include Sleep Disorders Australia (2014) and the Narcolepsy and Overwhelming Daytime Sleep Society of Australia (2014).

Sleep is big business too. The industry for helping manage personal sleep is burgeoning. Any quick internet search reveals pills, gels, drinks, books, DVDs, CDs, headwear, eyewear, breathing masks, pyjamas and applications for phones and computers, all designed and marketed towards assisting with getting enough of the right quality sleep. Some technologies are as simple as a sleep-mask to block out excess light from the eyes. Others can be as complex as respiratory systems that monitor and assist breathing. One mobile phone application called ‘sleep cycle’ is a program that runs under the user’s pillow when asleep. The phone monitors the sleep cycle to wake someone when in the lightest possible state of sleep. Rather than specify an exact time to be awake – which many people often leave to the last possible time they can rise and still be ‘on time’ for their daily or nightly activity – the phone determines the best possible time to wake within biological rhythms of shallow and deep sleep. Programs like sleep cycle supposedly render the traditional alarm clock redundant - a relic of bygone sleeping practices. The logic is that twenty minutes extra sleep is not worth getting the right *quality* sleep and, crucially, the right instant of waking during a sleep cycle. Such programs also provide statistical analysis of sleep, which can be plotted over weeks and months. Complex analysis of our sleeping habits existing literally at our fingertips demonstrates how normative renderings of day and night deeply penetrate into everyday life.

Yet, rarely is managing sleep as simple as using a mobile phone application. Patterns of sleep interact with social and material elements of our everyday lives. Research has shown how the lighting from the screens of mobile phones and other small digital devices are exacerbating sleep problems (Calamaro et al. 2009). According to Amanda Gamble (quoted in Rice 2013, np.), a clinical psychologist at Sydney’s Woolcock Insomnia Clinic:

We've gone from bigger devices - the computers that were fixed on our desk to the handheld portable devices ... so it's become a much more difficult issue to actually create a boundary between sleep and switching off these devices, because of course they come into the bedroom and a lot of people use their mobile phones as their alarm clock.

Sleep scientists have identified three such 'problems' with phones interrupting sleep and entering places of sleep like the bed and bedroom. First, they suppress melatonin, the chemical that helps us fall asleep; second, such devices are mentally and physically stimulating, making it harder for people to prepare for sleep; and third, (especially with young people) digital devices in the bedroom are eroding the association of the bed with sleep, by making it also a place of work and sociality over the internet and social networks.

Becoming more aware of our sleeping patterns is seen as an important public health agenda. So too, such awareness is seen as crucial for resisting industrial controls over sleeping (Wolf-Meyer 2012). The erosion of sleep in society can be critiqued more deeply as a factor of life under capitalism. Capitalism seeks to reduce the time spent in a passive, and thus unproductive, state of sleep. Chapter 4 contained a reference to Marx's notion of the 'working day' and the manner in which the capitalist mode of production strives towards the appropriation of labour throughout the 24-hour cycle (1990, p. 367). Effectively reducing the time available for sleep is part of such appropriation. And yet, sleep is a fundamental human need<sup>1</sup> that cannot be commodified to the extent that examples such as hunger and thirst can be. In Jonathan Crary's (2013, p. 10) words:

In its profound uselessness and intrinsic passivity, with the incalculable losses it causes in production time, circulation, and consumption, sleep will always collide with the demands of a 24/7 universe. The huge portion of our lives that we spend asleep, freed from a morass of simulated needs, subsists as one of the great human affronts to the voraciousness of contemporary capitalism.

Crary (2013) accordingly traced how sleep has become marginalised in the 21<sup>st</sup> century. In North America, average sleep has decreased from ten hours a century ago, to eight hours within the last generation, and currently averages six hours. Research has even been conducted to undermine the perceived human 'need' for sleep. Research funded by the U.S. Defence Department is examining if the brain activity of the white-crowned sparrow offers any

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<sup>1</sup> A need synonymous with those that underpinned Lefebvre's right to the city, the need for time asleep and time awake.

applicable insights into human sleeping patterns. The white-crowned sparrow migrates in autumn from Alaska to Mexico before returning in spring. This species is unusual in that it has the ability to remain awake for periods as long as seven days during migration season. The birds fly by night and search for food during the day. The aim of the U.S Defence Department, Crary (2013, pp. 1-4) says, is to develop a 'sleepless soldier' capable of high mental and physical performance in the absence of sleep. Such a scenario exemplifies a most frightening, dystopian rendering of the human relationship to day and night (see Box 6. 1).

#### **Box 6.1 Dystopian renderings: total alienation from day and night**

As discussed in Chapter 1, geographers have used creative texts to illuminate future possibilities (Saunders 2010). These include the worst dystopian futures. Science fiction has long excelled at portraying future dystopian worlds as a social critique of the present or of the directions in which oppressive powers can take society. How are day and night rendered in science fiction dystopias?



**Figure 6.1** Crepuscular Coruscant as science fiction dystopia (Source: Ostrander 2006)



In Star Wars, the planet Coruscant is an ecumenopolis – a single city covering the entire surface of a planet or moon – and the political and economic centre of the universe (Perry 1996; Figure 6.1). The depths of Coruscant's urban landscape receive no sunlight, a resource instead reserved for the wealthy and powerful who dwell on the city's higher levels. Billions of residents are denied sunlight. Organised crime, corruption and danger infest its dark regions. Such dystopian renderings illustrate a fantastical future of total alienation from day and night.

In an attempt to reinvigorate Marxism for the 21<sup>st</sup> century, Andy Merrifield (2009; 2011; 2013) has drawn on similar dystopias. For example, Merrifield contextualises his concept of Magical Marxism – which he sees as inviting and liberating Marxism beyond dogma and orthodoxy – through Gabriel Marquez's *One Hundred Years of Solitude* (1978). In Marquez's text, the fictional town of Macondo is afflicted by the insomnia plague, which prevents anyone from sleeping. For the most part, this state of eternal wakefulness suits the people of Macondo, for there is always too much to do in too little time. The people of Macondo busy themselves with endless tasks while insomnia makes them more and more forgetful. Eventually, a few begin to long for sleep, not only for rest, but out of an intense longing to dream again. They long to remember the past. For, in the depths of the insomnia plague, 'very slowly, bit by bit, ever so progressively and subtly, you forget about dreaming and in the end, the expert insomniac loses his or her memory entirely' (Merrifield 2009, p. 381). All that remains, 'is an eternal present, a contaminated present, a disguise illness, a repressive situation accepted as a perfectly natural reality, as the only reality' (Merrifield 2009, p. 381). As an example of the literary genre of magical realism, the insomnia plague is a fantastical construction. 'But it's an invention', Merrifield argues, 'that seems to capture with startling exactitude a reality we ourselves have been living for almost two decades now' (Merrifield 2009, p. 381).

In a similar vein, in a recent review of the right to the city concept, Merrifield revisited Lefebvre's fleeting reference to science fiction writer Isaac Asimov's *Foundation Series* – specifically the planet Trantor (Merrifield 2013; Lefebvre 1996, pp. 160-161). Trantor, another ecumenopolis, is a single city spanning 75 million square miles, with 40 billion inhabitants. It is an example, for Merrifield, of the totally urbanised society that Lefebvre (2003a, p. 1 emphasis in original) forecast in his opening paragraph to the *Urban Revolution*: 'Society has been completely urbanized... An *urban society* is a society that results from a process of complete urbanization. This urbanization is virtual today, but will become real in the future'.

For Merrifield, Trantor, is the height of a utopia-cum-dystopia in which ‘canopied under a ceiling of millions of steel domes, like a colossal iceberg, nine-tenths of Trantor’s social life takes place underground in climate-controlled air and light, with programmed downpours’. This meant that ‘*nobody recognised day from night any longer, whether the sun shone or not, and after a while few cared.*’ (Merrifield 2013, p. 910, emphasis added).

Merrifield is not specifically talking about day and night. He is using these examples to ask some broader questions about urban society, politics and the right to the city. Trantor might not yet exist, but Merrifield argued that believing it might be possible is a way in which to fully think through the ramifications of over half the global population now living in cities (Merrifield 2013, p. 910-911). Likewise, Macondo’s insomnia plague may be an invention of Marquez’s magical realism, but Merrifield sees its symptoms increasingly evident in the 21<sup>st</sup> century. He cites here amongst other things processed food, blamed for obesity epidemic that also leaves many in sugar fuelled drowsiness and the mass media penetrating ever deeper into everyday life, creating a state of heightened present, obscuring even the most recent history from memory and limiting hope of a different future.

Both Macondo and Trantor, like Coruscant, are examples of dystopias and depict total alienation of humans from day and night. Such examples are reminiscent of the vision of the 24-hour city. Dystopian renderings are not perhaps the vision promoted in night-time economy policy and planning, but as Crary (2013, p. 17) argued, capitalism’s pursuit of a 24-7 society ‘steadily undermines distinctions between day and night, between light and dark, and between action and repose. It is a zone of insensibility, of amnesia, of what defeats the possibility of experience’. Proceeding towards a 24-7 society in which sleep is no longer required, ‘the planet becomes reimagined as a non-stop work site or an always open shopping mall of infinite choices, tasks, selections and digressions... producing, consuming, and discarding occur without pause, hastening the exhaustion of life and the depletion of resources’ (Crary 2013, p. 17).

If, in rethinking day and night, we follow Merrifield’s lead to employ the magical as motivation, we might realise alienation from day and night in our midst, not centuries away as in science fiction. As Lefebvre argued, urban society is progressing towards planetary urbanisation. Likewise, the unquestioned teleological progression of humans from day into night proceeds towards that end, to the indistinguishable day and night of Trantor, to the reality of Macondo’s insomnia plague, or to the inequitable access to Coruscant’s sunlight.

In considering becoming crepuscular, such dystopian renderings provocatively illuminate what is at stake in not considering the ramifications of total alienation from day and night: the inability to dream; forgetting our place on the planet and in the universe; access to sunlight determined by power and privilege; and limiting hope for the future. Dystopian renderings underline the importance of developing a virtual object of becoming crepuscular, of reconnecting with the cosmological forces of day and night rather than becoming further alienated from them.

Rethinking future sleeping practices can be both personal, in terms of health and happiness, and potentially exploitative such as military research seeking to find ways to suppress the need to sleep. NapNow, an organisation trying to provide both social and scientific proof that napping should be a more integral part of the working day and our everyday lives, seek to bridge this divide (NapNow 2014a). NapNow are an example of rethinking the where, when, how, and why of sleep. They argue that:

The powernap is the quintessential renewable energy practice that we'd be mad not to embrace, now, for the sake of sustainable living and a sustainable future. As individuals there are clear indicators that too many of us, energetically speaking are in the red: tired, stressed and over-scheduled with primary school children through to adults suffering as a result... As a culture: we are in the midst of a compelling search for sustainable ways of living on this planet. Personal sustainability – learning how to manage our own energy reserves – is critical to environmental, business and community resilience. (NapNow 2014b, np.)

NapNow's activities include: showcasing businesses that embrace the benefits of napping; providing businesses with 'pro-napping' strategies; stimulating research and discussion about napping, citing its benefits for personal, business and social wellbeing; building a community of 'naptivists' who challenge negative perceptions of not only napping, but the general benefit of downtime, rest and renewal (NapNow 2014a; 2014c). Encouraging napping in business contexts can be interpreted as an element of the actual. For example, managing sleep to make workers more productive. But in terms of our 'personal sustainability' and the management of our energy reserves, napping can be thought of as virtual – as a means to become crepuscular by reconnecting with deeper daily rhythms more in tune with our personal preferences.

'Naptivism' invites reflection on the segmented sleeping patterns that Ekirch (2005) uncovered in pre-modern Europe. Up until the early modern era, western Europeans experienced nightly sleep in two split segments. The time in between sleeps was an hour or

more of quiet wakefulness. Both segments of sleep had roughly equal durations, usually waking around midnight (depending on the time one went to bed). In some examples, medical advice from the mid-1500s indicated benefits of sleeping on particular sides of your body for ‘first’ and ‘second’ sleeps to aid digestion and better quality sleep (Ekirch 2005, p. 272). The demise of segmented sleeping practices was class-based. Ekirch found segmented sleeping to be common amongst all but the wealthiest segments of society. Disproportionate access to artificial lighting meant that segmented sleeping remained evident in households *without* affluence. Greater exposure to artificial lighting changed the patterns and rhythms of sleep, from segmented to one continuous block throughout the night.

There have been subsequent attempts to replicate patterns of segmented sleep in experimental trials (Wehr 1996; 1999). One startling revelation of such research shows humans can revert to segmented sleeping patterns when given correct conditions of lighting. Depriving people of artificial light over a number of weeks can recreate pre-modern conditions for sleep (Ekirch 2005, p. 303). Thomas Wehr (1996; 1999) found that patients not exposed to artificial lighting exhibited patterns of broken slumber – lying awake for two hours, sleeping for four, waking for two to three hours of quiet rest and reflection before a final four hours of sleep<sup>2</sup>. The period between first and second sleeps heightened levels of particular hormones in the body and Wehr likened the intervening wakefulness to an altered state of consciousness – somewhat akin to meditation (see also Ekirch 2005, p. 304). Such work shows that what we intuitively think of as the ideal eight hours sleep through the night is a hallmark of modernity, rather than a biological necessity. Nevertheless, the shift from segmented to continuous sleep has had a drastic effect on the ways we structure our nights and days.

## 6.4 Crepuscular lives: towards increased segmentation of 24-hours

On the path to becoming crepuscular we need to rethink everyday practices that intersect with ideas of day and night. This chapter has shown how contemporary debates around sleep are questioning how, when, why and where we sleep. Napping during the day increases alertness, mood and concentration. Likewise, segmented sleep patterns throughout the night alters hormone levels and provides time for reflection, for isolation or for time with partners and families (Ekirch 2005). As such, in daycentric society, we can infer that the notion of dividing our activities into prolonged segments throughout the 24-hour cycle (experiencing long periods of sleep and long periods of work) is detrimental to health, happiness and productivity.

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<sup>2</sup> On the first night of the experiment, participants slept an average of 11 hours, which, it was suggested, was evidence of chronic sleep debt.

A more segmented 24-hour cycle meshes with the notion of becoming crepuscular. Distributing activities, rest, expending and recuperating our energies more evenly across the 24-hour cycle would suggest we are perhaps a crepuscular rather than a diurnal species. More evenly distributed behaviours and practices across the 24-hour cycle would bring us closer to the kind of balance that Lefebvre emphasised as part of the right to the city. Questioning sleeping practices in becoming crepuscular parallels Lefebvre's virtual object and addresses the question of what kinds of humans we want to be.

From this step of transduction I argue that debates about sleep can be framed more explicitly about how we relate to the earthly forces of day and night. Adopting such a perspective helps us to not only rethink sleep, but how we eat, socialise, work, exercise and fill our days and nights. Following the example of sleep, how can other factors of everyday life be incorporated into a consideration of our relationship to day and night? One example, a recent exhibition at New York's Public Library, has focussed on 'lunch' specifically developing out of the geography of the urban, modern, day and night:

Colonial American mealtimes were originally based on English rural life, with a main meal known as "dinner" in the middle of the day. The word "lunch" referred to a snack that might be eaten at any time of the day or night, even on the run. (Federman and Shapiro 2013, p. 2)

But industrialisation in the 19<sup>th</sup> century, and the subsequent shifting experience of day and night began to change rhythms of eating. Meal patterns thus shifted:

Nowhere was the change more dramatic than in New York, the burgeoning center for trade, manufacturing, and finance. Employees were given a fixed time for their midday meal, often a half hour or less. So, dinner was pushed to the end of the day, and lunch settled into a scheduled place on the clock between the hours of twelve and two. (Federman and Shapiro 2013, p. 2)

Lunch, as an outcome of the urban, modern day and night (Chapter 4) not only changed the time at which meals were eaten, but also how food was consumed. In such circumstances new practices of eating became a facet of the actual:

As the city's commercial center nestled into the lower half of Manhattan, middle-class merchants, traders, and financiers gradually moved into quieter neighborhoods farther north. No longer could they easily get home for a meal at noon. Quick-lunch made it

possible for them to bolt through a plate of food and get right back to making money.  
(Federman and Shapiro 2013, p. 7)

Quick-lunch was an early precursor to our contemporary fast food. As fast food has become an ever present in the actual it has been seen as a contributory factor in increasing obesity epidemic (Fraser et al. 2010). Obesity, in turn, is associated with decreased quality of sleep at night and increased drowsiness during the day-time (Vgontzas et al. 1998).

Through the lens of transduction we can interpret changing sleeping and eating practices, not as isolated historical examples, but as two examples that have contributed to a changed human experience of day and night. Drawing examples such as these together helps show how the distribution of activities across the 24-hour cycle has become normalised, and how it has alienated humans from potentially different ways of being. Distributing activity more evenly across the 24-hour cycle melds with Lefebvre's notion of balance that underpins his right to the city. If we need security and opening, work and play, the predictable and unpredictable, so too do we need engaged interactions with the materiality of night and day. In becoming crepuscular, and seeking more balance between our days and nights, behaviours and activities that may seem foreign to the actual may come to the fore: embracing wakefulness in the middle of our nocturnal slumber, less stretched activity – such as long working days – that drive us to over-exertion, or refuelling through excessive, rapid eating practices.

Documenting examples such as changing sleeping practices constitute a Lefebvrian sensibility of a 'consciousness of alienation'. In revealing these taken-for-granted elements of the actual, the lens of transduction helps to identify where they also contain elements of the virtual. Transduction has helped to recognise debates about sleep – those calling for increased napping and a return to segmented sleep – as a step towards a disalienated day and night. Such a rendering of day and night is one in which day or night are not associated, or reserved exclusively for one particular practice in everyday life. Rather, that distribution of activities across the 24-hour cycle is seen as contingent and full of possibility, for how it can influence our health, happiness and productivity.

## Chapter 7 – Crepuscular technology: equipping the virtual object

The previous chapter discussed practices of everyday life, in particular sleep. Practices, however, are more than just human bodily achievements – they are outcomes of socio-technical assemblages whereby bodies, technologies and infrastructures intersect (Shove 2003; Allon and Sofoulis 2006). This chapter accordingly focusses on crepuscular technology. In order to think about crepuscular technology it is helpful to refresh Lefebvre's concept of alienation. For Lefebvre, alienation is all encompassing in everyday life and every aspect of life is alienated under capitalism. Because alienation is all encompassing, the path to disalienation can only proceed gradually – a dialectical process in which we strive for a more fulfilled everyday life. Becoming crepuscular, as a virtual object, moves towards a totally disalienated relation to day and night. More specifically for this chapter, I focus on examples of technology that can be considered to alienate or disalienate humans from day and night. I focus this discussion primarily around lighting technologies. Lighting has been characterised as the single greatest influence on the changing human relationship to day and night (Schivelbusch 1995). In this chapter I explore the historical development of lighting and the ways in which an over-illuminated night is being contested.

This discussion follows on from Chapter 6 – crepuscular lives - which sought to question what types of lives we might ultimately want to live moving towards the virtual object. In that chapter I sought to highlight how sleep is a contested practice in everyday life, and how this in turn, is an example where the virtual can emerge from the actual. In this chapter I extend those discussions to connect to debates about technology, how we furnish our lives, and how closer attention to the technologies in our lives can help progress towards the virtual object. Sleep and lighting are two examples of how technologies and everyday practices intersect with the multiple meanings and experiences of day and night. So too, they are examples of disparate discussions and empirical explorations that, through the lens of transduction, can be brought into dialogue around day and night in our vernacular lives.

### 7.1 Lighting dominating the city

In the opening scene of the documentary *The City Dark: a search for night on a planet that never sleeps* the director Ian Cheney (2011) says: 'So, I live in a city. A big city. With eight million people, and... on most nights, only a few dozen stars'. Cheney's city is Manhattan and

he is speaking from Times Square. Cheney can only see a few dozen stars because of light pollution. As Cheney, and others (for example, Bogard 2013), argue, the cities in which we live are now over-illuminated. Millions of artificial lights have replaced the natural conditions of light and darkness with which humans and other species have evolved with and depend upon.

In the absence of artificial illumination the amount of stars in the ideal night-sky would be impossible to count. And so, Cheney wonders, 'What do we lose when we lose the night?' Questions such as Cheney's are being increasingly asked in a world that is polluted with excess and inefficient light (Bogard 2008; Bogard 2013). Since the mastery of fire, lighting technology has increased in volume and intensity. Wolfgang Schivelbusch's (1995 [1988]) *Disenchanted Night* is a cornerstone account of this transition. The advent of fire and flame furnished humanity with a means to light, heat and cook. Lighting was the first of this triad to be separated and has since seen a host of technological innovations from wood, to resin and pitch torches, candles and oil-lamps (Schivelbusch 1995, p. 4-5). Schivelbusch explored the industrialisation of lighting technologies over the course of the 19<sup>th</sup> century. This technology drastically altered the streetscapes of cities and influenced modern nightlife in diverse ways - the advent of window shopping being one example, with glass frontage and lighting used to attract customers outside of business hours. In the words of Schivelbusch (1995, pp. 114-115):

The nineteenth century saw a radical change in public lighting. Until then, lanterns had generally cast a kind of private light; now their beams increasingly began to spread outward. Position markers and luminous symbols of sovereignty turned into something that actually lit up the street. As technology became more sophisticated, the pools of light around solitary lanterns grew ever larger and finally merged, creating one vast sea of light.

Schivelbusch argued, the spread of light –towards one 'vast sea' – was met both welcomingly and cynically in different contexts. Such contrasts were no more obvious than in Paris – the city of light. Walter Benjamin's (1999) *Arcades Project* examined the architectural form of the Parisian arcades during the spread of light in the 19<sup>th</sup> century. Benjamin used the arcades as a lens to understand Parisian society coming to terms with modernity: with commodity capital, architectural and technological advancements such as iron and lighting networks, and changing social relations.



Convolute T of the *Arcades Project*<sup>1</sup>, for instance, focussed thematically on modes of lighting. The collaged material traced the way in which lighting networks became enrolled in the city. Rather than account for a technological roll out, as the history of lighting is sometimes presented, Convolute T shows the contradictory process by which lighting became established. Some citizens were initially sceptical about the efficiency of lighting, 'which was suspected of being dangerous and of polluting breathable air' (Du Camp, quoted in Benjamin 1999, p. 563-4). Light was used experimentally to embellish elements of the city from major monuments to billiard tables (Benjamin 1999, p. 565). Inventors of competing lighting technologies demonstrated their products, intending to sway public opinions (Benjamin 1999, p. 567). Lighting networks spread unevenly across public and domestic spheres, with classed discrepancies between access to lighting and maintenance of the networks. Wealthy homes and suburbs were adorned with light. Those less affluent were not.

Lighting and the arcades were envisaged as a shelter for Parisians from the 'elemental' world. In such instances, day and night, light and dark are associated with other 'elemental forces' such as the weather, heat and cold, rain and sunshine, starry and cloudy night skies. The arcades offered refuge for the happenstance of city life: 'during sudden rain showers, the arcades are a place of refuge for the unprepared, to whom they offer a secure, if restricted, promenade – one from which the merchants also benefit' (Benjamin 1999, p. 31), or, 'in bad weather or after dark, when they are lit up bright as day, they offer promenades' (Benjamin 1999, p. 42). Novel for the times (the 1860s) a person could 'stroll through the entire city without ever being exposed to the elements... As soon as the Parisians had got a taste of the new galleries, they lost all desire to set foot in the streets of old – which, they often said, were fit only for dogs' (quoted in Benjamin 1999, p. 53).

The *Arcades Project* reflected modernist Parisian desires to *transcend* the 'elements'. In Chapter 4 I discussed Bourdais' Sun Tower and the ambition to light up the streets of Paris at night – reflecting beliefs that light could be produced in unlimited quantities. Throughout the *Arcades Project*, there are accounts of how this played out across a number of different technological advancements within city life. For example, in 1861 Julian Lemer proclaimed 'I

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<sup>1</sup> The *Arcades Project* was constructed as a literary form, bringing together information and provocations on a topic in a collage format. Benjamin was against traditional linear narratives of history, and this was reflected in the way the project became structured. Upon his death, the project consisted of piles of quotations and his own writings sorted into thematic 'convolutes': 'A' Arcades, 'B' Fashion, 'C' Ancient Paris..., 'M' The Flaneur, 'a' Social Movement, 'd' Literary History – to name but a few. The posthumous publication presents these convolutes in book form.

close the curtains on the sun. It is well and duly put to rest; let us speak no more of it. Henceforth, I shall know no other light than that of gas' (quoted in Benjamin 1999, p. 567).

Benjamin highlighted the interplay between light and other technologies in attempts to transcend the limits of day and night. For example, 'the way mirrors bring the open expanse, the streets, into the café – this, too, belongs to the interweaving of spaces ... Thus precisely with the approach of night, distant horizons bright as day open up throughout the city' (Benjamin 1999, p. 537). Such use of mirrors reveals a depth to technological intervention beyond merely lighting the darkness. In such excerpts from the *Arcades Project*, we can see the way in which Parisians sought to eclipse the restrictions of light and dark, heat and cold to rethink the experience of city life.

Benjamin's excerpts on lighting reveal the numerous ways that lighting began to be employed in the city throughout the 19th century. Moreover, Schivelbusch (1995, p. 74) has argued that the advancements and changes brought about by technological innovation (such as lighting) were paralleled by changes in the structure of capitalism:

The period of electrification also witnessed changes in the economic structure of capitalism. The transformation of free competition into corporate monopoly capitalism confirmed in economic terms what electrification had anticipated technically: the end of individual enterprise and an autonomous energy supply.

The concentration of energy production and lighting supply through centralised power plants corresponded to concentration of economic power in large financial institutions (cf. Mitchell 2008). Lighting not only changed the human experience of day and night but became one element in the material-technical production of the contemporary economy. Along with financial institutions, lighting was woven together with infrastructure and financial mechanisms to form the actual object of the industrial, modern city. Accounts such as these remind us that technologies cannot be taken for granted (cf. Glennie and Thrift 2009). Lighting technologies were not agents that in and of themselves changed the course of human history, or the experience of day and night, but rather intersected with political, social, economic and cultural transformations.

In this manner, David Nye (2010) explored the intersection of lighting technologies and political, social, economic and cultural change, by examining the response to 'blackouts' throughout the history of North America. Power failures are most often understood in terms of technical analysis – identifying and solving the problem by restoring power. For Nye,

blackouts instead offer a chance to reflect on how the technical aspects of lighting interact with political, social and cultural issues. Blackouts, for Nye (2010, p. 2), can be understood as,

a disruption of social experience, as a military tactic, as a crisis in the networked city, as the failure of an engineering system, as the outcome of inconsistent political and economic decisions, as a sudden encounter with sublimity, and as a memory, aestheticized in photographs.

Blackouts are disruptive moments that make visible the dependence of modern life on technologies of lighting and energy use, much as droughts make visible the particular technologies of water capture, storage and distribution upon which the expectation of constant supply rests (Allon and Sofoulis 2006; Strengers and Maller 2012). An often overlooked practice of everyday life is thus brought into stark and obvious view when the lights suddenly go out. In Schivelbusch's account, lighting diffused and became normalised in society. For Nye, blackouts bring into view how unreflective we are of the ways we physically illuminate our lives.

As lighting technologies have increasingly penetrated the night-sky, various scholars, non-government organisations and activists are becoming increasingly vocal about the effective 'loss of the night' (Bogard et al. 2008; Bogard 2013; Holker and Tockner 2010; International Dark-Sky Association 2012a). The International Dark-Sky Association (IDA) has campaigned since 1988 on the issue of light pollution and now boasts over 58 chapters in 16 different countries. According to IDA (2012a, p. 7) 22 percent of all electrical energy use in the United States is used for lighting. Of that energy use, 8 percent is used for public outdoor lighting such as roads and parking lots (residential lighting accounts for 27 percent, industrial 14 percent, and commercial lighting 51 percent). The inefficient or 'wasted' light used outdoors equates annually to \$2.2 Billion (U.S), or the equivalent power of 11 million households. Domestic practices including leaving lights on when not in a room, skyscrapers left illuminated over night when predominately empty, and commercial lighting competing for prominence, are other examples where light and energy are considered wasted. City authorities in Buenos Aires have recently switched 100,000 streetlights to LED (light emitting diodes) cutting their energy use by 50 percent (Richard 2013). But crucially, although such an undertaking reduced energy costs and carbon emissions, LED can still create light pollution.

Beyond wasted energy, light pollution has far ranging negative impacts. Light pollution can be divided into four categories: urban sky glow, which is the brightening of the sky over urban areas; light trespass, where light is focussed where it is not intended or needed; glare, where

excessive lighting actually *decreases* visibility; and clutter, where there is excessive and sometimes competing groups of lights in overly lit urban areas (IDA 2012, p. 4). Light pollution is similar to other environmental impacts by humans: it damages ecosystems; can have long-term effects on human health; and is intricately connected to excess consumption, particularly in urban contexts. Yet, light pollution is different in that it is quickly reversible. Of all the environmental impacts of society, light pollution is perhaps the most easy to remedy. As Nye's (2010) analysis of blackouts showed, our cities and lives can be rapidly plunged back into total darkness. Accordingly, light pollution could be drastically reduced, with enough political determination to switch off the lights (Box 7.1).

### **Box 7.1 Cities without light**

In these striking images, photographer Thierry Cohen (2014) has sought to depict what cities might look like in the absence of artificial light (Figures 7.1 and 7.2).



**Figure 7.1** Thierry Cohen, Shanghai in the absence of artificial illumination (Source: Cohen 2014)

Technically, Cohen photographs the night-sky in remote and isolated regions on the exact same latitude as the cities he portrays. He then captures those cities during the day, when no lights are in use, and produces a composite image. The camera is positioned at the same angle in both locations meaning the sky above the city is the exact orientation that would appear hours later as the earth rotates.

Artistically, these photographs depict an urban landscape drastically different to our contemporary experience. In the words of photographic critic, Francis Hodgson (2011, np.), Cohen's work is 'not a fantasy sky as it might be dreamt, but a real one as it should be seen'.



**Figure 7.2** Thierry Cohen, the bright sky over darkened Sao Paulo (Source: Cohen 2014)

It is important to acknowledge that the IDA do *not* advocate the total dismantling of all lighting technologies. They recognise that there are many benefits of lighting for security, safety and recreation. Restrictions on the permissible use of lighting technologies can often also have unintended consequences. The actor Ben Kingsley recently voiced concern that shifting from tungsten lighting to the more 'eco-friendly' LED system will dramatically change the appearance and aesthetic of sets for renowned musicals, such as *Les Misérables*, in London's West End theatre district (Carlin 2013).

Light pollution is not the inevitable price to pay for the 'progress' of modern city, but rather, a problem of inefficient and poor use of technology (IDA 2012a, p. vii). IDA attempt to combat the loss of the night by working with concerned communities to reduce light pollution in their homes, communities, and cities. As they suggest, proper or efficient use of lighting can save on cost of energy, improve safety, benefit human health, and restore the ecological conditions for nonhuman species (IDA 2012a). The protection of the night-sky has also been coordinated through the creation of Dark-Sky Reserves. Such reserves designate vast areas of 'exceptional or distinguished' starry night-sky. Chapter 10 explores the experience and politics that

surrounds one of these dark-sky reserves, the Aoraki Mackenzie Reserve in Tekapo, New Zealand.

Poets, scientists and humanities researchers have collaborated in response to over-illumination (Bogard 2008; Branch 2008; Moore 2008). The night-sky can be viewed as a threatened ecological niche in the modern city. Yet, more than just an environmental issue, such movements also position the night-sky as cultural heritage that future generations are at risk of being denied. Moore (2008) detailed how pre-teen children who have spent their short lives in cities often interpret starlight and the night-sky as a fantasy – something entirely foreign to their everyday lives. Excessive lighting eradicates the night-sky, separates humans from an experience of darkness which we rely upon, and which without remedy can have drastic effects on human health.

Excessive illumination is exemplary of our increasing alienation from the cosmological cycle of light and darkness. In Chapter 6 I argued that we need interactions with the material conditions of light and darkness. Crepuscular lives and technology intersect in this instance. While light dominates the city, so too, in recent years have there been multiple concerns with exposure to the sun and darkness. Sociologists and medical researchers have, for decades, been concerned with the incidence of cancer amongst shift-workers at night (Conlon et al. 2007; Davis et al. 2001). Such studies have shown that night shift-work – and excessive exposure to artificial light – decreases the production of melatonin and has been associated with breast and prostate cancer. Not having the right balance of darkness can be fatal. In contrast, over exposure to the sun has seen skin cancer reach ‘epidemic proportions’ (Diepgen and Mahler 2002). Places like Tropical North Queensland, Australia, have some of the highest incidents of all-types of skin cancer in the world (Buettner and Raasch 1998). Furthermore, sedentary lifestyles and lack of exposure to sunlight has led to a rise in vitamin D deficiencies, which can lead to deformation of the skeleton (known as rickets), cardiovascular diseases and muscle weakness (Holick 2007; Holick et al. 2011). These health problems also have significant overlap. For example, skin-cream with sun protection can protect against skin cancer and yet exacerbate vitamin D deficiency. This has prompted some researchers to advocate the notion of ‘judicious sun exposure’ as the human relationship to light and darkness becomes increasingly dysfunctional (Lucas 2012). The examples listed above all indicate dysfunctional – indeed alienated – relationships to day and night.

## 7.2 Remedying the damage: towards disalienating technology

How then, can we rectify our alienation from day and night through socio-technical intervention? Crepuscular technology would be technology that seeks to disalienate the human relationship with the cycle of day and night, light and dark. Such a desire is not necessarily without precedent. Chtcheglov (1953), the French activist and poet, envisaged in his *Formulary for a new Urbanism* that new civilizations were to be expressed through new architecture. In this vision, he had a flair for the crepuscular<sup>2</sup>:

Darkness and obscurity are banished by artificial lighting, and the seasons by air conditioning. Night and summer are losing their charm and dawn is disappearing. The urban population think they have escaped from cosmic reality, but there is no corresponding expansion of their dream life. The reason is clear: dreams spring from reality and are realised in it. (Chtcheglov 1953, p. 3)

In a context of alienation, Chtcheglov (1953, p. 3) envisaged:

The latest technological developments would make possible the individual's unbroken contact with cosmic reality while eliminating its disagreeable aspects. Stars and rain can be seen through glass ceilings. The mobile house turns with the sun. Its sliding walls enable vegetation to invade life. Mounted on tracks, it can go down to the sea in the morning and return to the forest in the evening.

Similarly, Constant Nieuwenhuys (most widely known as Constant), a 20<sup>th</sup> century Dutch artist, architect and activist had a project entitled New Babylon (Nieuwenhuys 1959). Playing on the biblical reference to a city of disorder and vice<sup>3</sup>, Constant envisaged New Babylon to be a city instead centred on ideas of creativity, the collective ownership of land and movement. Constant experimented with modelling and painting mediums to display his project (Nieuwenhuys 1974). In New Babylon the city was to be layered. The administrative and functional aspects of the traditional city, such as dwelling, transport, utilities were to remain as they were. But the true city was then to be built upon stilts and platforms spanning above the traditional city. This platform would provide a blank canvas for the true city to then develop on

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<sup>2</sup> Chtcheglov was (allegedly) caught heading towards the Eiffel tower with a stock of builder's dynamite intent on bringing the tower to the ground. Apparently, the lights from the Eiffel tower shone into Chtcheglov's bedroom at night disturbing his sleep (Hanson and Rainey 2013, p. 5). One can only imagine what Chtcheglov would have thought about the Sun Tower.

<sup>3</sup> 'Provocative...' Lefebvre described (in Ross and Lefebvre 1997 [1983], p.70), '...since in the Protestant tradition Babylon is a figure of evil. New Babylon was to be the figure of good which took the name of the cursed city and transformed itself into the city of the future'.

top, which emphasised social interaction, free movement and play. In New Babylon technology was harnessed to automate work, so that human beings were free of labour to pursue a richer, more fulfilled and disalienated urban everyday life. Such a vision would free humans from the 'generalised misery' of daily commutes and regimented hours explored in Chapter 6. Constant knew this to be provocative, but assured it was feasible:

If the project we have roughly outlined here risks being taken for a fantastic dream, we insist on the fact that it is feasible from the technological standpoint, desirable from the human standpoint, and indispensable from the social standpoint. The increasing dissatisfaction of the whole of humanity will reach a point where we will all be compelled to execute projects for which we possess the means, projects that will contribute to the realization of a richer and more fulfilled life. (Nieuwenhuys 1959, p. 73)

Chtcheglov and Constant put forth their own virtual possibilities: that the technology exists that can be better directed for more fulfilled everyday lives. Glass ceilings and rotating houses can reconnect humans with the cosmological cycle of day and night. So too, at the city scale, rethinking urban space and technology can help to produce crepuscular spaces for crepuscular lives.

Through the lens of transduction examples of crepuscular technology become abundant. Take as example the Norwegian town of Rjukan. Rjukan is surrounded by mountains, which leaves the entire town in shadow from September-March. The town has recently installed 'solar mirrors' on the surrounding mountains to reflect sunlight down into the town during the winter months. The idea was seeded around a century ago, by the founder of Rjukan's hydro-electricity plant. As the technology didn't yet exist, they instead installed a cable car to transport people from the town to the sunlight (Wilde 2013). Local resident Martin Andersen said: 'It's a very logical thought in a way, you walk around down there in the dark, you see the sun up here... why not just mirror it down?' With advancements in technology the 'solar mirrors' are now in use, bringing diverted natural light to the town's public spaces. In Rjukan, crepuscular technology is being used to bring light into dark days, to fulfil life with the presence of the sun. On a larger scale, in the 1990s, Russian scientists experimented with 'space mirrors' aimed at lighting up entire Arctic cities during winter months with giant discs orbiting the earth (Leary 1993). The risk is, of course, further alienating humans from the earthly forces of light and dark across seasons. Crepuscular technology needs to fulfil crepuscular, not daycentric lives.



In another example, in Cambridge, England, the city council has installed a technology that may eventually replace streetlighting (Hall 2013). Known as a 'starp'ath', glow-in-the-dark particles are sprayed onto existing paths and then covered by a protective film. Just like any glow-in-the-dark material, the surface absorbs light of the sun during the day and then emits that light at night. Starpath is cheaper than replacing existing paths and more cost effective than current lighting systems. Similar to the public demonstrations of lighting which aimed to convince Parisians in the 19<sup>th</sup> century, convincing the public of starpath's utility will prove challenging as it is a drastic reconceptualisation of urban lighting practices.

In New York, reacting to the inevitable shadows that skyscrapers cast, designers Studio Gang have invented the 'Solar Carve Tower', which aims to provide light for the building's occupants but also to be spread around for neighbours in the local area. The design is influenced by the angle of the sun's rays, designed not to impede the sun's light but to help redirect it down into local parks (see Perkins 2013). The Solar Carve Tower may appease a long held dispute in New York. Over two and a half decades ago, in New York's Central Park, Jacqueline Kennedy Onassis (quoted in St John 2013, np) argued: 'One would hope that the city would act as a protector of sun and light and clean air and space and parkland. Those elements are essential to combat the stress of urban life'. Onassis spoke in opposition to a new development within the Columbus Circle where towers of 58 and 68 stories would block sunlight from Central Park (St John 2013). Onassis made an equality claim for light as part of everyday life. Opposition to the towers was eventually successful, with heights scaled back (Lueck 1987). And yet, innovations such as the Solar Carve Tower, while examples of disalienating technology, are design led, rather an obligation within a more just or fairer city. In New York, many developments still do not require public display of shadow assessments, which often give startling clarity to the length and volume of shadows that will be cast over public spaces (St John 2013).

The protection of light is an issue also in Britain, where so called 'right to light' laws are under review (Law Commission 2013). The 'right to light' allows landowners to prevent developments that impede or negatively impact the quality of natural light reaching their property. The right is being reviewed, because it is said to be frequently misused, and has become a hindrance to the 'appropriate' development of land. In the context of becoming crepuscular here we can see a clear obscuring of the virtual by the actual. The 'virtual' human right to light is negated by the 'actual' demands of growth and property development.

Lefebvre (1991, p. 98) was himself critical of skyscrapers and vertical growth in cities, when he argued:

The arrogant verticality of skyscrapers, and especially of public and state buildings, introduces a phallic or more precisely a phallogentric element into the visual realm; the purpose of this display, of this need to impress, is to convey an impression of authority to each spectator. Verticality and great height have ever been the spatial expression of potentially violent power.

In the examples of the Solar Carve Tower and the UK's 'right to light' review, there are competing examples of verticality. One could be argued to be crepuscular, the other not. In becoming crepuscular cities might therefore be much flatter than the traditional cities we see in the world today.

### 7.3 A future with crepuscular technology

Lighting, more than any other technology, has blurred the distinction between night and day. Over a long historical trajectory, the use of lighting has become an engrained part of our day-to-day living, not often attracting significant critical attention. As Nye (2010) argued, it takes events such as blackouts for us to realise how dependent we are on homogenous and invisible technologies of constant supply. As cities are now over-illuminated, organisations such as IDA are advocating to implement more efficient, suitable lighting technologies to help combat light pollution. Such a position is complemented by geographers, such as Tim Edensor (2012; 2013a; 2013b), who argue for a renewed cultural appreciation of darkness and light. Edensor (2013b, p. 463) has argued that encounters with darkness serve to challenge the overwhelming dominance of sight over the other senses: 'Dark space... offers possibilities for developing more intimate, convivial and focussed forms of communication'. Similarly, strategic and creative use of artificial lighting can enchant and enhance sensory experiences of place (Edensor 2012; Edensor and Millington 2013). Following Edensor's lead, transitioning to changed use of light, greater appreciation of darkness, or the roll out of crepuscular technology ought not be thought of as a regression into a pre-modern past, but 'becoming differently modern' (Head and Gibson 2012) through a rearticulation of a future possible relation to the earthly forces of day and night.

In their research on 'off-gridders' – those who have made a conscious choice to be unplugged from existing, centralised energy infrastructures – Vannini and Taggart (2013a) outlined one such instance of becoming differently modern. They described the ways in which people reliant on renewable energy sources adapt to seasonal and weather related variation in sunlight. Examples include: low-wattage lighting; portable torches/flashlights; candles; open-

fires and unplugged labour-saving technology such as manual blenders and electricity generating stationary bicycles. Such an off-grid lifestyle disalienates:

Their life is in many ways similar to ours, but in many ways it is different as well: being more deeply shaped by ephemeral qualities of place, more open to the continuous coming into being of light and darkness and the multiple brilliant textures of the sky, less enclosed by surfaces aiming to separate their homes from the sky, and more 'involved' and 'engaged' with the 'telluric, celestial, and organic' agitations of matter. (Vannini and Taggart 2013a, p. 15)

Vannini and Taggart (2013b) contest the notion that technological advancements, homogenous supply and ubiquitous energy networks inherently enhance a sense of comfort in daily life. They described the ways in which their participants had a capacity to create a different sense of satisfactory comfort through unlearning existing norms, and putting different technologies and ideas towards learning new, locally-specific ways of living (cf. Strengers and Maller 2012). According to Vannini and Taggart (2013a, p. 15), there are lessons to be learned from the off-gridders:

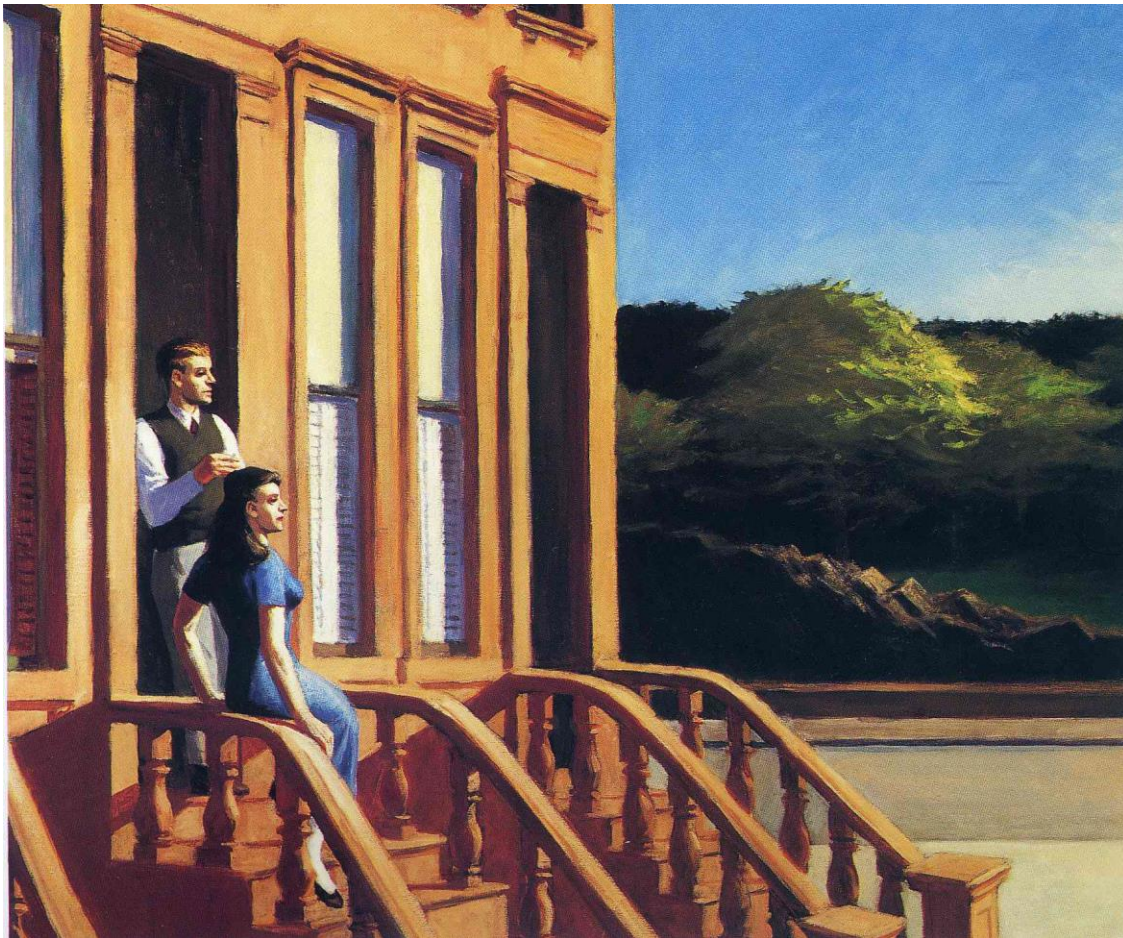
Perhaps these slower, supposedly more efficient, power-synchronous homes are but utopian spaces. Maybe they're impractical experiments, microscopic life enclaves not worthy of a second look. Or maybe they're the dawn of a new enlightenment: one not so keen on obliterating the night in search for eternal – and utterly unsustainable – artificial light.

In terms of transduction, Vannini and Taggart's off-gridders are a very clear example of where the virtual exists. Vannini and Taggart document where people are pursuing a disalienated relationship to day and night, where people are living crepuscular lives, with crepuscular technology. They are becoming crepuscular.

In becoming crepuscular, lighting networks would need to be developed with constant critical reflection: do we need this light? What do we want this light to do? Does this lighting disproportionately affect our experience of darkness? But crepuscular technology need not stop at illumination. More nuanced use of shade, retractable shade cloth, seasonal foliage, and appropriate fashion for the climate all help with judicious sun exposure. Judicious sun exposure could in turn become a central part of everyday life in becoming crepuscular (Box 7.2). Perhaps as we begin disalienating our relationship to day and night we would begin to sense too little or too much sun exposure. The extremes of sunburn, skin cancer or diagnosed

vitamin D deficiency alert us to a disalienated, dysfunctional relationship to the sun, light and darkness. Becoming crepuscular could involve measures to re-engage with such 'elemental worlds' in ways that reduce such problems. By extension, excessive tans or sunburn may become socially stigmatised, as bodies bearing the damage of an alienated relationship to day and night.

#### Box 7.2 Living with light



**Figure 7.3** Edward Hopper, *Sunlight on Brownstones* (1956 Wichita Art Museum)

As he attempted to come to grips with alienation in modern life, Edward Hopper often filled his paintings with sunlight and colour – an ironic antidote of vibrancy to feelings of dissatisfaction. During his career, when he tired of painting people, he once said 'maybe I'm not very *human*... what I wanted to do was to paint sunlight on the side of a house' (quoted in Levin 1998, p. 139, emphasis added). As this quote suggests, Hopper saw sunlight as an expression of life itself, beyond humans. Nevertheless, in his many paintings that do include subjects, he often depicted people in calm, still poses exposed through clear and vivid light.

For example, in *Sunlight on Brownstones* and *Summertime* the subjects are captured in a moment of contemplation, looking towards the horizon and bathed in a soft sunlight (Figures 7.3 and 7.4).



**Figure 7.4** Edward Hopper, *Summertime* (1943 Delaware Art Museum)

Judicious sun exposure is vividly detailed in Hopper's paintings. Becoming crepuscular, our relationships to light would need to be strategic in which we intentionally include or exclude sources of light from our lives. The stillness of *Summertime* and *Sunlight on Brownstones* also heightens a sense of judicious sun exposure being paired with a slower (or more segmented) pace of life – taking time to sit or stand, and orientate ourselves towards the sun, reflecting on the presence and absence of light (both cosmological forces and technological interventions) in our lives.

As Vannini and Taggart have shown, we need not conceptualise technologies of disalienation as necessarily regressive or archaic. The steps towards disalienation require rethinking the norms that surround particular actions or objects and putting those towards new uses. For example, sunglasses are now a ubiquitous fashion item with a practical intent to protect our eyes from the sun's rays. What if, in becoming crepuscular, we could employ night vision goggles in the same way? Not as a technology restricted to military use, or with negative

overtones of violence and stalking, but used to negotiate the darkest of nights, all the while reducing light pollution.

In this chapter I have explored lighting technology as a debate in which technology is seen to alienate and disalienate the human relationship to day and night. Becoming attentive to the way that urban infrastructure alienates and disalienates the human relationship to day and night is vital in pursuing the virtual object. This chapter also has shown that what we could define as crepuscular technology already exists. Particularly around lighting debates we can see the tension between the virtual and the actual. There are those that seek a darkened night-time sky and more efficient use of lighting. But lighting networks, and energy producers, remain dominant actors in the urban assemblage – an enduring hallmark of the actual. By developing a lens through transduction to help envisage the crepuscular we can see the debate over lighting technologies as one instance where the virtual can emerge from the actual.



## Chapter 8 – Crepuscular politics: ongoing nocturnal and diurnal antagonisms

This chapter focusses on the notion of crepuscular politics. More specifically, this chapter outlines the political antagonisms that may exist in a transition to move beyond the binary of day and night. I begin by reviewing the conclusions Murray Melbin made in *Night as Frontier* (1987), given that they highlighted ongoing political antagonisms related to day and night. I then explore where Lefebvre's right to the city can assist in building upon Melbin's conclusions. I outline two strands of antagonisms that relate to the politics of becoming crepuscular – namely gendered exclusion from the night and calls for greater political representation for nocturnal activities. Such examples show how renderings of day and night intersect with activism and equality claims in the city and everyday life.

This chapter is significant in terms of transduction, for it highlights where feedback from the actual disrupts our vision of the virtual. The examples cited in this chapter are where the contemporary and historical experience of day and night is argued to be oppressive and unjust. Such renderings are important to ground the utopian nature of becoming crepuscular. This disruptive feedback from the actual helps to establish rigour in the utopian virtual object of becoming crepuscular.

### 8.1 Melbin's frontier conclusions

In the *Night as Frontier* (1987) Melbin made two broad conclusions. First, he saw an eventual end to the frontier of night. This end would *not* mean a total occupation of every hour, everywhere. In his frontier metaphor, 'costs' would be too high for too little yield. Humans would not find it profitable or desirable to colonise every hour of the night in all parts of the globe. Nevertheless, Melbin envisaged that a large proportion of after-dark hours would be colonised, and, as with terrestrial expansion, there was no going back<sup>1</sup>. Melbin (1987, p. 136) forecast that we would have to live with the consequences of colonising the night, 'a condition of our ventures is that we must accommodate to the course we set in motion'. One such consequence, and Melbin's second key conclusion was that pushing the frontier of night would continue to create political antagonisms between interest groups. He argued that 'daytimers',

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<sup>1</sup> This conclusion of Melbin's is exactly the teleological rendering of the human relationship to day and night I sought to disrupt in Chapter 4.

or the vast diurnal population, would not tolerate too much intrusion from nocturnal activities of the 'nighttimers':

Daytimers are galled over losing their sleep. They are riled by the night-time din of voices and vehicles, by the hissings and clankings of mills. Their bedrooms are invaded by ground-shaking construction work and thundering airplanes, as well as by raucous passersby and the clamour from persons congregating at the always open shops. Topping their feeling of harassment from actual decibels is their indignation at losing the sleeping privileges they took for granted. Tradition and the norms of comfort are on their side. (Melbin 1987, p. 68)

We can call 'tradition' and the 'norms of comfort' daycentric, in that they are conservative renderings of night and day. Day is for activity, labour, and noise. Night is for silence and sleep. For Melbin (1987, pp. 68-9), the daytimers had the power to remedy nocturnal intrusions, because they could

introduce formal prohibitions against the endeavours of nighttimers. They persuade municipal licensing boards to restrict noisy projects at night. They make drilling and dynamiting for subway construction taboo. Zoning ordinances bar trucks from rumbling through residential areas after dark. At airports they try to ban night flights. New laws trim the late hours of saloons, fast-food outlets, and all-night groceries. Apartment leases stipulate that no loud sounds may be made after a certain hour. At work or at play nighttimers learn that a large, drowsy population wants them to keep their noise down.

Three decades on from Melbin's initial provocations, his questions endure: how do we learn to live with the consequences of after dark activity? What consensus can there be between diurnal and nocturnal interests? And how can this be achieved politically in the contemporary city?

In many ways we are not any closer to answers. Melbin's questions continue to be articulated in different contexts: The night-time economy debate is one vivid example (see Chapter 5). City councils, businesses and revellers in the night-time economy support increased activity at night, while others, such as emergency services and some 'daytimer' residents, do not. Another example is the issue of light pollution (see Chapters 7 and 10). In this example, light from activity at night is obliterating darkness. In this case it is not nighttimers arguing against the restrictions of the daytimers, but rather some nighttimers arguing for dark activity at night



– for example astronomy – to be protected and encouraged. Yet thus far, such debates have not been brought into dialogue. They are disparate arguments, between different stakeholders of the ‘diurnal’ and ‘nocturnal’ population. Evidently, the ways in which humans collectively populate the hours of day and night is a source of ongoing tension.

Melbin’s analysis of nocturnal and diurnal antagonism has its limits. In drawing the distinction between ‘daytimers’ and ‘nighttimers’, Melbin’s analysis relied too much upon generalisations. For example:

Nighttimers feel comradely towards strangers they meet after dark because they identify with them and are concerned for them... they share the risks of danger... they are equally vulnerable to lawlessness and feel a strong bond with one another. It is a solidarity born of sameness. (Melbin 1987, p. 80)

Such essential characterisations are rife when it comes to romanticised renderings of day and night (see also Alvarez 1995, p. 3; Dewdney 2004, p. 15). Relevant here, in terms of becoming crepuscular, is the acceptance of ongoing conflict and difference in regards to both individual rhythmic preferences and the ways in which consensus is found between differently suited parts of the population. Such a statement connects to a consideration of rights, and from a Lefebvrian perspective this again invites reflection on the concept of the right to the city.

## 8.2 Multiple rights in the right to the city

As explored in Chapter 6, Lefebvre’s *Right to the City* meant the equal right of all urban inhabitants, not just to the political, economic and material resources of the city, but the right to participate in the future city, to remake it as they see fit (Lefebvre 1996). Lefebvre argued for a more holistic notion of what a city is, what it should provide and facilitate, and how this should be agreed upon and enacted between citizens. This viewpoint contradicts the overriding emphasis of policy and planning in and for cities focussed on controlling growth and development. If everyday life was increasingly alienated in the modern world (Lefebvre 2008a), and as the urban form began to be increasingly fragmented through planning principles, rapid suburbanisation, and social marginalisation (Lefebvre 2003a), the right to the city was the means towards becoming disalienated beings and achieving urban society.

Such a utopian ideal for urban reform makes the right to the city a rather widely utilised concept – at times without reference to Lefebvre’s original texts or influences. Straying from a Lefebvrian framework itself is not an alarming call for concern (Purcell 2002), but as many have argued, the right to the city is used as a trump card too often without critically engaging with what the

concept may mean (Marcuse 2009; Mayer 2009; Purcell 2002; Woessner 2009). The right to the city has now dispersed as a political slogan for many different activist groups worldwide (Mayer 2009), arguably becoming somewhat diluted in the process. Purcell (2002) has argued that the right to the city is understandably exciting and palatable to activists working across diverse forms of marginality and distress in urban life. However, he also argues that it remains a disconcerting concept, as it is difficult to envisage how the right to the city would shape the futures of cities and if it could give birth to new forms of oppression and discrimination. Current readings of the concept are applied too exclusively to formal state policies and structure.

Attaining the right to the city would rely on far greater political participation than currently present, and it would be highly contested. Urban centres would become greater hives of political significance, raising contestation of divisions along nationality and absolute adherence to the nation state (Purcell 2002, p. 104). City inhabitants would therefore become the central political presence in opposition to the dominance of the nation state – replete with numerous issues of scale that define being situated ‘inside’ or ‘outside’ of political membership. David Harvey (2008), for example, highlighted urban conflicts – such as in Belfast, Sarejevo and Beirut – as being caused by rival groups exerting their supposed (yet conflicting) right to the city.

Marcuse (2009) has suggested that effectively embracing the right to the city in critical urban theory requires asking ‘whose’ right, ‘what’ right, and ‘what’ city. Purcell (2002) has similarly argued that over-emphasising the right to the city as a duel between the working class and capitalist accumulation means fighting for a right only to the capitalist city. Whilst capitalist class relations are undoubtedly a massive issue, it risks not challenging examples of the racist city, heteronormative city, patriarchal city, or, as is the case in this thesis, the daycentric city.

The implication of such critiques of the right to the city is that there are multiple rights that are argued for in urban life, and each have specific considerations. The method of transduction helps to clarify this notion of multiple rights. The right to the city, in the strictly Lefebvrian sense, seeks the emergence of a virtual object. But that virtual object can exceed our grasp and remain on a horizon ahead of us. In its stead, we are faced with myriad politics of the actual that may appear far more pressing – as they are rooted in the existing structures of everyday life. In the next section I focus on two such strands of research and activism related to day and night that both draw on the terminology of the right to the city.

### 8.3 Ongoing antagonisms

Becoming crepuscular invites reflection regarding ongoing antagonisms between nocturnal and diurnal interests. The issue is, however, more complicated than a simple division between Melbin's nighttimers and daytimers. For example, supporters of the night-time economy and the astronomy community are both 'nighttimers' but with radically different visions of how the night should be occupied. In this chapter, the aim is not to envisage resolving antagonisms between day and night, but to recognise its continued presence in conceptual understandings of night and day in urban and everyday life. There are historic exclusions from the night that would need to be remedied in becoming crepuscular. For example, if we were to utilise the term 'nighttimers' it must be acknowledged that the night-time is not equally accessible to all in the first place. In other examples there are also calls for greater representation of nocturnal cultures and populations as legitimate citizens and endeavours in the city.

#### 8.3.1 Gendered exclusion and the night

The night-time, particularly in urban modern cities, has been, and continues to be, occupied and shaped disproportionately by men. In Baldwin's (2012, p. 6) words:

Even as people ventured out after dark in growing numbers and increasing diversity through the nineteenth and early twentieth centuries, the streets were still dominated by young men. Women, when present, remained far more likely than in daylight to be treated as sexual targets. The rule of law remained shaky, gleefully mocked by otherwise ordinary citizens. [The] Urban night should not be romanticized as offering a haven from oppression.

This male domination represents what Valentine (1989) argued was the unequal gendered access to the city. Valentine framed how the patriarchal city influenced the mobility, independence and freedom of women in cities – predominately restricting access to public space. This effect was especially evident at night, which served to reinforce women to the confinement of the home, in turn maintaining patriarchal control of the city (Valentine 1989, p. 389). This was not to say that fear in the city, especially at night, was strictly a feminine concern. Fear of crime in public space plays out across intersections of social identities of age, race and gender (Pain 2001). Rather, the feminist critique recognised an historical exclusion from spaces of the night that continues to resonate in contemporary society.

A number of political movements have attempted to unsettle patriarchal control of nocturnal space. Reclaim the Night<sup>2</sup> marches have been held as rallies and marches as a direct protest against rape and the threat of male violence (Reclaim the Night Australia 2013; Take Back the Night Foundation 2013). Early marches were held in the United States in cities such as San Francisco and Philadelphia and European cities such as Rome and Leeds in the 1970s (Take Back the Night Foundation 2013)<sup>3</sup>. As such protests stressed, women's mobility in cities was safe only in large numbers such as at the marches. In a speech given in the context of such protests, Andrea Dworkin (1979, np.) has said:

A Take Back the Night March goes right to our emotional core. We women are especially supposed to be afraid of the night. The night promises harm to women. For a woman to walk on the street at night is not only to risk abuse, but also – according to the values of male domination – to ask for it.

The rape and murder of Jill Meagher in Melbourne on the 22<sup>nd</sup> of September 2012 was a highly publicised incident that resonated strongly with Dworkin's commentary (Legge 2013).

Meagher was stalked and murdered by a man who had previously been jailed for, and was currently on parole for, convictions of rape. This tragic crime gave renewed impetus to the Reclaim the Night marches in Australia. Over 5,000 people<sup>4</sup> marched following the murder of Meagher in what was the highest attendance at a Reclaim the Night march since 1978 (Boyce 2012, p. 14). The march was also widely publicised online, particularly through facebook, with 10,000 people listed as 'guests' (McLean and Maalsen 2013, p. 253). In recalling the march, Australian planner Carmel Boyce (2012, p. 14) argued that the lighting and design of Sydney Road (the location of the murder), contributed to the street not feeling safe at night. For example, inefficient lighting bathed the street in a dull yellow, and light was directed for cars but not for pedestrians<sup>5</sup>. The public support following this incident has led geographers

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<sup>2</sup> Also known as 'Take Back the Night'.

<sup>3</sup> In a similar vein, 'SlutWalks' have also been held across cities worldwide since 2011 (Ringrose and Renold 2012). SlutWalks came as a response to a statement made by Canadian Police Officer Michael Sanguinetti who said, 'women should avoid dressing like sluts in order not to be victimised' (quoted in Ringrose and Renold 2012 p. 333). In such marches women have sought to reappropriate the term slut, as a means to articulate their right to dress, behave and move however they wish, free from the fear of male and sexual violence or moral judgement.

<sup>4</sup> Some estimates were as large as 30,000 (Akerman 2012)

<sup>5</sup> Boyce's critique is an example of the overlap between crepuscular spaces, lives, and infrastructure. For example, the glow-in-the-dark star path discussed in Chapter 7 may decrease light pollution, but would it enhance women's safety or feelings of security?

McLean and Maalsen (2013, p. 244) to argue that such incidents and accompanying widespread social media campaigns have renewed urban feminist politics in Australia.

Hubbard and Colosi (2013) cite the Reclaim the Night marches as a historical precedent of the ongoing paradoxes related to gender and the urban night. Hubbard and Colosi (2013, p. 15) argued:

Policies designed to protect women can often inadvertently position them as inferior to men... perpetuating ideas that men can handle the dangers of the city at night, but women need the protection of the state and the law... the claim that women need equality with men is subsumed beneath a discourse that proclaims women's vulnerability and inability to negotiate the (sexual) city on their own terms.

The issue of gendered exclusion from the night and the incidents (and threats) of violence meld with the issues raised by the right to the city (Shaw et al. 2013, p. 6):

The concepts of gender equality, women's safety and the 'right to the city' are all inextricably linked. Women's lack of safety is a serious obstacle to achieving gender equality. It curtails their mobility and ability to participate fully and freely as citizens in their communities. Women's 'right to the city' includes the right to live free from violence and fear, in more equitable, democratic and inclusive cities.

As these Reclaim the Night commentaries suggest, gendered exclusion and violence towards women is a stark reality of the actual, of the patriarchal city, and in the case of Meagher's, a justice system that could not protect women from rapists. In this debate, the night is rendered as part of this problematic, in that there are specific qualities of the night – most specifically darkness – that harbour those who seek to bring harm to women.

Is the answer more effective lighting technology? As Boyce (2012) argued in the case of Melbourne, poor streetlighting and urban design contributed to the case of Jill Meagher's rape. Conversely, urban studies activist Jane Jacobs (2011, p. 54) argued in the 1960s that having more 'eyes' on the streets of cities, via a larger number of people in urban space spread across the 24-hour cycle, would contribute to improved safety:

Horrific public crimes can, and do, occur in well-lighted subway stations when no effective eyes are present... Streetlights can be like that famous stone that falls in the desert where there are no ears to hear. Does it make a noise? Without effective eyes to see, does a light cast light? Not for practical purposes.

Becoming crepuscular, specifically living crepuscular lives and producing crepuscular spaces, would potentially help to make urban life safer in the manner that Jacobs envisaged.

Reshaping our relationship to day and night could enable a more even spread of activity and inactivity across the 24-hour cycle so that day is not packed beyond capacity (as discussed in Chapter 6) and public spaces in the night not so empty that crimes such as that which befell Meagher are made possible.

This does not mean obviating the need to reveal and challenge patriarchal power relations. Becoming crepuscular would need to remedy historical and contemporary exclusion. Politics beyond the binary of day and night would need to confront gendered exclusion in the night as a foundation (in the actual) from which the virtual would seek to emerge. As gendered exclusion disrupts our vision of the virtual, it also reminds us that remedying patriarchal control of the city resonates with other virtual objects: of greater public participation in our cities, of less violence and a more inclusive social agenda (Box 8.1).

**Box 8.1 Women's safety in becoming crepuscular**



**Figure 8.1** Edward Hopper, *Automat* (1927 Des Moines Art Centre)

Edward Hopper's *Automat* depicts a lone woman drinking a cup of coffee under bright lights with comparative darkness outside (Figure 8.1). Automats were an example of the 'quick-lunch' phenomenon described in Chapter 6. Automat diners could, in the early 1900s, slide a nickel into a slot and choose from compartmentalised ready-to-eat heated meals (Federman and Shapiro 2013, p. 10). Once the interest in novel, mechanised meals had waned, Automats also included cafeterias serving inexpensive, quality food and coffee at all hours of the day and night.

As the woman in *Automat* drinks her coffee, her legs are showing, which, during the 1920s, would have been a relatively new social phenomenon. However, it would be wrong to suggest that this painting is a feminist statement. Hopper objectified the women in making her legs the brightest part of the painting (Hobbs 1987, p. 72).

Why I am drawn to *Automat* in the context of crepuscular politics is Hopper's use of darkness on the window's exteriors. As the woman sits with her coffee, the time of night is not revealed. It could be just after sunset, the middle of the night, or just before dawn. *Automat* is a motif for becoming crepuscular in which women's rights to mobility and safety across all hours of the night are no longer a political cause, but normalised within everyday life.

### 8.3.2 Seeking recognition for the nocturnal city

Another source of political antagonism relates to the place for nocturnal subcultures in the city. Laam Hae (2011a; 2011b; 2012) for example critically examined night-life's place in New York City. This work is empirically focussed on dance subcultures, and has a broader concern with political representation and gentrification in post-industrialising cities. Night-life has been used as a 'fix' to promote gentrification, but gentrification has, in turn, changed the nature of New York's night-life. In Hae's (2012, p. 2) words:

As the city has experienced gentrification throughout the last three decades, "noisy" and "boisterous" nightlife businesses in gentrifying neighbourhoods, including bars and lounges as well as dance clubs, have been censured as the number one enemy of "quality of life" in these neighbourhoods due to their nuisance effects. Ironically, this process has gone on even as the real estate sector trumpeted and marketed the profile of nightlife in these communities as a sign of neighbourhood vibrancy in order to boost property values. That is, nightlife establishments and their cultural elements have been one of the important catalysts for the gentrification of the very neighbourhoods in which the presence of these businesses, later, have been intensely contested by groups of gentry that have moved here.

This contradiction has led to a greater politicisation of night-life activities and 'pro-night-life' activism (Hae 2011b). Hae focussed on two such organisations: The New York Nightlife Association (NYNA), which campaigns for night-life as an industry in need of protection from the city's 'anti-nightlife regime', and Legalize Dancing in New York City (LDNYC) which has a specific focus on New York's cabaret law – which regulates zoning and licensing for social dancing. LDNYC campaign more for the protection of civil liberties and dancing as a subculture rather than industry. Such night-life activism, Hae argued, is unprecedented. However, power dynamics between industry and subcultures have produced a new class of night-life entrepreneurs who benefit from the gentrification of night-life. As Hae (2011b, p. 580) has argued:



Nightlife activism should not only campaign for nightlife as a site other than an industry, as a site of expressive activities to be protected from the undue state sanctions that stifle its creative energy, but also fight against gentrification that prices out under-financed nightlife businesses.

Hae's exploration of rights to the city, with its nocturnal emphasis, has a very tight empirical and spatial focus – the area of Manhattan below Central Park from the late 1960s to the late 2000s (Hae 2012, p. 10) – but serves as a lesson for the right to the city and urban cultural/social life.

My own work on music scenes has also asked for greater political awareness and appreciation of nocturnal cultural pursuits (Gallan 2012; 2013; Gallan and Gibson 2013). Wollongong's nocturnal subcultures contrasts Hae's New York examples. The NYNA and LDNYC are two examples of highly organised night-life activism. In Wollongong, nocturnal cultural pursuits rarely have 'champions' to argue on their behalf. Punk-scene members were active participants at the Oxford for a relatively short time, when compared with the arc of one's life. The implication for the provision of cultural infrastructure is that nocturnal scenes and subcultures are poorly represented in cultural policy circles, whereas other, day-time oriented pursuits often have life-long members. Some nocturnal cultural endeavours are thus hampered politically as they become framed as an ephemeral expression of youth (cf. Rogers and Coaffee 2005).

In another example, Prior et al. (2012) have called for the realisation of the 'nocturnal right to the city'. In Prior et al.'s analysis they characterise Sydney's sex industry as a (predominately) nocturnal activity that abrades dominant moral geographies of the city, framed traditionally by notions of privacy, noise and heteronormative family values. The authors argue that the sex industry is kept in check through property rights that structure when, where and how the industry operates. They draw on a recurring rendering of the night: how are the liberating, sometimes subversive, activities at night corralled by the dominant city? And yet, Prior and colleagues are primarily concerned with property rights, citizenship and sexuality – including the possible emergence of sexual commons – rather than a focus specifically on the night<sup>6</sup>. But a call for a nocturnal right to the city – in 2012 – is a clear indication of the continued marginalisation of nocturnal activities that Melbin forecast two and a half decades earlier.

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<sup>6</sup> 'Sexual commons' refers to property that can be either publicly accessible, partly restricted or accessible upon payment of a fee, ranging from streetscapes where sex industry premises are clustered to gay saunas and swingers clubs (Prior et al. 2012).

Prior et al. do not refer to Lefebvre's concept of the right to the city. Theirs is an ongoing project seeking to retheorise the rights of sexual industries in cities (see also Hubbard et al. 2008; Prior et al. 2013). However, their analysis does highlight how a nocturnal right to the city could be theorised as a crepuscular right, if in closer dialogue with a Lefebvrian perspective on day and night.

## 8.4 A crepuscular right to the city

In daycentric society, at the whim of patriarchal violence and Melbin's daytimers, calls for greater rights to the city for women and for nocturnal cultures and populations are undoubtedly justified. Political processes surrounding noise, subcultures and sex, for example, are dominated by daycentrism that marginalises the nocturnal in the city.

Yet a crepuscular right to the city is not just the rights of particular interest groups, which might become broadly defined as nocturnal or diurnal. A crepuscular right to the city would transcend the binary of day and night in the pursuit of becoming crepuscular. That pursuit must be grounded in a political critique of the present. It is important to call for greater political representation for those othered by the day/night binary. Gendered exclusion, disproportionate violence perpetrated on women, lack of cultural diversity, and greater appreciation of nocturnal pursuits, are all sound critiques to be made of the urban night in the daycentric city. But in the context of this thesis it could be argued that such perspectives remain fixed within the scope of the actual. Becoming crepuscular needs to take this politics further, to think of a right to the city beyond distinctions of nocturnal/diurnal rights or nighttimers/daytimers distinction. We each exist in both the day and night. Indeed, in becoming crepuscular such identifications might become redundant.

The examples listed in this chapter serve to further show the engrained and overlapping nature of binaries as discussed in Chapter 2. In the example of gendered exclusion from the night there exists an intersection between issues of gender and day and night in which arguments have been made that the night remains effectively restricted for women, when compared to men. That this historical exclusion remains an issue disrupts a utopian vision of the virtual.

Such examples do not only show that the actual remains predominant over the virtual. They remind us of what is at stake, and what becoming crepuscular, as just one possible virtual object, eventually hopes to realise. They serve as a reminder of the dialectical nature of becoming crepuscular. Change needs to advance gradually – although the virtual object might

envisage moving beyond the binary of day and night, there are still political injustices in the present that compel action. In these instances, the binary of day and night is vital to revealing such injustices and articulating political antagonisms.



## Chapter 9: Crepuscular rhythms: crepuscular thought in practice

In *Rhythmanalysis*<sup>1</sup> (2004) Lefebvre explored the way everyday life was composed of multiple rhythms. This chapter explores how renderings of day and night manifest and can be interpreted through our bodily rhythms. I first review Lefebvre's theory of rhythmanalysis and then through it, explore my autoethnographic experiences of parenting. During the research and writing of this thesis my wife (Dan) and I have welcomed two sons (Walt and Knox) to our family. This life event has had a profound effect on my intellectual development, playing a role in the rethinking of my subjective nights and days throughout the course of the last four years. To document this experience I have kept an ongoing diary of the instances where fathering, family life and the rearing of newborns have weaved into my changing ideas of day and night across a significant life-course transition. In this chapter I present a selection of these instances in the form of rhythmanalysis excerpts. Rhythmanalysis is crucial for this thesis to consider because it highlights the subjective, embodied, conflicted rhythms of day and night that we carry in our minds and bodies.

This chapter argues that renderings of day and night become more obvious in our bodies through changing circumstances. The presence of the cycle of day and night is frequently disregarded in conscious everyday life, but it is viscerally felt at all times in our bodies. My experience of parenting provided a radical break with previous temporal routines, making explicit renderings of day and night that I had previously overlooked. Becoming attentive to crepuscular rhythms, through changing experiences of day and night, highlights when, where and how new days and nights can emerge in everyday life.

Beyond parenting, similar radical breaks with taken for granted circumstances of day and night may include a new relationship, moving across significant changes in latitude, new employment, or a new recreational activity. All of these involve bodily adjustment and negotiation. For Muslims migrating to northern parts of Canada, extreme latitudes posed problems observing Ramadan – a time when Muslims fast from food, drink and indulgences during daylight hours (Bitoni 2012). In a new latitudinal context, religious authorities subsequently ruled that Muslims in the far north may observe the time of southern cities for

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<sup>1</sup> Rhythmanalysis was the last work to be written by Lefebvre, published posthumously in 1992, and was considered the *de facto* fourth volume of the *Critique of Everyday Life* series (Elden 2004, p. viii).

their fast. Without such a ruling, Muslim's in northern regions of Canada would face fasting continuously for almost the entire month. In 2015, Ramadan will coincide with the summer solstice – the longest day of the year – which would exacerbate such circumstances. Resident of Inuvik, Ahmed Alkhalaf (quoted in Bitoni 2012, np.) has said: 'You're supposed to break your fast when it's dusk and we eat when the sun is out. So it's psychologically tough for the first couple of days'. Through changing latitudes a religious rendering of day and night is renegotiated, and meanings shift to accommodate the bodily rhythms of everyday life.

Thus far, Chapters 4 to 8 have each explored crepuscular themes: spaces, moments, lives, technologies and politics. This chapter draws these themes together and gathers more material under the method of transduction through which to foster and develop new vocabularies and imaginations of the *embodied* experiences of day and night.

## 9.1 Lefebvre's rhythm analysis and geographies of rhythm

Rhythm analysis is a method to make sense of the complexity of everyday life. In Lefebvre's (2004, p. 15) words 'everywhere there is interaction between a place, a time and an expenditure of energy there is rhythm'. Everyday life is composed of rhythms, we each embody rhythms, we share and learn rhythm socially, and rhythms are imposed on our lives by the state and capitalism.

There are three key concepts to consider in rhythm analysis: rhythms that are polyrhythmic, eurhythmic, or arrhythmic (Lefebvre 2004, p. 16). The body, and therefore everyday life, is inherently polyrhythmic. We are made up of a number of rhythms that complement and contradict each other: breathing lungs, beating heart, racing pulse, salivating mouth, the cadence of conversation, the pace of walking. Such rhythms can be isolated from one another in thought but constantly intersect as they are lived. So too are they inseparable from the material spaces beyond the body in which we live (Probyn 2005, Duffy et al. 2011). If, for the most part, we are unaware of such rhythms they can be considered eurhythmic. Eurhythmic rhythms are generally in agreement and complement each other. The eurhythmic body can be said to be a healthy body, in that everything is functioning as it should be. When an illness or agitation imposes itself on consciousness or the body this rhythm can be said to be arrhythmic. Arrhythmic rhythms are revealed by conflicting with a eurhythmic state. We are often unaware of the rhythm until it is problematic. Thus the arrhythmic rhythm can be said to be unhealthy, can cause a crisis, and in the worst case scenarios can be fatal – for example, heart attacks.

For Lefebvre, the rhythmanalyst could, when trained, observe a house, city, road or crowd *through* rhythm. Lefebvre hoped this would become a method to rival mainstream science, a recognised profession, placing the body at the centre of critical analysis. As Lefebvre (2004, p. 21) argued:

The rhythmanalyst calls on all his [sic] senses. He draws on his breathing, the circulation of his blood, the beatings of his heart and the delivery of his speech as landmarks. Without privileging any one of these sensations, raised by him in the perception of rhythms, to the detriment of any other. He thinks with his body, not in the abstract, but in lived temporality.

The body as the basis of learning and interpreting rhythms is crucial for the rhythmanalyst. In Lefebvre's (2004, p. 67) words: 'at no point have the analysis of rhythms and the rhythmanalytical project lost sight of the body'. Lefebvre stressed that rhythmanalysis was intended to be analysis *through* rhythm rather than analysis *of* rhythm. He stressed the benefit of subjective analysis as a 'more philosophical method, with its attendant risks: speculation in the place of analysis, the arbitrarily *subjective* in place of facts' (Lefebvre 2004, p. 5).

Rhythm has also increasingly engaged geographers interested in the embodied experience of place. Edensor (2010) used rhythmanalysis as the cornerstone theory in *Geographies of Rhythm*, to explore such themes as: how place can be theorised equally as becoming and consistent; how people are influenced by social and cultural factors to flow rhythmically through space – for example navigating transport networks; how we sense rhythms through our bodies, and how those senses organise our experience of place; how rhythm meshes with the mobilities paradigm, which stresses how place is never bounded but continuously reconstituted by people in movement and flow; and how paying attention to nonhuman rhythms such as animals, plants, and objects can encompass a more inclusive understanding of social space – multiple intersecting rhythms from multiple actors (cf. Appendix D). For Edensor (2010, p. 2), 'rhythmanalysis is a useful tool with which to explore the everyday temporal structures and processes that (re)produce connections between individuals and the social' (see also Edensor 2006). In acknowledging the diversity of rhythms Edensor (2010, p. 2) argued:

With this focus on multiple quotidian rhythms we may identify how power is instantiated in unreflexive, normative practices but also side-stepped, resisted and supplemented by other dimensions of everyday experience.

Rhythmanalysis is a method to demonstrate how temporalities are learned, incorporated or resisted in the material spaces of our lives.

Many aspects of this growing geographical engagement with rhythmanalysis are relevant to a discussion of day and night. Meadows (2010) focussed on the experience of insomniacs as they slide, sometimes distressingly, out of coordination with what in this thesis is called daycentrism. In Meadows' (2010, p. 89) words:

The practice of blaming the insomniac is a clear example of [a] sleep related 'ethic'. The definition of chronic insomnia places fault for the condition squarely upon the sufferer, as do various cultural conceptions of the insomniac that are always reducible to the notion of an immoral person unable to moderate his or her thoughts and practices.

Meadows argued that the majority of remedies for insomniacs are absurd when positioned against a body totally out of coordination with the 24-hour cycle. The insomniac is thus a body and person isolated and adrift of collective rhythms of society. Such a circumstance does not herald a disalienated relationship to day and night as envisaged in this thesis through becoming crepuscular. Rather, a state of insomnia is *arrhythmic*. As Meadows (2010, p. 93) argued: 'As most any insomniac could confirm, the quest for a restorative rhythm is the illusory image of eurhythmia that always eludes one's grasp'. Meadow's research shows how crepuscular themes (spaces, lives, politics, technologies) have to be developed in unison. Living a crepuscular life could become traumatic if not lived within a crepuscular space. In other words, becoming crepuscular must start with the individual but cannot succeed without parallel societal change.

Meanwhile, Jones (2010) analysed the effect of tides on towns and individuals who work or play in the sea. Much has been written on circadian rhythms in relation to the sun, but 'tidal' communities exhibit a somewhat different temporal routine. Places where tides have high fluctuations can be thought of as 'lunisolar' hybrid temporalities – where temporality is influenced by both the sun (as day and night) and the moon (as high and low tides). Tidal rhythms define affective relationships with place such as in ports and fishing villages. Lunisolar rhythms also become enrolled in particular technologies and infrastructures in our lives. For example, the tidal rhythms of the river Thames are crucial to the functioning of London's sewage system – a system that, for Jones (2010, p. 196) 'saved the city from the worst excesses of pollution'. Jones' hybrid temporalities are an example of environmental factors



such as seasonal and weather events that entrain our circadian rhythms affecting our everyday lives and sense of place (cf. de Vet 2014).

This chapter builds on such provocations to explore how multiple crepuscular rhythms compose, and, in turn, can be used as a tool to analyse the experience of everyday life. I do so through an emphasis on parenting newborns. Given the attention to diverse rhythms in *Rhythmanalysis*, it is notable that parenting and the experience of newborns had very little prominence in Lefebvre's writing on rhythm (for exception see Lefebvre 2004, pp. 43-44).

In neurobiological research, by comparison, the experiences of both newborn infants and parents are understood as capacities to sense rhythm (Malloch 2000; 2005). Both parents and newborn infants are sensitive to how rhythms are absorbed through the body. Pre-linguistic infants recognise 'at a very young age how to contribute to a bodily rhythmic exchange' (Duffy et al. 2011, p. 18) through patterns of speech, sound and bodily contact – something acutely absent, and thus of grave concern, in cases of parental post-natal depression (Travathan and Malloch 2002). In this chapter I reflect on my own parenting experiences with newborn children during the writing of this thesis, with such rhythmic matters in mind.

## 9.2 Presenting rhythms in text

The autoethnographic material featured in this chapter is modelled on Lefebvre's essay 'seen from a window'<sup>2</sup> (2004, pp. 27-37). In it, Lefebvre described what he saw from his window overlooking a street – Rue Rambuteau – near the Pompidou Centre in Paris. He described his sense of traffic rhythms, voices in different languages, trade, silence, noises, light, and darkness as they occurred across the 24-hour cycle. From another window, Lefebvre peered into a courtyard and gardens, attempting to sense beyond the material trees, grass, bricks and mortar, to the present rhythms such as life, growth, death, decay, the polyrhythmic, the eurhythmic, and the arrhythmic. Lefebvre made brief mention here of the rhythms of day and night, of how rhythms of the street change in volume and intensity late in the night. 'The fateful hour', he wrote, 'ten o'clock in the evening, noises forbidden: so the crowd becomes silent, calm but more melancholy; oh fatal ten o'clock at night!' (Lefebvre 2004, p. 36; see also pp. 46-50).

Lefebvre speculated that the rhythms he sensed from his window revealed much about the city – its codes of conduct, distinct demographics, the control of the state, and unexpected

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<sup>2</sup> *Seen from a window* is the most well-known excerpt of *Rhythmanalysis* as it was translated into English individually, before the remainder of the text (see Lefebvre 1996, pp. 219-227).

quotidian events. Of particular interest was interpreting how rhythms impose and recede influence on our bodies. Reading this chapter as an excerpt without the context of the entire text one could be tempted to call it self-indulgent—a French philosopher peering out his window in Paris and observing complexity in the world. Such self-indulgence indeed attracted subsequent criticism, even from scholars sympathetic to a Lefebvrian sensibility (Merrifield 2006, p. 75). But in the wider *Critique of Everyday Life*, Lefebvre was interested in the way rhythm might reveal how time and space was produced both through the body, the state, and capital. Considering this, the excerpts I present below from my own autoethnographic experience are not supposed to stand alone as exceptional in their own right. Rather, the excerpts below are key situations through which I have learnt, through ‘participant sensing’ (Wood et al. 2007), the bodily rhythms of new days and nights, where day and night are revealed in their complexity and contradiction, and where the intellectual development of the crepuscular themes (that distinguish Chapters 4-8) have become enmeshed with the practice of everyday life. In this regard, I follow Longhurst et al.’s (2008, p. 215) call for researchers to use their bodies as ‘instruments of research’, by documenting embodied experience. Rhythm has been the device of analysis for this chapter’s autobiographical material rather than the empirical focus.

Crepuscular rhythms link my everyday experience of parenting to the conceptual framework of this thesis, and explore the dialectic between thinking and living day and night. Rhythms are both lived and thought. So too, day and night is both lived and thought. My hope is to convey some feeling for this through the following rhythm analysis of parenting. Excerpts from my research diary are thus presented in boxes below.

### 9.3 Rhythm analysis of parenting

#### **Box 9.1 Power-tools ordinance**

The apartments above, beneath, beside us are being renovated. The architecture is receiving a facelift. Notices to vacate are issued, the owners seeking to increase the rent, to keep their property increasing in value.

We’re both seasoned renters, knowing we don’t have many rights we can enforce. A rather toothless tenancy tribunal can mediate months from now, and at a cost. But our disdain for the real estate agents is heightened during our pregnancy, our fears of not finding somewhere suitable to live elsewhere in Sydney somehow elevated.

Finding a new place is easier said than done, as weeks begin to feel like years.

The renovations continue, jarring sounds and vibrations as bathroom tiles are stripped from walls, voices of the renovators now travel between units, floors, the front and rear of the building, unwanted sound penetrating into our lives.

Dan has just finished a 12-hour nursing shift at the hospital, 1930-0730, one-on-one with a patient recovering from heart surgery. Swollen feet from the pregnancy, aching back from the extra weight. Her undivided attention centred on the patient's vitals.

She walks home in the early morning light and lays her head on the pillow. Baby awakens and moves after being lulled to sleep by Dan's movement throughout the night. Mother and unborn child rest in shifts. Polyrhythmic. Aware of, or responding to, each other's movements.

Half an hour into sleep renovating power-tools start up. Dan rings me at work, totally overwhelmed, exhausted from a string of night shifts, and in desperate need of sleep. I ring the real estate and explain the situation. The reply:

'I'm sorry Mr Gallan, but the work is within the period of the ordinance'

Arrhythmia. The rigidity of day and night absurd to the hours of a shift-working nurse and acceptable decibels. Dan's sleep is discordant with the legitimated sacred hours of power-tools.

This rhythmanalysis in Box 9.1 is characteristic of the impact of daycentrism on shift-workers. Although one can sympathise with Dan's predicament – a tired, hard-working, pregnant nurse – her individual circumstances mean nothing in a daycentrically regulated city space. Power-tools are ordained between 7am and 8pm (City of Sydney 2014). This example brings together a number of the crepuscular themes explored in previous chapters. As discussed in Chapter 2, examples such as power-tools are one of a possibly infinite number of contexts where day/night binaries are grafted onto notions of socially acceptable day and night activities. In Chapter 8 – crepuscular politics – I drew on the work of Melbin (1987) who argued that 'daytimers' have the political power to remedy situations such as the example above. Whereas daytimers can remedy noise and disturbance in the nocturnal hours, shift-workers have no such recourse in the day.

This rhythmanalysis also depicts how daycentrism is but one facet of the actual. The power-tools and renovations are part of a rhythm of property cycles in which landlords reinvest and redevelop their property to attain higher rents (cf. Smith 1979). Making an argument for a shift-worker's right to sleep not only conflicts with daycentric rhythms, but also the ordained rhythms of property development in the actual city.

Interpreting this instance of power-tools through rhythm highlighted, for me, the frustrations of daycentrism's precedence in the city. The situation was one of *arrhythmia* in which the thoughts I was developing in relation to daycentrism manifested in the experience of everyday life. Daycentric rhythms of the actual imposed themselves on our life. Crepuscular thought

provided a lens to interpret the conflicting rhythms of arrhythmia, but, failed to resolve how such daycentric rhythms were being inflicted on our everyday lives.

### **Box 9.2 Advice from a nurse**

I am asked to wheel the bassinet containing our newborn baby through the corridors of the hospital. The nurse seeks a silent room in which to house the machine which will be used to test Walt's hearing.

A pleasant conversation flows. Small chat. The nurse enquires about my career, surreptitiously assessing my ability to be present for wife and son.

Beneath me Walt is attached to the machine designed to test his hearing. He is but six hours old, and this is a defining test for one of his rhythm analytical tools. Red cords, blue cords stick to ear pieces, sensors on his scalp. They will play a single rhythm and pitch until the machine registers brain function in reaction, instantly logging a reading, his ability to hear, to sense.

This machine has been invented within my life time, within one generation. When I was born a jar full of uncooked rice would be shaken behind the head of the baby, the doctor trying to perceive slight flinches, movements of the neck, face, and head. Hardly foolproof, yet a sign: yes, you can hear, no, you can't. So dichotomous when compared to the reading that Walt shows along a spectrum. A pinpoint reading, relative to all the other little rhythm analytical devices that come through this hospital.

Walt passes the test. My conversation with the nurse continues. She imparts the knowledge of four children herself: It's tough at first (managing arrhythmia). But she reminisces about weekend mornings with the whole family in bed together, relaxing (eurhythmic).

'You'll both be fine, you seem like two very healthy, young parents.' She repeats the mantra many midwives have imparted on this short, momentous morning 'The trick is routine, routine, routine... as soon as possible'

'So I have heard'.

Wry smiles, and then concession:

'They won't take to it, but it is worth a try'.

The threads come unstuck, the difficulty of teaching day and night to your children laid bare. The linear is discordant to the cyclical. The biological untamed by the social. What counts is that you try. The earlier you start training your children the rhythms of daily routine, the easier it is for them to learn later on. Supposedly.

'You'll both be fine' she adds.



**Figure 9.1** Walt's first-day hearing test (Source: Author)

Box 9.2 suggests how much we condition children to our desired rhythms of day and night. Lefebvre (2004, p. 39) referred to such an act as *dressage*, 'humans break themselves in like animals. They learn to hold themselves... one breaks-in another human living being by making them repeat a certain act, a certain gesture or movement'. From birth, there is abundant, and overwhelming, advice on parenting techniques and how best to deal with inevitable problems that arise. One such example is the *Save our Sleep* movement, a website, book and 'method' of parental sleep training (Hall 2014). Their position is that it is 'everyone's right to a full night of sleep'. Subscribing to such parenting philosophies involves an often formulaic routine suggested by informal 'self-help' resources. The director of *Save our Sleep* concedes 'my advice is not medical or scientific, but a collection of tried and tested solutions and tips based on

many years of experience with babies and young children', and yet from this, the advice to parents is that 'you should extract the advice that best fits in with your lifestyle and beliefs' (Hall 2014, np.).

The advice I received in passing from the nurse was one of numerous social interactions that reiterated daycentrism through conversation in the early days of parenting. Our supposed social obligation was to learn and establish rhythm for our child 'as soon as possible'. Within the nurse's advice though there was also a concession, that even though we should be incorporating routine, the child does not necessarily 'take to it'. In this sense the trial and error of incorporating routine is imparted by doctors, nurses, midwives and yet seems to be vague and imprecise. Such imprecision is especially obvious when compared to the hearing test that has developed into an almost infallible recording device to register hearing (Figure 9.1).

The routines and rhythms of day and night are heralded as crucial, but with far less certainty of effective 'solutions' or strategies compared with a hearing test. I take this as yet another indication of bodily alienation from day and night. We consider routine for sleep, feed, and play at certain hours to be important, but have no idea how each individual child will respond. In turn we scaffold our cultural understandings of rhythm, particularly of sleep, onto the lives of the newborns we 'break-in'. *Save our Sleep* is a method that relentlessly pursues sleeping through the night as indicator of healthy relationship and behaviour towards day and night. In Chapter 2, I described how we each have a particular rhythmic affinity along a spectrum as 'morning' or 'night' people. Becoming crepuscular, we might instead find a method to determine such affinity, in turn developing a disalienated relationship with day and night as a recognised part of our childhood development.

Indeed, since becoming a parent, I have had countless conversations and comments with other parents, in which people sympathise that your world is in a supposedly foreign state now you have children. If incorporating another being into our routines is so traumatic, such arrhythmia, or fear of arrhythmia, reveals how little flexibility we believe we have with our relationship to day and night. But it also suggests tacit collective acknowledgement of the impossibility of truly 'training' our children to adhere to a strict day/night binary.

**Box 9.3 Jet lag, New York**

We arrive in New York to attend the Association of American Geographers conference after 24-hours in transit. The air conditioning, crowds, single file lines through customs, immigration clearance, and numerous, onerous security checks in Los Angeles all strain our bodies. By the time we arrive in New York Walt, now three months old, is exhausted, he is still feeling the effects of an elevated temperature from immunisations he had 24-hours before the flight. From Sydney to Los Angeles, Walt was squirming and screaming. He has since been awake and agitated from Los Angeles to New York. I strap him to my chest as we jostle at the luggage belts. He grows limp and falls asleep, the ever so slight change in weight welcomed by parents as indication their child has fallen asleep.

We board a mini-bus to Manhattan. It is toasty warm, but I'm sweating, itching with Walt strapped to me. His temperature is raised, so is mine. These are not the cold airs of February in New York I was anticipating. But I don't dare change anything as Walt sleeps.

We arrive at our hotel, East 45<sup>th</sup> Street, negotiate check-in, enter the room and Walt jolts awake. Whether from the temperature, air conditioning, pitch-black thick curtains or all-or-nothing lights, he doesn't like this room. Windows are sealed shut, restricting us from fresh air. We are here for seven nights. It will take him four to adjust to jet lag and to the room. Dan wanders the city for hours with him in the pram or strapped to her chest, the cool air, the movement, perhaps the noise, puts him to sleep. Yet whenever she returns to the room, exhausted from wandering the grid streets, he snaps back awake, unhappy, crying, exhausted.



**Figure 9.2** Walt, New York hotel room, 3am (Source: Author)

Bedrooms are socially sanctioned as the most practical and comfortable places to rest and sleep (Bryson 2010). Hotels are seemingly the pinnacle of this, provisioned with air-conditioning, plush beds, thick, dark, curtains, and a raft of modern conveniences. In a city such as New York these rooms make up a huge proportion of the built form and economy of the actual. Indeed there are over 90,000 such rooms in New York City, dedicated to tourists,



travelling workers, and visiting friends and family achieving adequate sleep and relaxation in a different context to their home (Dominguez 2011). Yet Walt would not take to the seemingly luxurious conditions of the hotel, exacerbated by the effects of jet lag (Figure 9.2). Instead Walt slept in movement, being outside in the winter air rather than inside in warmth, being public not private, in the day-time or early evening rather than at night-time. Dan fostered such rhythms through movement within the city. In the evening I would do the same<sup>3</sup> (Figure 9.3).



**Figure 9.3** Fast asleep in Times Square, early evening (Source: Author)

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<sup>3</sup> During the day I was attending the AAG conference. As a globally attended conference, jet lag is a common problem for conference participants, and yet hours of presentation are scheduled daycentrically and social activities confined primarily to the night.

Sleep for Walt was not a problem in the bright lights and big sounds of peak hour in Times Square, a quintessential example of the modernist 'advance' into the night rendered as 'frontier': excessive illumination, increased activity after dark, and modernist fantasies of unmitigated production of light (Melbin 1987). But as Walt slept a glimpse opened up of the alternative possibility of a virtual crepuscular life – sleep amongst sound and light.

This example troubles the way we incorporate spaces and practices of sleep into the urban form. Crepuscular spaces and lives would envisage incorporating places of sleep into the urban form in different guises. There are emergent possibilities. For example, in Japan, there are now women-only cafes where women can nap during busy days (de Boer 2013). The cafés provide hundreds of varieties of pillows for selection and serve food that aids relaxation. Nap-café stand in stark contrast to the male-only capsule hotels in Japan designed for inner-city workers who toil beyond the last evening transport connection to their residences. Nap-café are made for crepuscular lives in which days are more segmented – incorporating sleep into everyday life in new ways. Capsule hotels exacerbate disalienated relationships, in which working to such extensive duration exceeds the daycentric transport networks of the city. Jet lag in New York meant negotiating the city in different ways to facilitate sleep for Walt.

#### **Box 9.4 Just the two of us**

Dan begins training for a new job. 15 hours of the day she will be away, commuting to Sydney, for a fortnight. Afterwards, this is a job where she can work from home. Nursing on the phones.

Dan and I are tense. Walt, now eight months old, hasn't yet taken to a bottle – water or milk. Will he be okay without his mum, his food source, his comfort?

First day, 10am. I'm overwhelmed. Feel isolated. I put it into perspective. The training is only for two weeks, it's the first day, and this will get much easier. I'm overcome with incredible empathy for single parents, isolated mothers, with no family, or support network.

I keep offering Walt bottles and cups of milk and water. I give him juicy mandarin and cucumber so he gets a little fluid at least. Since being on solids he has preferred to feed himself and won't let us spoon-feed him.

By 3pm, I notice Walt is very cold to touch even with his usual amount of clothes on. Our well insulated apartment holds the heat in short winter days and remains cool in the long dry days of summer. It will be some days before I realise he's missing the warmth of feeding time, the proximity to Dan, the radiance of body heat between them. Four to five times a day they warm each other.

By 4pm, Walt (out of desperate necessity) takes a sip of water from a bottle. Twelve long hours of anxiety, dissipates. Hydration. Eurhythmic hydration!

Then the 'witching hour' arrives, the crepuscular transition every evening when Walt becomes most demanding of Dan. He becomes distressed. 90 kilometres away Dan is rushing to catch the 'early train', to get home, with Walt into her arms. Catching a train half an hour earlier at that end of the commute equals an hour and fifteen minutes earlier at our end in Wollongong. The tyranny of a stretched train network in peak hour, but half an hour could make so much difference in little Walt's day.

Walt is completely distressed by now. I'm biologically unable to help with the feed that he wants. We pace the house together and rejoice when the text message comes beaming through the mobile phone networks from Sydney's central station, 'I made the train, see you soon'.

A crepuscular moment – the 'witching hour' – is present in this rhythm analysis. The infant craves feed and comfort in the crepuscular hours. It is an uncanny cue he gives us every evening and some dawns. As crepuscular moments, such instances reveal the embodiment of cyclical time. Walt marks the transition of day and night in each 24-hour cycle, a cyclical expression in babies not yet overcome by linear time in the modern city. In parenting, cues like this come to replace an emphasis on 'clock-time'. Attempting to read these cues becomes a quotidian task, honing one's perception of a child's needs. In living crepuscular lives perhaps we would begin to anticipate these cues, not just from infants we care for, but from ourselves: cues to sleep, to relax, to play, across the segmented 24-hour cycle. Of course, we already recognise exhaustion, being over-tired, but what of the nuances we need to recognise for newborns in our care?

This rhythm analysis also highlights the stressed infrastructure networks of the city in the linear rhythm of day and night. What Dan did for two weeks is a permanent daily reality for a lot of people, the circumstances Lefebvre described as 'generalised misery' (see Chapter 6). Missed connections and reduced services over extensive distances can have significant impacts on our quotidian routines. Around 20,000 people commute up to two hours each way from Wollongong to Sydney each day, representing 'the largest single commuter flow between cities in Australia' (Apap 2008, np.). In this guise, daycentrism's drastic effect on lives and the built form is revealed. The daycentric imperative to be in workplaces during coordinated hours positions people in networks across the city that are stretched beyond capacity, and confronts other, more diverse bodily rhythms of day and night such as a baby needing warmth and sustenance from their mum.

### **Box 9.5 The midnight wakeups**

This week, Walt, now fourteen months old, has been waking up in the middle of the night hungry, having not filled his tummy before he goes to sleep. He's reduced breastfeeding, but is not yet used to eating across one 12-hour segment and fasting across the other. In the midnight hours, rousing from sleep, our problem-solving skills are not well honed. The three of us fumble around together trying to identify arrhythmia and resettle into eurhythmia.

It's a strange thing lying there in the middle of the night, Walt and I both staring up at the ceiling, our eyes completely adjusted to the darkness, his hands slowly feeling the features on my face. It's a strange comfort to remember the words of Ekirch and Wehr: that monophasic sleep patterns are out of sync with our evolved tendency to sleep in segmented patterns overnight, rousing in the middle of the night. It's a liberating feeling, to think that this isn't an abnormal behaviour to be up in the middle of the night. As soon as I accept it, my whole feeling about being awake changes. Suddenly this time together, embracing Walt on the couch as he lays there peacefully, awake but still, is quality time. It's a brief period where he's still small enough to fit within my arms, on the couch side by side comfortably. We are not asleep, but so too, I do not feel totally awake. However long these nights feel only ever matters in relation to the day – is there work to rise early for? Plans for the day? Or just the reluctance to sleep late, associated of course as it is with sloth, one of the seven deadly sins?

It was on this night, and through this example of rhythmanalysis, that I first felt thoughts of the crepuscular had fully penetrated into my bodily experience of everyday life. The complexity of our bodily rhythms would often contradict the crepuscular thought I was developing. A binary in thought is often too simplistic when compared with polyrhythmic bodies. Here was an instance in which that role was reversed; in the sleepless hours of the night, thoughts of the crepuscular – beyond day and night – brought me solace and calmed my initial frustrations. Adhering to daycentrism restricts such moments of nocturnal contemplation. And yet, like Lefebvre's moments (Chapter 5), such an experience was fleeting. This crepuscular moment could not be sustained. Nevertheless, such midnight wakeups became a break from my usual outlook on day and night, and an opening onto the virtual object of becoming crepuscular.

### **Box 9.6 Morning people/Night people**

Some months into Dan's new job the routine, the regular weekly cycle is approaching eurhythmia. Dan is pleased with the practice of work, especially its variety: helping new mums, crisis calls from addicts, dietary advice to elderly people.

It is also dream employment for her to be so close to Walt, now eighteen months old. It is a blessing to have avoided a job that requires any commuting. Her breaks are spent with the family, we still have meals together, and she only has to think about getting ready for work ten minutes before her shift begins.

Yet the shifts have taken some getting used to. We are, like many couples may be, at opposite ends of the scale considering ourselves 'morning' or 'night' people. Dan sleeps early in the evening and rises early in the morning. I go to sleep later and rise later. I have done for most of my life (I'm the running joke in the family about late sleep-ins). But, in changing jobs, Dan has started working night shifts. Of course, she did so when working in hospitals, but for 5 days a week she is finishing between 1030 and 11pm and most mornings getting up earlier than usual with Walt. We've organised her shifts this way so she can still spend the days with Walt.

On the other hand, I have prioritised going into work early, so I can be back for the start of Dan's shift and my takeover of parenting duties in the early afternoon. Although I have worked better during the night-time hours for most of my life, our new arrangements force me to work earlier during the day. Working in the day helps to keep up appearances in the office, a workplace that most readily accepts day-time activity. With the need for nurses over the 24-hour timespan Dan has the flexibility to change her hours. It's certainly not traumatic, but it definitely takes getting used to. This is because we are working at opposite ends of the scale to which we feel predisposed.

In Chapter 2 I explored how circadian rhythms can be entrained to environmental factors, but that we each 'feel' more capable at particular times. In so doing, I also pointed to the way we each have a particular preference for the day or night along a continuum. The rhythm analysis excerpt in Box 9.6 reflects how some employment circumstances can facilitate flexibility in hours of work. However, while some industries and endeavours require such incessancy, not all do (Melbin 1987, pp. 82-100). Flexibility is of benefit to pursuing crepuscular life. Our working arrangements for this period of our lives are certainly not unique, but they do highlight how both familial commitment and workplace cultures are involved in entraining our circadian rhythms.

This rhythm analysis also shows how some aspects of daycentrism, such as crowded commutes, can be isolated from our lives. Yet others, such as morning work for night-people, can impose themselves rhythmically. As Lefebvre argued, disalienation results in a new and reconfigured alienation (see Chapter 3). In this rhythm analysis, as Dan and I negotiated one element of daycentrism and the actual (commuting), other rhythms were imposed on our lives (working 'against' our rhythmic preference). Such a rhythm analysis helps in elaborating how alienation/disalienation becomes a central, and bodily, part of everyday life in becoming crepuscular.

### Box 9.7 They'll sleep well tonight

During birthday parties, family functions, play-dates, days and nights out with the family, as the kids get ever more excited – running, laughing, playing hide and seek – I'll often hear the comment 'they'll sleep well tonight'. I wish it worked that way. Any long day or late evening when the kids have had a full day and should be physically and mentally exhausted, it is assumed they'll sleep perfectly. But they rarely do. The massive days often over-stimulate.

After long days our boys, now aged two years and six months respectively, are more prone to night terrors, to continuous waking through the night, scared but unable to tell you what they've been dreaming, even if they've been dreaming. As full, stretched days exhaust young bodies, missed naps often equals worse evening sleeps. The seemingly nonsensical notion is that for young children more sleep equals more sleep.

Over-stretched and over-stimulated days are examples in contrast to the balance that Lefebvre emphasised in the right to the city (see Chapter 6). We sometimes fill the day with too much activity. It becomes not only physically exhausting but more importantly, too stimulating, mentally. Of course, filling our 'free' and 'social' times so intensely is a product of linear time in which days and nights are rendered as five cycles (or more) for work, and two cycles (or less) for ourselves (cf. Debord 2010, 150). Such a symptom of linear time's dominance requires 'free' time, available to see extended family and friends, becoming packed full of long days and nights.

In night-terror moments, the child's arrhythmia is compounded by the parent's feelings of tiredness and frustration. Such disturbances in the night are distressing, the instances where you cannot console your child. Yet, the boys often don't remember them by morning.

### Box 9.8 Bats at the beach

Our quota of books at nap-time or bed-time is four. In the usual evening routine, Walt has dinner, a shower, helps fill his milk-bottle, and chooses his four stories. A few examples of children's books play with the binary of day and night. In *Bats at the Beach* (Lies 2006) bats enjoy all the same things we do at the beach during the day, except they are there during the night. Under darkness they apply 'moon-tan' lotion before their swims. *Wow says the Owl* (Hopgood 2009) plots the adventures of an owl that doesn't do what they're 'supposed' to do, which is to sleep all day. And so, the owl gets to experience all the wonderful colours of the day, before realising that the night-sky was far more beautiful than they'd ever realised.

For the most part, however the bed and nap-time routine is complemented by the majority of books plotting a 'day-in-the-life' of much-loved children's characters. Thomas the Tank Engine spends his days on tasks around the Island of Sodor, before returning to Tidmouth Sheds with his friends each evening to sleep.

Dan and I are almost asleep by the end of story-time each evening. Low lighting, curtains drawn, and the intentional slow cadence of our voice as we read children's stories all lull us too into an early evening drowsiness. Yet once the boys are down lights come on, meals are prepared, and cleaning is done. We rarely give ourselves the same ritualistic wind-down for sleep, even though we see the proof of its effectiveness each evening with our own children.

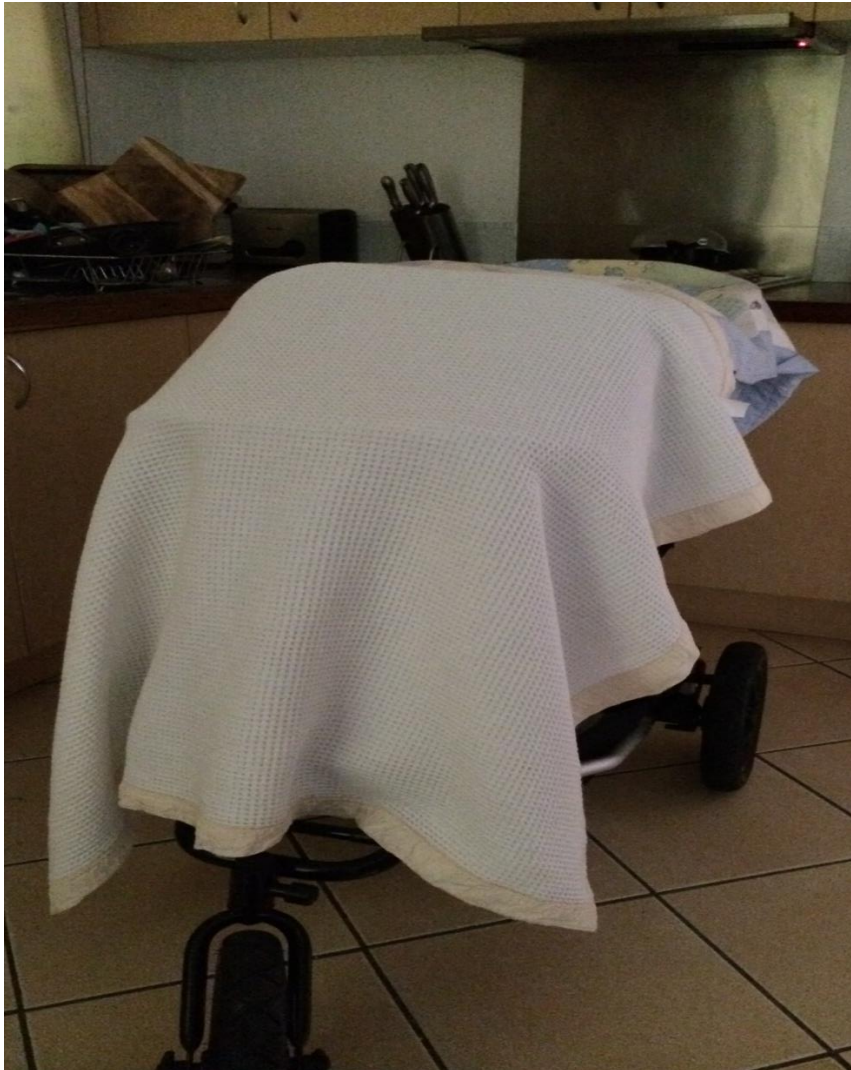
This rhythm analysis highlights a ritual of preparing for sleep. Being a parent forces you to be strategic about rhythms to prepare children for sleep. We do this twice for Walt (now almost three) and three times for Knox (now 10 months) over 24-hours. Yet as adults we rarely afford ourselves the same luxuries. We often push on until exhaustion out of necessity. We are not as intentional and ritualistic about our transition into sleep. Indeed we try and resist the slide into sleep in the day-time hours. Day-time napping is often accompanied by guilt or the fear that we will disturb our nightly sleep and fall out of sync with daycentrism.

Children's stories teach culturally 'appropriate' ways in which to relate to day and night. Such stories certainly help in our established routine. We rely on such materials to help entrain our children's circadian rhythms. Although children's books contain many normative daycentric renderings of day and night, at odds with becoming crepuscular, they form part of my household routine. These normative renderings of day and night further enmesh us within the actual. Most nights I rejoice at this, getting the boys to sleep gives me time to 'get on' with the activities (such as house work, thesis writing, and cooking) that are incompatible with rearing newborns. And yet, as ever, there is a present element of the virtual. The ways in which we entrain our circadian rhythms can be taught and learnt. Where *Bats at the Beach* teaches an appreciation of the nocturnal, so too could elements of the crepuscular be taught. Such routines could be beneficial to enacting new relationships to day and night.

#### **Box 9.9 White noise**

Getting nap times set for two children adds a dimension of difficulty for managing sleep. The common areas in our house are too close to the bedrooms. Play space edges sleep space, as nap-times fail to become eurhythmic. We want to develop a sleep routine for Knox, now aged 10 months, but don't want three hours of the day where we are constantly telling Walt that he has to be quiet – 'keep it down', 'don't do that', 'do this instead'. That would be stunting for him and unsustainable for our energy reserves.

It takes a few months but we find a solution. Knox lays flat in his pram for naps twice a day – in the kitchen. We switch on the exhaust fan from our stove-top to blare out white noise (Figure 9.4). Knox then has deep sleeps, unable to hear us. We have time to do the things we need to do in the kitchen right next to him – cleaning the dishes, clearing away breakfast, preparing lunch – and the noise doesn't exceed his blissful white noise background. Walt is free to play as he would if Knox were awake. White noise facilitates eurhythmic napping.



**Figure 9.4** Knox napping with white noise (Source: Author)

It is often assumed that as our adult sleeping patterns prefer silence, the same is beneficial for children's sleep. For young children such silence can be frightening (Forquer and Johnson 2005). After all, they spend around 9 months hearing everything that goes on in the world around them. Muffled sound, dampened rhythms and vibrations can be heard in the womb. Even while adults sleep in comparative silence, the internal organs continue to give sonic, rhythmic, company to the foetus – beating heart, inflating lungs, and digesting stomach. And yet, as they join us here in the world, we impose our cultural norm of silence for sleeping upon them.

With added white noise, sleeping time becomes the noisiest part of our day in the house. While the white noise settles Knox, we find ourselves talking louder above the fan. In terms of crepuscular technology, this arrangement is an example of enabling sleep across all hours of



the day and night. In this instance, and in contrast to the power-tools encountered earlier (Box 9.1), sound is the solution, not the problem. The extractor fan is just one example. Radios tuned to static apparently work just as well. The ideas prompted by this rhythm analysis could be extended to other crepuscular technologies. More sustainable, less energy dependent examples could include egg cartons on walls and noise cancelling headphones to facilitate the silence we crave as adults. Or, in turn, learning to sleep with sound in new configurations. As argued in Chapter 7, such technologies could be enrolled in our lives to disalienate our relationship to day and night, helping us sleep at different hours across both the day and night in pursuit of crepuscular lives, not only domestically, but scaled up into suburban and urban scales.

Williams (2005) argued that any society is forced to organise and institutionalise sleep. This rhythm analysis excerpt is one example of how we manage and organise sleep in our household. In becoming crepuscular, the argument is not that sleep will not need to be managed. Rather, through managing crepuscular spaces, lives, technology, and politics, sleep could be organised to suit our individual preferences, be more beneficial to our health and happiness, to foster personal (not industrial or capitalist) productivity, and to be enabled without fear or inconvenience of sleeping counter to daycentrism.

#### **Box 9.10 Sharing a room**

When Knox is a year old, we decide that it is time for the boys to start sharing a room. We think we'll need to 'train' Knox to sleep away from us first. We move his cot into the hallway between our rooms at first and struggle to get him to take to the new setting. The new set-up prompts puzzled looks from visitors during the day – to see a cot set up in the middle of our entry/hallway. A passageway now becomes a bedroom. A day space now a night space.

The hallway arrangement fails for a few weeks before we decide to put him straight in with Walt. This works far better. On the first night we hear Knox wake and babble in his cot without crying out. He resettles himself. This is the first time he has done so. We speculate that he must know Walt is in the room with him and that this brings him comfort. We were worried that the boys would disturb each other during sleep but they don't wake each other at all. Knox wakes for feeds, Walt wakes if he has a bad dream, but neither of those situations wakes the other.

In Chapter 6, in the context of sleep research, I discussed how sleep is, in one sense a withdrawal from the social world, even while the manner in which we learn to sleep is learned socially (Williams 2005). This rhythm analysis excerpt describes how sleep for Knox was not successful in a room (hallway) by himself. We speculated that he sensed our presence as he sleeps. Indeed, some mornings (if Dan or I start work early) he cries out the instant we leave the room. In our Western context of the actual there are social and cultural emphases on sleeping alone in defined spaces, a withdrawal from the activity of the world. However, as

Knox learns these ways to sleep he highlights how social we are, even in slumber. The presence of parents and siblings is of comfort in sleep. In becoming crepuscular, an appreciation of such social proximity for sleep would drastically change space. The emphasis on social, working, or dining space as discreet from sleeping space may diminish as we find activities more closely related in crepuscular space.

#### **Box 9.11 Segmented days and nights**

It is a great frustration when you are trying to resettle the boys at night and, not only do they not want to sleep, they seem positively thrilled to be awake with you. Now Walt can talk he asks the questions: 'time to wake up now?' (3am), 'Breasssfass Dada?' (Breakfast 4am), and 'Knoxy awake now? Dada awake now?' (To Dan, all hours of the night). Walt often resettles himself or sleeps through the night. He also listens to us, so when we explain 'the sun's not up' or 'it's still night-time', he usually takes our word for it.

But the resettling gets you wondering in the middle of the night. As I fumble in the dark my senses are dulled. My body craves the idealised six to eight hours a night to which I have become accustomed. My physical capacities seem lessened but my mind often races to crepuscular thoughts. The boys are obviously not as distressed with segmented nights. They also have segmented days. Sleep, naps and time awake are more evenly spread across the day and night. Being awake in *multiple* nocturnal periods is less stressful because they can make up the difference during the day.

The segmented sleeping patterns of children are a window onto possible segmented rhythms envisaged in becoming crepuscular, a window onto the virtual. In the context of the argument of this thesis, I feel like a fraud having to say 'it's still night-time' to my son. And yet, such interactions are a useful reminder that in pursuing the virtual we can still find our bodies and thoughts enmeshed in the actual.

### **9.4 Rhythmanalysis and transduction: life strengthening thought**

The rhythmanalysis excerpts presented in this chapter have been focussed on segmentation of days and nights for children. In parenting newborns, such things as sleep, eating, playing are more evenly distributed across the 24-hour cycle. The rhythms of day and night in parenting are markedly different to those before having children: the day for play, work, eating; the early evening for entertainment, time with Dan or anything additional we could not 'fit' into 24-hours. Previously, the depths of night were only ever for sleep. Occasionally waking in arrhythmic circumstances, for example in sickness. Segmented days and nights take us closer to the possibilities of becoming crepuscular. As rhythmanalysis, such excerpts have revealed a multitude of rhythms: fetal gestation, inter-generationality, labour, seasonal change, nocturnal/diurnal rhythms and how they interact with those of the working day, real estate, noise pollution, leave entitlements, working conditions and how they structure the possibility of family life.

Throughout the duration of writing this thesis, my sons have been entraining influences on my circadian rhythms, related to, but somehow different from the sun (as cyclical time) or linear time that had previously impacted the day and night of my everyday life. I rise earlier now, sleep earlier, and wake more regularly across the night. When it comes to sleep in our family circumstances, our lives *are* becoming crepuscular.

Through my subjective experience of parenting I have explored the dialectic between thinking and living 'different' days and nights. The birth of my sons has provided a distinct lens for a changing experience of day and night. I feel I have been more attentive to these changes than I otherwise would have been because of the conceptual focus of this thesis. As I experienced the bodily disruption and discomforts of day and night as a new parent, I could contemplate its meaning and imagine ways to think and live differently. I explored my changing days and nights through Lefebvre's rhythmanalysis. That has emphasised how rhythms of day and night can never be totally isolated from seasonal, generational, economic, cultural, or social rhythms. Day and night are both lived and thought. Like Lefebvre's theory of alienation/disalienation and the impossible/possible, the living/thinking of day and night is dialectical.

In terms of transduction, the focus in this chapter on rhythms has helped to show where crepuscular spaces, moments, lives, technologies, and politics intersect with the visceral experience of everyday life. This is crucial to consider, for as Lefebvre (2004, p. 69) argued 'thought strengthens itself only if it enters into practice: into use'. In two of the rhythmanalyses presented above – 'the midnight wakeups' (Box 9.5) and 'segmented days and nights' (Box 9.11) – I have shown how an idea of becoming crepuscular intersects with my own life. Being reminded of historical segmented sleep patterns, or of the notion of crepuscular lives, was a comfort in those (sometimes) incredibly frustrating hours of the night. During other nights, I could find myself enmeshed within the daycentric imperative requiring sleep for the next day's exertions. This chapter has highlighted how the notion of becoming crepuscular has to be lived, it cannot merely be thought. The virtual has to emerge through lived practice and cannot be prescribed as top-down planning of the actual. Conceptual contributions to our understandings of day and night are fundamentally incomplete until they develop into embodied practices of everyday life.



## Chapter 10 – Crepuscular places: a site where the virtual and actual coexist

This chapter focusses on crepuscular places as locations where unorthodox renderings of day and night are celebrated or promoted. In particular I focus on the Aoraki Mackenzie Dark-Sky Reserve, New Zealand, as an example where elements of the virtual exist alongside the actual. I first review the disproportionate influence of ‘big cities’ on renderings of day and night. I then discuss crepuscular places before documenting the context of Aoraki Mackenzie Dark-Sky Reserve and the connected town of Tekapo.

Crepuscular places are relevant to this thesis not only for their novel interpretation of day and night but for their enacting of a particular virtual object. In Chapter 7, I explored debates around lighting and theorised this as an example of crepuscular technology. In Chapter 8, I explored how political antagonisms may arise in instances where diurnal and nocturnal interests compete. Aoraki Mackenzie Dark-Sky Reserve is a crepuscular place where both of these themes come together, where daycentrism is unsettled politically and crepuscular technology infuses the built environment.

### 10.1 Day and night in the ‘big’ cities

In Chapter 4, I examined how a teleological rendering of the human relationship to day and night has developed in tandem with a linear narrative of urban modernity. Major, famous cities of the modern world – especially Paris, New York, London – disproportionately influence academic and popular cultural discussions about day and night’s meaning in the city and everyday life. Paris is known as the ‘city of light’, in reference to the enlightenment and pioneering implementation of lighting technologies (Chapter 7). New York is ‘the city that never sleeps’, and has been the subject of detailed empirical studies of shift-work (Sharman and Sharman 2008); nocturnal wildlife (Matthew 2001), and nightlife subcultures (Hae 2012), as well as the nocturnal muse of writers, artists and photographers (Sharpe 2008). For Sharpe (2008, p. 4), in visual representations of New York we can trace ‘the imagery through which ideas about the nocturnal scene entered cultural consciousness’. London has similarly been the repeated subject of nocturnal explorations (Morton 1936; Sandhu 2006, 2010). Nocturnal London was historically ‘a homegrown Africa that on-the-make writers scrambled to map and colonize’ (Sandhu 2010, p. 11). Subsequent literary writing became key sources through which the general populace became familiar with the urban night, and through which cultural

conceptions of darkness were developed (De Quincey 2008). Such work suggests there is something exceptional in the experience of day and night in the world's largest and most famous cities. Major cities possess the infrastructures, events and activities that stand out through extraordinary renderings of day and night. New York has Times Square with its blazing lights and overwhelming advertising boards that appear in countless movies, commercials and music video clips. Luxor Casino in Las Vegas has thirty-nine, mirror-intensified lamps that beam through the apex of its pyramid. This beam of light is said to be the brightest spot on earth (Bogard 2013, p. 10).

The night is said to intensify the urban experience. In David Nye's (2010, p. 12) words:

The night cityscape, whether that of Pittsburgh, San Francisco, Boston, Las Vegas, Chicago, or Washington, is endlessly produced on postcards. Los Angeles is often represented as a glittering sea of lights. The night skyline has become the signature image of the metropolis, a defining landscape of modernity.

Likewise, Crang (2001, p. 188) has argued that long exposure photos of car headlights streaking into the night have become a cliché that characterises time and space in the city. Glittering lights and cars streaking into the night thus become defining images of Western urban modernity and simultaneously defining images of a transition into night as frontier.

The implication of the disproportionate influence of 'big' cities is that they conflate renderings of night and day with urban modernity. Meanwhile, geographers have argued that small cities are often overlooked in urban analysis (Jayne et al. 2010). Research into the different experience of day and night in smaller cities and non-metropolitan regions is productive, to unsettle the dominance of larger cities.

## 10.2 Crepuscular places

In this chapter I accordingly focus on a crepuscular place that offers a contrasting perspective to the big city narrative of the urban, modern day and night. Such crepuscular places provide a different experience of day and night. They are spaces in which day and night's meanings come to be contested.

Such difference means that crepuscular places are often sources of wider intrigue, and thus become linked to tourism. According to Weaver (2011), tourism focussed on 'mega-skies' is a burgeoning industry. Mega-skies come in diurnal, nocturnal or crepuscular forms and include examples such as dark-sky tourism, auroras, sunsets, meteor showers, solar and lunar eclipses, rainbows and clouds. Many such examples are characteristic of cyclical time (Chapter 4).

Examples such as the northern lights rely on specific latitudes. Others, like sunsets, are less unique and therefore become competitive with other regions. For example, Sihanoukville in Cambodia; Santorini in Greece; San Esteben in Mexico; Fakarava in French Polynesia; and the Pacific island nation Kiribati are regarded as having the most ‘sublime’ sunsets in the world (Herbert 2013).

Kiribati is a notable example of a crepuscular place. In 1993 Kiribati petitioned the Greenwich Observatory to change the International Date Line (IDL) (Dewdney 2004, p. 37). As an island nation straddling the IDL, the time difference between geographically adjacent Western and Eastern Kiribati was 22 hours (Kiribati Tourism 2013). The Kiribati government wanted to insert a loop into the IDL in order to change the time zone. When the celebrations for the new millennium arrived in 1999, foresight meant Kiribati was strategically placed to be the first place in the world to celebrate the first dawn of the new millennium – the very first crepuscular moment of the next thousand years.

Another example of emergent crepuscular places results from the International Dark-Sky Association’s (IDA) efforts in recognising locations that promote, preserve and protect the night-sky. The Dark-Sky Places program has three categories: communities, parks, and reserves (IDA 2014). *Communities* have taken extraordinary steps to protect the night-sky through lighting regulation, planning, education and community-wide support. Examples include Dripping Springs, Texas and the Isle of Coll, Scotland. *Parks* are locations of exceptional beauty, education and preservation of the night-time environment. Examples include Hortobagy, Hungary and Eifel International Dark-Sky Park, Germany. The top tier of the program is the Dark-Sky *Reserve*. Reserves are larger than parks and possess exceptional quality of starry nights protected not only for public enjoyment, but for scientific, cultural, natural, educational, and heritage purposes. Reserves are usually formed through multiple stakeholders and have long-term strategic visions.

Dark-sky places are a relatively recent occurrence, and academic perspectives on their development are scarce (for exceptions, see Edensor 2013b; Garlick 2010; Weaver 2011)<sup>1</sup>. Designation of dark-sky places attempts to rearticulate and redefine the human relationship to day and night. In terms of transduction, dark-sky reserves are a kind of virtual object, one that attempts to implement different days and nights. Why these sites are significant for this thesis

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<sup>1</sup> The emphasis on star gazing and the night-time sky as the basis for protecting areas, is a relatively new phenomenon. Night-sky preservation could, however, be viewed as the latest iteration of national park designation or world heritage listings. These two concepts have a much longer trajectory (see Sellars 2009; Leask and Fyall 2006).

is that, as a type of virtual object, they are also centred around, or in proximity to, actual objects of already existing towns and regions that have their own histories, heritage and politics. Considering this, they are key sites where the relationship between the virtual and the actual can be concretely explored. One such example is the Aoraki Mackenzie Dark-Sky Reserve in New Zealand.

### 10.3 Tekapo and Aoraki Mackenzie Dark-Sky Reserve: the context

The Aoraki Mackenzie Dark-Sky Reserve was designated by IDA in June 2012 (IDA 2012b). It covers an area of 4300 square kilometres of alpine landscape, bordered by the Two Thumb Range in the east and the Southern Alps in the west. The area in between is known as the Mackenzie Basin, but the Aoraki Mackenzie Dark-Sky Reserve also includes Aoraki Mt Cook National Park (home to New Zealand's highest mountain) and the townships of Twizel and Mt Cook (Tourism New Zealand 2014). Aoraki Mackenzie is thus the largest designated dark-sky place in the world. The Mackenzie Basin was chosen because it has the darkest and clearest night-sky in New Zealand. The basin has a micro-climate which produces a high annual number of clear nights. The mountainous rims of the basin prevent inclement weather blowing in off the Tasman Sea to the west and the Pacific Ocean to the east. This local geography has meant that Aoraki Mackenzie is ranked at 'gold' level status, which is the highest ranking available in IDA's park designation<sup>2</sup> (Figure 10.1).

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<sup>2</sup> Currently, the only other two locations to achieve 'gold' status are NamibRand Nature Reserve, Namibia, and Kerry International Dark Sky Reserve, Ireland (International Dark-Sky Association 2014).





**Figure 10.1** Welcome sign to the Aoraki Mackenzie International Dark-Sky Reserve (Source: Author)

The Aoraki Mackenzie Dark-Sky Reserve surrounds the town of Tekapo, a three hour drive from Christchurch, on the South Island of New Zealand. The town is on the shore of Lake Tekapo which is fed from glaciers in the Southern Alps, giving the water its famous, vibrant turquoise colour. Tekapo is small, centred on one main street, with a population around 300. The population doubles of an evening with an influx of tourists. The town is known for its hydroelectricity power station; the Church of the Good Shepherd, a 19<sup>th</sup> century stone church with altar views of the lake; and a bronze sheepdog statue in tribute to working collie dogs of the regional grazing industry. The area had been settled by the Maori for hundreds of years under the name Takapo meaning ‘to leave in haste at night’. Since the 1850s Tekapo (a corruption of ‘Takapo’) and the surrounding Mackenzie region has been used for farming sheep. Tekapo tourist trade includes water sports, ski fields, jet boating, horse trekking, hunting and fishing (Tekapo Tourism 2014). Rather than ‘leaving in haste’ at night, Tekapo is fast becoming a nocturnal tourist attraction as the primary settlement within Aoraki Mackenzie.

The media release that announced Aoraki Mackenzie Dark-Sky Reserve promoted diverse factors as contributing to its designation: astronomy has been integrated into Maori lives for centuries for navigational and cultural purposes; the presence of the Mt John Observatory; and

a rise in star gazing tourism operations in recent years (IDA 2012b). Unsurprisingly, Aoraki Mackenzie is considered by its stakeholders to have many functions:

The... starlight reserve<sup>3</sup> is a multifunctional one, in which the landscape is of outstanding beauty, significant biodiversity and has geologically important features. Night sky tourism is not only a significant source of income for members of the local population, but is woven into local culture in providing a point of reflection on the night sky for local people and visitors in understanding and experiencing the night sky. (Aoraki Mackenzie Starlight Reserve Working Party 2012, p. 14.)

This is somewhat unique amongst other dark-sky reserves. Tekapo and surrounds is one of only two areas worldwide that has an observatory, located close to human settlement that has been involved in the creation of a dark-sky reserve (Garlick 2010, p. 24; Figure 10.2). Other reserves rely on isolation rather than community cooperation. In this case, the designation of the Aoraki Mackenzie Dark-Sky Reserve has been significantly benefitted from the presence of the internationally renowned Mt John Observatory<sup>4</sup>.

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<sup>3</sup> Starlight reserve is synonymous with dark-sky reserve. The campaign for designation nevertheless argued '...we feel that 'Starlight' emphasises what can be seen, rather than the 'Dark Sky', which emphasises what cannot' (Aoraki Mackenzie Starlight Reserve Working Party 2012, p. 1).

<sup>4</sup> Mt John Observatory was established in 1965, funded by the University of Pennsylvania and the U.S National Science Foundation. New Zealand was chosen as its latitude was further south than observatories in Australia, South Africa and South America. Mt John was jointly opened with New Zealand's University of Canterbury, located in Christchurch. Satellite tracking stations were included at the site in the late 1960s by the U.S Air Force, who also sealed roads and supplied water from Tekapo. The U.S involvement gradually waned, with the research petering out and the military installations becoming technologically redundant in the early 1980s. Since 1982 the site has been owned by the New Zealand Government and continues to be leased by the University of Canterbury. Japanese institutions have also been involved with research at Mt John. Nagoya University and the Japanese government were instrumental in the installation of a 1.8 metre telescope known as the MOA (Microlensing Observations in Astrophysics) project. The MOA project monitors millions of stars and in 2003 led to the discovery of a planet (roughly the size of Jupiter) orbiting a star some several thousand light-years away (Aoraki Mackenzie Starlight Reserve Working Party 2012, pp. 53-59).



**Figure 10.2** The view from Tekapo to the silhouetted observatory on Mt John (Source: Author)

Research conducted at Mt John could be significantly impacted with any increase in light pollution and development in Tekapo. The presence of the observatory has meant, that for decades, Tekapo has had restrictions on the type and quantity of lighting that can be used in the town and surrounding region. Since the 1980s (when IDA was beginning) Tekapo introduced lighting restrictions under instruction from the team at Mt John:

Light pollution in the skies around Mt John increases the ‘noise’ in observation; limits the observation of faint objects; and restricts the range of astrophysical and atmospheric physics research which can occur at Mt John. The ability to clearly view the night sky is also an amenity of the district. Consequently if these values and the value of Mt John for research purposes is to be maintained, outdoor lighting in the vicinity of the observatory needs to be limited. (Mackenzie District Council 2011, p. 3)

IDA insist on reinstating conditions of light and dark as close to the natural veil of darkness as possible. Usually, reinstating darkness would mean drastic overhauls to existing, yet inefficient, infrastructure. The presence of the observatory, and the expertise and foresight of the researchers in Tekapo has meant it is one of the few places on the planet where lighting restrictions have been integral to development since the 1980s (Figures 10.2 and 10.3). In

Tekapo streetlighting is shielded, landmarks such as the church are not illuminated at night, and external advertising lights have a curfew of 11pm.



**Figure 10.3** Low pollutant streetlighting, Tekapo's foreshore park (Source: Author). Note the 'hats' that shield light from emanating into the sky

Mt John researchers are involved locally in influencing any development that may impact research. The observatory team has a central position in producing the information needed to maintain lighting ordinances:

In order to ensure maximum compliance with the Lighting Ordinance, the Mt John Observatory has produced an information sheet for Tekapo village residents and other residents of the wider Mackenzie Basin. This information is sent automatically by the District Council to all those seeking to build a new home or alter their home, or undertake any type of construction work that might require external lighting. (Aoraki Mackenzie Starlight Reserve Working Party 2012 pp. 52-53)

Responsibility for ongoing management is also delegated to individuals from the observatory, as Alan Gilmore (quoted in Aoraki Mackenzie Starlight Reserve Working Party, 2012 p. ix), resident superintendent of Mt John explained:

I regularly advise the Council about resource consent applications involving outside lighting, and bring to the attention of local residents the provisions of the current

lighting ordinance. As Starlight Reserve Manager I would continue to carry out these roles of advising the Council on lighting matters, and helping to reduce the occasional occurrence of lighting ordinance infringements. I would also monitor night sky brightness from time to time, so as to ensure that our present exceptionally dark skies are maintained for the future.

The area thus has a long history of thinking their place differently in order to protect the dark night.

#### 10.3.1 Expanding Tekapo and Aoraki Mackenzie: the night-sky as a point of difference

The night-sky over Tekapo has been identified as a Unique Selling Proposition for the region by businesses, councils and (some) residents. Such qualities are used to promote cities, regions and nations as offering something unique to boost tourism and attract investment (Pratt 2008). Tekapo was previously viewed merely as a town in which to break up the journey between Christchurch and Queenstown. The manager and tour guide I interviewed<sup>5</sup>, 'Chad', explained, 'you'd stop over, you'd grab a pie, you know, take a piss, and then be in Queenstown, or vice-versa'. But there has been a transition in recent years for the region to become a place to stop overnight, or for longer. Astro-tourism and the observatory have now become a key part of this. Chad recalled the night-sky being discussed at a meeting between local and regional tourism industry (around 2009):

Christchurch tourism... they came out here to say 'you know, we need to really promote the Mackenzie Region, the Lord of the Rings has helped for sure, but they've been everywhere. What's our point of difference?' What sets us aside from anyone else?'

Chad indicated a reluctance from the local astro-tourism industry to say the 'point of difference' was the night-sky. He said this was a difficult negotiation with astro-tourism organisations not wanting to appear self-serving:

But actually one of the heads of Peppers [resort and accommodation], he said 'well in all honesty it would probably be the stars. The stars would probably set us aside from

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<sup>5</sup> A semi-structured interview was audio recorded and then transcribed. The respondent was contacted prior to visit by email and agreed to an interview of approximately one hour conducted at the café located at the observatory on Mt John. Questions focussed on the historical development of the observatory and dark-sky reserve, astro-tourism, and general awareness of the reserve's status within Tekapo and region. The name Chad is a pseudonym to protect his anonymity.

anyone else' ... for me it's so powerful because they, from their perspective, have come to the conclusion that it's an asset.

The focus on Tekapo as an area of dark-sky tourism has changed the place's reputation as a brief stopover town and is credited with having flow on benefits to the other local tourism operators:

Folks... go out of their way to stay in Tekapo for a chance to experience the stars on some level... if you go to the church at night there's 40 people photographing the church with stars [Figure 10.4]. Entirely unrelated to what's been done up here [Mt John], but it's that... that interest level. (Chad)



**Figure 10.4** The Church of the Good Sheppard, Tekapo, illuminated by headlights of passing cars  
(Source: Author)

For astro-tourism, longer stays are often essential in Tekapo, as its alpine weather can quickly change. Relying on one night to see the stars can easily lead to disappointment:

So we've tapped into something and... now people realise, you know, if you want to see the stars – what happens if it's cloudy – so your best bet is two or three nights. And so they're beginning to see longer stays in Tekapo which then filters out of course to the restaurants and the hot pools... I mean they [the hot pools] were always quite popular but now we're seeing people get a two-day pass. (Chad)

Regionally, Christchurch airport welcomes approximately 90 percent of international visitors to New Zealand's South Island. The company that runs Christchurch airport saw the designation of the Aoraki Mackenzie as strengthening this position as a gateway to New Zealand's tourism, also making the airport a 'gateway to the stars' (Jim Boulton cited in Aoraki Mackenzie Starlight Reserve Working Party 2012, p. 83).

### 10.3.2 Scepticism

On the plane to Christchurch from Sydney I met a Tekapo local. He was very surprised I was flying to New Zealand specifically to visit Tekapo until I explained my research interest in day and night. His wife worked in a local tourist information office and they ran a bed and breakfast accommodation facility. He was sceptical about the dark-sky reserve designation and apprehensive about what it meant. He did not feel involved in the dialogue process and wondered if residents were going to be asked to install new lighting, be forced to use curtains at night, or how the reserve was going to be policed. Although he had lived in Tekapo for most of his adult life, he was not actually aware of the lighting ordinances in place prior to Aoraki Mackenzie's designation. Tourism deepened his scepticism. He felt more supportive of designation purely for 'research purposes' but felt designation would possibly benefit astro-tourism at the expense of other local businesses. He wouldn't, or perhaps couldn't, name stakeholders from Mt John but believed they were very influential in the town's development. The observatory is integral in maintaining the lighting ordinance, but this person voiced concern in terms of regional development<sup>6</sup>.

Concerns over the monopolisation of development in Tekapo have emerged as local astro-tourism operators expand. A larger tourist facility is planned for Tekapo's shore, which could be visited by coach groups unable to reach the Mt John summit. The facility is described as a \$5 million 'window to the universe' (Meier 2013). Wayne Barnett, from Mackenzie District Council, argued there was general support for the development amongst the town, with the exception of some businesses and residents who felt their 'prized view' of the lake may become obstructed (Meier 2013, np.). In my interview I asked about dialogue with the local community: 'I think it's been ...more of a council thing up until now... I think there was

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<sup>6</sup> To give this account some context, it is helpful to acknowledge the Not In My Back Yard (NIMBY) Syndrome. The NIMBY syndrome is resistance by people who want to protect their local area from development (See Dear 1992). NIMBY arguments are prevalent over developments such as prisons, government housing, or those associated with pollution such as waste management or land-clearing. The person I talked to on the plane was concerned with being told 'what to do' and development becoming monopolised in Tekapo.

noticeable resentment actually in the town. It was kind of those up in the ivory tower and we're the townspeople type thing'. (Chad)

There was broad support for the designation of a dark-sky reserve nationally<sup>7</sup>, and yet, evidently, its implementation still caused local confusion. Community outreach is an integral requirement of IDA programs. To what extent this has been effective outside the astronomical community is uncertain. There have, however, been attempts at raising awareness and promoting the Aoraki Mackenzie Dark-Sky Reserve locally. The Starlight Reserve Working Party hosted an International Starlight Conference in June 2012 to promote and coincide with the reserve's designation<sup>8</sup>. The conference focussed not only on the technical aspects of scientific research on stars but also on legal, political, environmental and cultural themes of the night-sky, stargazing and tourism (Aoraki Mackenzie Starlight Reserve Working Party 2012, p. xi, pp. 78-80; see also The Royal Society of New Zealand 2012). One astro-tourism company runs a national competition inviting school students to upload three-minute speeches to YouTube on astronomical topics (Aoraki Mackenzie Starlight Reserve Working Party 2012, p. 69). Chad described how his company were involved with local schools, getting students to complete projects that identify compliance with the lighting ordinance as a form of community outreach. Tekapo is gradually coming to embrace celestial tourism on a number of different levels, actively seeking to promote itself in astronomically themed ways. For example, a large sundial is under construction which is the centre piece of a planned region-wide model of the solar system (Figure 10.5). The sundial is located in the town's foreshore reserve (adjacent to the main street) and different planets and points of interest are to be scattered around the region.

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<sup>7</sup> Letters of committal were provided by the Royal Astronomical Society of New Zealand; the Mayor of Mackenzie District Council; the University of Canterbury; the Aoraki Mackenzie Starlight Reserve Working Party; local and regional tourism boards; the area manager of New Zealand's Department of Conservation; and Margaret Austin Chair of the National Commission for UNESCO NZ (Aoraki Mackenzie Starlight Reserve Working Party 2012, pp. v-ix). The Starlight Reserve Working Party was established in 2009 by the local tourism and development trust, which is a body within the Mackenzie District Council (Aoraki Mackenzie Starlight Reserve Working Party 2012, p. xi). The application process gained national media attention, the support of three former prime ministers, Christchurch airport, national energy companies, chambers of commerce and the national Department of Conservation (Aoraki Mackenzie Starlight Reserve Working Party 2012, pp. 80-90).

<sup>8</sup> This was the third such international conference, with previous iterations being held in the Canary Islands, Spain, in 2007 and 2009.





**Figure 10.5** Tekapo's sundial, the centre of the 'solar system', under construction, June 2013 (Source: Author)

Beyond the politics of designation and ongoing reserve management, I turn now to my experience of astro-tourism, the Aoraki Mackenzie Dark-Sky Reserve, and Tekapo.

## 10.4 Dark-sky tourism: subjective experience of the Aoraki Mackenzie Dark-Sky Reserve

I travelled to Tekapo and Aoraki Mackenzie in May/June 2013. While there I took both day and night tours with a local astro-tourism company. I kept a diary during the stay and those thoughts are collected here. As such I was involved in participant observation while in Aoraki Mackenzie. In participant observation 'the intent is to gain added value from time 'in the field' and to provide a descriptive complement to more controlled and formalised methods' (Kearns 2000, p. 193). My subjective experience of dark-sky tourism is interpreted here to reveal the negotiation of the virtual and the actual.

### 10.4.1 The night tour

During the booking process and in communication with the local tourism company I was repeatedly reminded that departure times for the tours are subject to change without notice. Clouds are perilous to the dark-sky tourist. I was given a window of time for when my tour may leave and it was my responsibility to check in with the office for any changes. There was a total

preoccupation and anxiety around weather for the tour organisers and participants. Although Tekapo was chosen for an observatory due to its high annual percentage of clear skies, it is an alpine region. Weather can change radically with very little notice. One tour operator mentioned that they have had cases where the weather has changed from perfect to dismal between meeting participants in the town and the 15 minute bus ride to the summit. Weather changes have resulted in tears, anger, and near total break downs at the Observatory. In Chad's words:

I think it will ultimately be difficult for those who are promoting dark-skies because it's dangerous, you know... because people just break down in tears... when it's snowing... or raining... There are no controls but they've come on a big journey all the way out here... it's just too much for them, they just break down and you think, wow, that's when it really means something.

Refunds and guarantees are contentious. The guides issued the disclaimer repeatedly: 'weather can change at any moment, there are no guarantees'.

Half way up to Mt John the bus driver turned their headlights off to avoid distracting telescopes. This was unnerving and prompted gasps from the tour participants. The driver had obviously grown accustomed to navigating a winding, unmarked road up the mountainside by the shadows and shapes of bollards –it definitely added to the drama of the experience. Technologies that are used to give access to the summit of Mt John include innovations that allow human access to the night without polluting the night-sky. Glow-in-the-dark tape indicates access points, designates smooth paths from rocky edges, and directs tourists up and down steps. I was given a red-light torch on arrival. This spectrum of light is least disruptive to the telescopes. The small hand-held red-light torches are the size of a key-ring and, solar charged, making use of both the sun's energy and allowing negotiation of the dark. Short, sharp flashes of light improve balance and do not detract from 'night-eyes' or from the other senses that begin to be honed in the absence of sight. These are practical applications of technologies that assist the negotiation of darkness, but not at the expense of the night-sky.

Social interactions changed in darkness. Throughout my research, I have sought to feel more comfortable in darkness, to resist the impulse to turn on a light, and to try and ignore customary feelings of danger or uncertainty when it becomes difficult to see (cf. Edensor and Falconer 2014). Nevertheless, exiting the bus, the first 15 minutes at the observatory were comical. Many people found it hard to balance. There was lots of bumping into each other, followed by quick apologies, rolled ankles and heads bumped against door frames and

telescopes. One young participant on the tour kept thinking I was his father (we were a similar size and wore similar hats). He kept siding up to me to whisper questions or make comments only to realise his mistake and jolt away in panic. It took 10-15 minutes for my eyes to adjust and feel comfortable negotiating darkness.

The guide began his welcome address theatrically by saying: 'I can see a lot of you are looking up at me. Stop it. You're not going to be able to see my face, you'll pass me in the town tomorrow and not realise who I am. You don't need to be polite. Look up there instead'. We not only needed instruction for safety, but for how to act attentively and politely in unfamiliar darkness. The guide followed his instruction by shooting a green laser-pointer into the sky. It marked precisely the area of the sky he wanted us to look at. The green laser was our focal point as we visually toured the stars. We were taught to correctly identify the Southern Cross, were shown a number of clusters including the Jewel Box and Omega Centauri, the Milky Way and the large and small Clouds of Magellan. Such constellations were so bright they appeared as wisps of cloud. After a tour with the naked eye we rotated between different telescopes that illuminated colours such as red and green in the Jewel Box cluster, and clearly revealed the rings of Saturn.

As we toured the night-sky we were told distances between constellations. The magnitude of astronomical statistics was overwhelming. The distances between stars and galaxies in light years were met with 'oohs' and 'ahhs' from my fellow tour participants. The tour very quickly became a discussion about astronomy. Many budding astronomers asked questions of which they obviously knew the answers, but took the chance to show off their knowledge among a convivial audience. Small talk ensued between guides and tourists. Questions were asked about the demands of shift-work in the astro-tourism industry. Some found the night-shifts a privilege, especially to be able to see the night-sky in a location such as Tekapo. Others found the shifts undesirable. The mystique surrounding the silhouetted tour guides dropped when they admitted they weren't researchers at the facility, but were similar amateur astronomers. One guide admitted that this was just his job, and he that had no interest in astronomy outside of work. I visited during winter but in the summer months the darkness is not suitable for viewing starts until 11pm, creating further difficulties for shift-workers and tours. Guides mentioned they often receive complaints and cancellations in summer, because it simply gets too 'late' in the night.

The tour confirmed how the ongoing goals of the reserve aim to comply with astronomical research. Yet, there is a huge difference between requirements of darkness for astronomical

research and the experience of the night-sky to the naked eye. The telescopes on Mt John are hundreds of thousands of times more powerful than our eyes. Once my eyes had adjusted to the darkness, car headlights passing through Burke's Pass, at least 20 kilometres from Mt John were dazzling and disorientating. It gave me a clear sense of how detrimental those lighting effects could be to instruments much more powerful than our eyes.

Also part of the night-time tour at Mt John was a resident astro-photographer. Astro-photography drastically transforms the night-sky (Figure 10.6). Spectrums of light produced in photographs portray vibrant reds, purples, and blues. They appear as if the sky is literally exploding above one's head. Such images are used to advertise reserves and the IDA. The images capture the imagination, but are far removed from what the human eye can register. For cameras and telescopes, the location of the observatory makes a drastic difference, for the naked eye this difference is far less dramatic. Humans can only see the stars in thousands, telescopes are privy to billions.



**Figure 10.6** The sky over the night-time tour, transformed through photography, Mt John (Source: M. Yanagimachi)

The night-time tour certainly captured the imagination of participants. The distances in light years between earth and stars, the unfathomable scale and age of the universe, prompted imaginative responses. I overheard lots of speculative comments about the possibilities of new

planets, alien species, and what rivers, oceans, mountains and forests might look like in other galaxies. I wondered why this experience didn't prompt the same imagination about issues here on earth. Perhaps I had an unrealistic expectation of tourists on holidays, who unlike me, were not enmeshed in a research project rethinking day and night. In the words of IDA (2013, np.), those 'without the experience of a starry night miss invaluable opportunities to speculate about larger questions and to learn about the environment and larger world'. The responses I overheard, and conversations in which I participated, seemed to have less relevance to worldly concerns. In this sense, my view was unusual, framed by the lens of transduction. I was searching for the emergence of the virtual – not only away in the deep corners of space, but here on earth, in Tekapo.

Rotations between telescopes continued for at least an hour. It was terribly cold on the mountaintop. Heads were huddled down trying to stay warm between turns with the telescopes. Once back on the bus, conversations I overheard changed quickly, to dinner plans, accommodation arrangements and the Lord of the Rings tours people had booked for the next day - from contemplating the universe to other more *worldly* pursuits.

#### 10.4.2 The day tour

The day-time tour ran by the same company was stretched in contrast to the night. I was shown around Tekapo's local landmarks such as the church, the dam, and a small holiday village without electricity on neighbouring Lake Alexandrina. I was taught about the area's grazing heritage and contemporary conservation issues, and then taken up to the observatory.

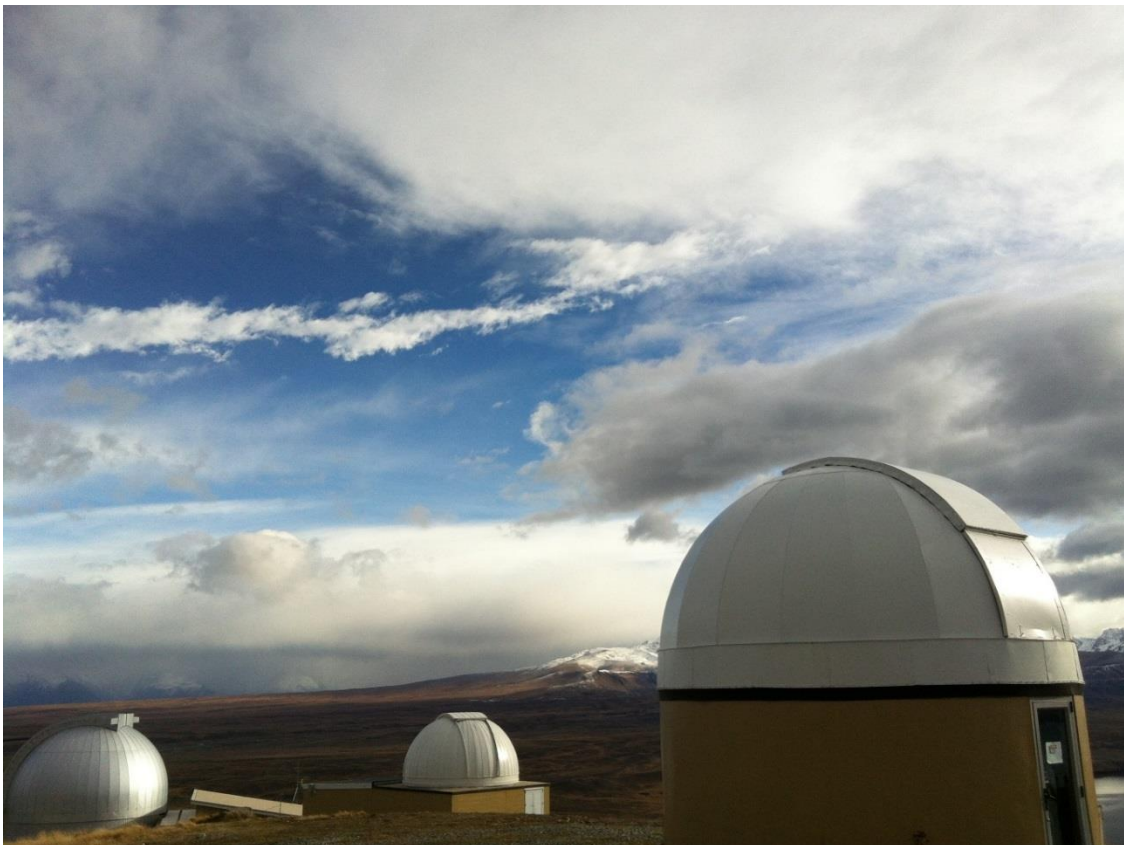
Touring Mt John during the day was a less stimulating sensory affair. I was shown the major telescopes and research offices up close, given they were not being used during the day. During the night-time tour I was one of thirty-two participants. During the day I was by myself. During the summer months the night-time tours were said to swell into the hundreds per night. I recognised the guide's voice from the night before, but not his face. He was correct that his appearance was completely different to what I had imagined. He tried valiantly to enliven the day-time tour as much as possible. That is, until I explained my research was interested in how we understand day and night in different contexts. He subsequently admitted that there was considerable effort being made to make day-time tours more interesting. As yet though, it didn't seem to be working.

I later asked Chad during our interview if different sorts of people chose the day-time tour or if many people do both:



People go for the night one. I think...for many, be it through schooling or just, you know...is that the stars, astronomy, everything is night. During the day? No way... but I think slowly they're beginning to realise... the sun is actually a star. And that is a surprise to some people believe it or not! And the moon can be up there during the day... I think the daytime one is where the best potential is because young astronomers can't stay up at night past 11 o'clock... it's way past their bed time and I guess with people staying together there will be a time at which accommodation is limited, you can't find a place that stays open, or they've booked something else... so how do you still capture an imagination during the day?

Notwithstanding the lack of popularity of day-time astro-tourism, the café on Mt John is busy during the day. It has 360° views of the Southern Alps and of Lake Tekapo (Figure 10. 7; see also Aoraki Mackenzie Starlight Reserve Working Party 2012, p. 4). Lonely Planet (2014, np.), the well-known publisher of tour guides, has described it as 'quite possibly one of the planet's best locations for a cafe'. Tourism bodies increasingly see the Aoraki Mackenzie designation as promoting the area's daytime beauty (Aoraki Mackenzie Starlight Reserve Working Party 2012, p. 87).

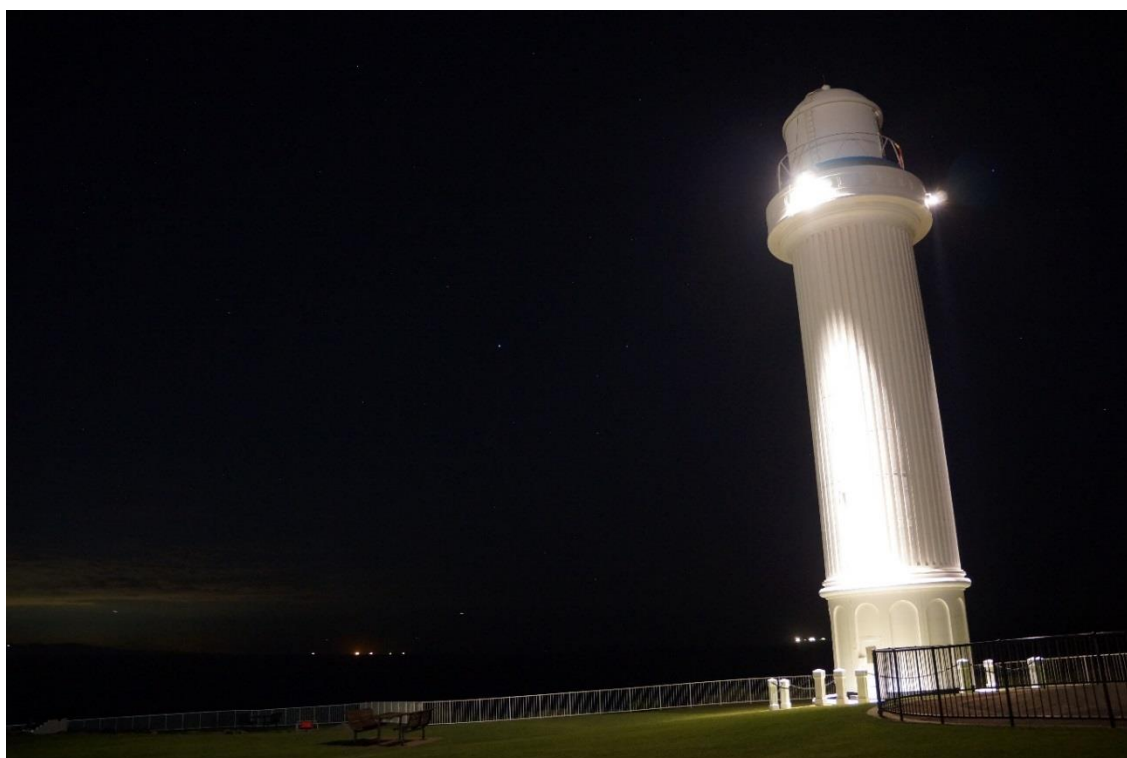


**Figure 10.7** Mt John Observatory during the day (Source: Author)

Attempts to establish an astro-tourism market during the day invert the concerns that have driven night-time economy policy and planning (Chapter 5). Rather than seek to unlock the economic potential of the night, astro-tourism's problem lies in making day-time hours appealing for tourists. As with night-time economy policies, attempts to boost 'out of hours' commerce require a shift in people's rhythms, or in their ideas about appropriate and desirable behaviour across the hours of the night and day.

#### 10.4.3 Tekapo's diurnal, nocturnal and crepuscular sky

In Tekapo I gained a sense of how awe-inspiring gazing at the night-sky can be. I was on a trip away from my usual quotidian routine with the sole purpose of viewing the night-sky. However I think this is equally stimulating anywhere—to take the time to sit and watch the sky change hue during crepuscular hours and transitions. It was something the impending trip had inspired me to do in Wollongong before I departed for New Zealand (Figure 10.8). In so doing, I could recognise light pollution from Sydney, some 80 kilometres away, which I had never noticed before. Seeing Sydney from this vantage point would be far more difficult during daylight – testament to the scale of light pollution that major cities emit.



**Figure 10.8** Wollongong's night-sky (Source: Author) Note the glow on the horizon is Sydney's light pollution

In Tekapo, I found it difficult to determine where my interest specifically related to the night-sky. I found stargazing to be no less stimulating from the lower elevation in town than Mt John. The area is stunning, not only for its star gazing, but for cloud formation, mountainous surrounds, wide open vistas and diurnal and crepuscular skies (Figure 10.9). 'Looking up' is a practice that has stuck with me since returning from Tekapo. Visiting the Aoraki Mackenzie Dark-Sky Reserve does prompt a greater awareness of the sky, something which is relative to different cultural and geographic contexts and locations. This crepuscular place provided an experience that subsequently *re-enchanted* my perception of the diurnal, nocturnal and crepuscular sky (cf. Woodyer and Geoghegan 2013).



**Figure 10.9** Tekapo's crepuscular sky (Source: Author)

### 10.5 The disalienating night-sky

There is a close connection between astronomy and the dark-sky movement. This is particularly evident in Tekapo's historical context considering the presence of the observatory and decades-old restrictions on lighting. Beyond the connection to astronomy, IDA also argues for the importance of the stars for other reasons, ranging from health to heritage. The dark-sky movement argues that the loss of the stars has an impact on the human psyche deeper than we can imagine (Chapters 1 and 7). IDA (2013, np) argue that:



A lost view of the stars extinguishes a connection with the natural world and blinds us to one of the most splendid wonders in the universe. Children who grow up without the experience of a starry night miss invaluable opportunities to speculate about larger questions and to learn about the environment and larger world.

Through implementation of reserves, IDA sees itself as overcoming alienation of humans from the dark-sky. The Aoraki Mackenzie Dark-Sky Reserve is an example through which to interpret such a process of actualising disalienation. Astro-tourism operators in Tekapo envisage themselves as integral to such a process. The guides I spoke to prior to and during my visit saw themselves as ‘gatekeepers of the stars’, with a role to play in connecting people to the night-sky. As Chad (email correspondence 28/05/2013) said:

It is one thing to admire and study the firmament on a personal level, but it’s a rather life changing experience to serve as a conduit through which the public may be awakened to, reunited with, inspired by, and encouraged to explore that same celestial realm.

This sentiment was echoed by other stakeholders in the region. For example, Tim Hunter (Chief executive of Christchurch and Canterbury Tourism) said that the recognition as a dark-sky reserve would, ‘help us attract many more citizens of the world to our region to experience a dark sky experience that is memorable, humbling and uplifting for the human soul’ (quoted in Aoraki Mackenzie Starlight Reserve Working Party 2012, p. 87). In such responses, the night is viewed as common heritage across cultures and continents (Chapter 1; Dewdney 2004, p. 2-3). Aoraki Mackenzie stakeholders see themselves as facilitating a process of disalienation that reconnects people with the sky.

Such disalienation is significant, because experiences of the night-sky are relative. I personally did not get a sense of the night-sky being drastically different to other places I have lived. On the night-time tour, a bright object passed across the sky as we circled amongst telescopes on the freezing summit. Having grown up in rural NSW and seeing this kind of object multiple times, it was obvious that this bright light was a satellite. For many in the group, however, the object startled them. One participant shrieked thinking the object to be a UFO.

Edensor (2013b, p. 456) described a comparative experience of the night-sky in a northern hemisphere context. Visiting Galloway Forest Dark-Sky Park in Scotland he said:

The infinite, dispassionate play of innumerable stars and galaxies was somewhat overwhelming and a source of wonderment, especially given their unfamiliarity to me

because of the impossibility of witnessing a night sky such as this in most areas of the UK.

Geographical variability in starlight and dark-skies was acknowledged by Chad. Indeed, when tourism began at Mt John in the late 1980s it only found traction with a Japanese market: 'Twenty years ago, it was only for Japanese... because the reaction initially was from more of the European, you know, Western [perspective]... stars, why would you pay to see stars? Everyone has stars'. By then, however, highly urbanised Japanese society had lost their everyday ability to see the stars. Japanese tour operators continue to make a feature of the night-sky tours as a highlight of packaged holidays to the South Island of New Zealand. One recent survey indicated that over 70% of Japanese tourists listed stargazing as one of the main reasons for visiting the country (Aoraki Mackenzie Starlight Reserve Working Party, p. 63). Dark-sky reserves such as Aoraki Mackenzie are thus crucial in raising a 'consciousness of alienation' for people from cities, regions and nations where dark-skies are polluted.

Beyond different cultural and geographical appreciations of the stars, alienation/disalienation was also generational. Chad argued:

From the European side, it's interesting with the older generation because they can reminisce about times in which there was stars... and you'll find them kind of a bit nostalgic... and so a trip down memory lane because of their memories of the dark-sky, you know... or from blackouts... for some people in the war there were blackouts and stuff. It touches a feeling, that immediate trigger...

In Chad's experience he found this markedly different for younger generations:

For the young ones I think it's an awakening. I feel you get a couple of guys like 'stars...yeah...yeah' kind of a bit reluctant. But they'll get up there [Mt John]... a number of times people have said that it was really interesting... that was fascinating, they're beautiful.

Such inexperience of the night-sky was seen as an opportunity to educate. Chad was surprised by how 'unaware', or alienated, some people were of some basic concepts about the sky above our head:

We had a Dutch girl swear to us the moon was only ever a crescent in the sky in the Netherlands, and it's great ... to have that platform from which you can begin to expand horizons.

In a global context of increasing alienation from the night-sky and cyclical day and night, reserves such as Aoraki Mackenzie are crucial crepuscular places in which to change peoples' understanding of day and night, light and darkness – and to begin a process of disalienation.

### 10.6 Aoraki Mackenzie Dark-Sky Reserve: what can we learn for the virtual?

The challenge for IDA and other dark-sky activists lies in translating the experience of crepuscular places into action. Ambition for such action is often modest. In IDA's (2012a, p. xi) words, 'one bulb, one fixture, one backyard at a time'. But how might the dark-sky movement help to initiate the change envisaged in this thesis – becoming crepuscular? Being in this crepuscular place did prompt me to look up more, to appreciate the sky and its changing rhythms and hues. For some too, it is a radically different experience relative to their previous night-sky experiences. The challenge lies in extending that experience from astronomical fetishism, to a critique of urban excess, and a focus on fulfilment of everyday life.

The dark-sky movement currently depends on the astronomical community, and needs to galvanise broader awareness across those urban communities that only ever see the stars in the thousands, not the millions and billions. From a place like Tekapo we can ask renewed geographical questions around scale, population size and density – and above all remoteness. How and where is it possible to extend the lessons from the context of Tekapo to other towns, regions and cities?

Although Tekapo has a long history of controlling light pollution, dark-sky preservation proved to be contentious, or at least confusing, for a town of 200-300 people (Meier 2013). Such issues would surely be exacerbated in areas of higher population, or, in areas *without* a stakeholder such as the observatory, with a vested interest in restricting light pollution. The darkness of Tekapo that assisted designation as an IDA reserve has been reliant on the control of lighting enacted decades ago. This is certainly fortuitous for Tekapo's tourism industry now. Tekapo's lighting ordinance shows that efficient, disalienating crepuscular technology *is* possible. However questions remain about the political will within other regions or cities to overhaul their existing technology and infrastructure.

As the Mackenzie Region continues to develop economically, it will be important to track how increased activity and diversification will impact or strengthen the observatory and dark-sky tourism. Increased development and growth in the area could potentially lead to increased light pollution if not carefully managed. Prospects for development in Tekapo therefore potentially confound the night as frontier thesis (Melbin 1987) in which humans illuminate the

night excessively as activity increases after dark. Tekapo decision-makers will have to negotiate a deep tension that further economic activity and development may threaten the very darkness that gives the place its distinctiveness and which opens up new commercial possibilities. But so too, Tekapo could be a place to contest the notion that development, by necessity, is conflated with light pollution.

Access to the stars is becoming highly commercial, which brings the imperative to protect profits. One example that grounded this for me was parking restrictions in Tekapo (Figure 10.10). It might seem trivial to highlight this as an example of the rigidity of day and night. However, 'No parking overnight' signage across the shores of the lake restricts camper-vans parking and spending the night near a township with glorious views and within the dark-sky reserve. This kind of activity is actively discouraged. The 'appropriate' way to 'enjoy the stars' is to pay for accommodation or tours in the town.



**Figure 10.10** No parking overnight, Lake Tekapo's shore (Source: Author)

In the context of this thesis then, the case of Tekapo's regulation of darkness is not a radically different relationship to the cycle of day and night envisaged in becoming crepuscular. Nevertheless, this crepuscular place *is* virtual in that it is dedicated to celestial encounters. The designation of the Aoraki Mackenzie Dark-Sky Reserve has seen broad cooperation between a number of stakeholders on a local, regional and national level working to ensure the quality of

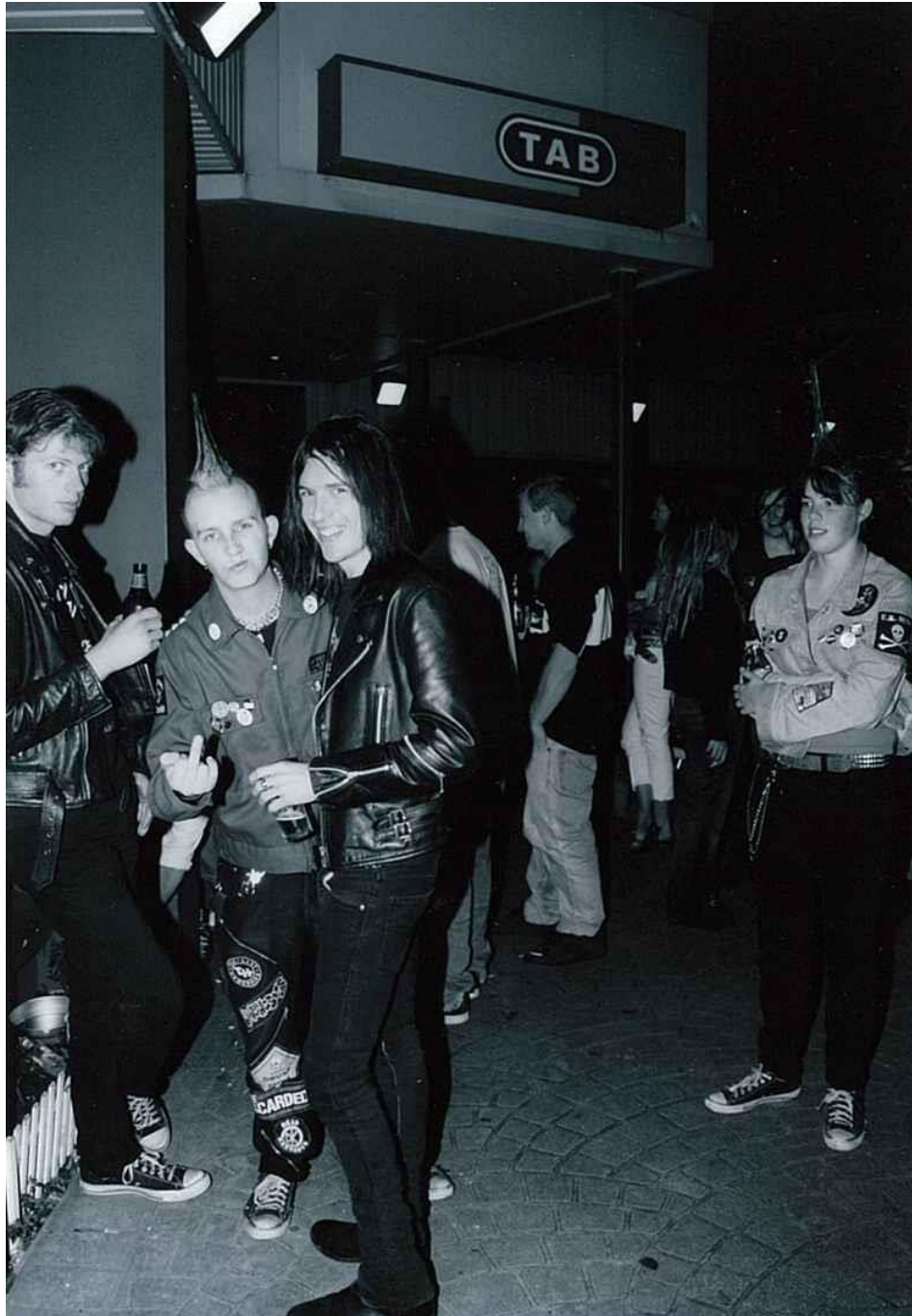
the dark-sky. Such protection of darkness is virtual in that a radically different rendering is not only envisaged but enacted, motivated by the desire to disalienate the human relationship to day and night. Yet the Aoraki Mackenzie and Tekapo also remain contradictorily actual. Private property and the imperative for growth remain preeminent. What makes Tekapo and the dark-sky reserve significant is the way in which this virtual is enacted within an actual town and region with its own history and heritage, its own policy and planning, its own culture and economy. Through extensive cooperation, the designation of Aoraki Mackenzie has been a process through which the *virtual* has in some slight ways become *actual*. A rendering in which the night-sky is protected and valued is written into local legislation and has garnered widespread, although not unanimous, support. So too, such values have been embedded in the material fabric of the town. It may not be a complete, radically different conceptualisation of day and night that this thesis ultimately envisages, but it is one of the clearest examples where renderings of day and night are subject to significant concrete change. Tekapo is a vanguard crepuscular place where the virtual and the actual jostle for prominence.



## Chapter 11 – Coda: in conclusion, an opening

This thesis has been a crepuscular expedition through day and night's many meanings and renderings. To bring this project full circle, I will end where I started: the Oxford Tavern in Wollongong. Figures 11.1 and 11.2 depict the Oxford during the night and during the day. These photos are not the night and day of a single 24-hour cycle, but a night featuring the Oxford at its height of success and popularity, and a day featuring the material remains of the Oxford, after its closure, but as a venue devoid of the social and cultural life that once inhabited it.

These photos illustrate a legacy of daycentrism. Figure 11.1 depicts what was the heart of Wollongong's punk-rock subcultural scene. As one of the scene's regulars described it, 'the Oxford was the only place in Wollongong where we felt any sense of belonging, any sense of safety, the only place where a group of misfit, skate punk kids could just be' (Gallan 2013, p. 11). But this 'eclectic freakland' was not recognised as part of Wollongong's cultural precinct plan. The Oxford eventually died as a result of a failed redevelopment project in down-town Wollongong in which *nocturnal* cultural expression had no place in the daycentric city.



**Figure 11.1** The Oxford 'before', circa 2004 (Source: Ian Laidlaw)





**Figure 11.2** The Oxford 'after', 2012 (Source: Author)

What remained of the Oxford was boarded up, an abandoned courtyard and pub gathering leaves and dirt (Figure 11.2). In the years following its closure, I would often see discarded pizza boxes and empty beer-cans that had been tossed over the fence – disrespectful littering, or mementos, comparable to flowers left by a loved one's grave? Such was the Oxford's appearance in the light of day: a decrepit site, a dead-zone in Wollongong's city-centre. The irony is, that in pushing nocturnal vibrancy to the margins, what was left after the venue's closure was a block left abandoned and unused throughout both the night and day. As this thesis has argued, day and night are co-constitutive. One does not exist without the other.

What made the Oxford an ideal starting point to interrogate the binary of day and night was its marginal status when compared to Wollongong City Council's daycentric Blue Mile Vision,

discussed in Chapter 2. Here, multiple renderings of the day/night binary influenced the space and place of the Oxford. Although the venue was marginalised by daycentrism, so too was its marginal status valued by the scene's participants. As this thesis has argued, bringing binary critiques to bear on day/night does not entail resolving such a dualistic tension evident in the case of the Oxford. Rather, a critical reading of day and night helps identify the multiple ways the binary is put to conflicting ends, where its untroubled presence can reveal social structuring and ordering, and where dualisms of the binary are also valued. Identifying *daycentrism* may have implications for the Oxford's status within Wollongong. It can help explain how the night, as a neglected half of the binary, was undervalued in city visions. But this thesis has ultimately not sought to resolve the binary of day and night to remedy cultural policy and planning. Instead, I have dwelt on the tension between night and day's dualisms. From humbler beginnings at the Oxford Tavern, this thesis has taken concerns of day and night and extended them much further, to some fundamental considerations of living on an orbiting, rotating planet.

This research has sought to extend calls within geography aimed at rethinking the night, light and darkness. Where formative discussions have disproportionately focussed on night, this thesis outlined the benefits of a conceptual, crepuscular framework for more deeply considering not only night, but the binary of day/night. Certainly there is a story to be told of the 'creature of the night' in Figure 11.1 – a mohawked, intoxicated, patched-up punk with his middle finger in the air. Indeed, we know much about the night and many such *creatures* have been thoroughly documented (Chapter 1). But without a consideration also of night's antonymic other – day – and day and night's entangled relations, the full story remains obscured. A consideration of day extends the story, from a punk in a pub during the late hours of the night, to the morning light and midday sun of the daycentric city. A consideration of both day and night has identified day's dominance, night's neglect, and the many ways in which we scaffold culturally constructed dualisms onto the asymmetric, perpetual cycle of day and night, light and dark. Such dualisms manifest within the city, such as in the Oxford's plight, but perhaps more crucially, they often foreclose possibilities in everyday life.

This thesis has sought a different path from much of the previous scholarship on night (Baldwin 2012; Palmer 2000; Shaw 2012; Williams 2008). Much of that previous scholarship focuses on the materiality of darkness and of the specificity of the urban nocturnal at the expense of deeper analysis of day-time and the human relationship to a cosmological force. Those researching a previously ignored urban nightscape – in terms of entertainment options, demographics, law and order – have filled important gaps, and their findings may have

significant value for planning, policy and research (see for example Hae 2012; Prior et al. 2012; Schwanen et al. 2012). The problem remains that in focusing only on rethinking the night, the deeper binaries and norms that structure everyday life and constrain its possibilities remain intact. At this juncture I have prioritised developing a conceptual framing for research on day *and* night rather than just contribute to documentation of the night's diversity. An emphasis on becoming crepuscular seeks to project this previously developed knowledge on day and night out towards future changing worlds and changing futures. Pushing the boundaries and understanding of night, including what and who inhabits the night in different ways, can certainly become emancipatory. But without a parallel discussion that opens up 'day' to scrutiny, any research agenda on night remains imbalanced.

Daycentrism provides a new vocabulary to invigorate research on day and night. While daycentrism means that day is favoured and legitimised, it also means that the binary day/night is restricted from emerging differently. In unsettling daycentrism, conceptual and empirical explorations of day and night have a contribution to make to critical geography. In light of economic and climate crises, and an ever uncertain and anxious world there is an enduring simplicity in the cycle of day and night. Day and night remain stable coordinates through which we can rethink urban and everyday life. In disalienating our relationship to day and night new modes of living and thinking can emerge as we more deeply consider our place on earth. Consequently, studies of the night ought not be isolated, because of, or defined by, their shared empirical focus. Rather, through a crepuscular reframing, day and night are revealed as relevant to enduring questions of critical geography: of diversity, of equality, of cities and earth systems, and of a fundamental relationship between humans and the environment on a local, global and cosmological scale. I have explored what day and night reveal about enduring geographical themes such as human agency (section 1.2), space, place, time, politics, technology, quotidian activity and rhythms (Chapters 4-10).

From the beer garden of the Oxford to the dark skies of Tekapo, this thesis has taken the reader on a journey through many different *renderings* of day and night. I have examined, amongst others, spatial, temporal, implicit/explicit, asymmetric, dystopian, metaphorical, urban, modern, historical and geographical renderings of day and night. An emphasis on renderings has allowed this thesis to work with the many contradictory qualities of night and day. Discussions have ranged from medieval Britain to ancient Egypt, from contemporary United States to Japan, from Muslims in northern Canada to astronomers on the South Island of New Zealand, from concerns around the night-time economy to those of light pollution, and from science fiction ecumenopoleis to the all-too-real murder of Jill Meagher in Melbourne,

Australia. Even still, the range is certainly not exhaustive. There remain many contradictory (and complementary) renderings of day and night to explore. An acknowledgment of diverse renderings is an important theoretical perspective to adopt for future discussions around day and night: the tensions and contradictions around different days and nights remain a fertile source of conceptual and empirical enquiry. This thesis has addressed such diversity as *productive* rather than *problematic*. Writing and thinking about day and night inherently involves negotiating contradiction.

Understanding the binary of day and night can certainly give greater clarity on the fate of an inner-city music venue such as the Oxford. But the explanatory potential of day and night does not remain limited to an urban night-time economy framing. A crepuscular framework has revealed how sleep, sunsets, star-gazing, light-switches, the sex industry, Reclaim the Night marches, Hopper's paintings, Borges' poetry, alcohol legislation, parenting new-borns, and glow-in-the-dark starpaths are each but one fragment of day and night's meanings in our lives.

Here the power of the binary of day and night comes into its clearest resolution through the lens of transduction. Transduction has helped to hone critical and theoretical readings of day and night, and to use that as a means of rearticulating everyday life. So too, the feedback of transduction has highlighted the facets of society that render our virtual aspirations impossible. A Lefebvrian sensibility averts becoming despondent in the face of such stasis. Between and beneath the steps of transduction (Chapters 4-10) have been some enduring 'Lefebvrian sensibilities': that disalienation must begin in everyday life; that a vision of utopia means the impossible and the possible exist together, we cannot know one without the other; and that urban society, the right to the city, the total human, and becoming crepuscular, awaits us. They exist in our midst – we just need the desire and the tools to begin seeing them.

Whereas we might ultimately envisage becoming crepuscular, our lives are currently circumscribed by dominant renderings of day and night. Such impositions – strict working hours; norms of sleep, rest and activity; male violence towards women after dark; urban transport systems built around peak hour commutes – contribute to the ongoing process of alienating human subjects. We are utterly alienated from each other, from everyday life, and certainly, from day and night. Yet, as Lefebvre (2008a, p. 184) argued, 'alienation is an ordeal that our era must undergo'. As such, contradictions and tensions between night and day's many renderings provide an opportunity to develop a consciousness of our alienation, to identify steps taken towards disalienation (no matter how obscure), and to draw together renderings that complement each other in the dialectical process of alienation/disalienation.

For it is only through an ‘immense effort of thought (consciousness) and action (creation)’ that we can begin to change, or in this case, to become crepuscular (Lefebvre 2008, p. 184).

There are nevertheless shortcomings in both a Lefebvrian sensibility and the method of transduction. Both are nobly centred on the desire to transform everyday life: to be more than just words, to more deeply provoke consideration of how we live our lives. But no matter how ambitious this project could be for promoting the transformative potential of day and night in everyday life, it ultimately remains words in a thesis.

Nevertheless, research and conceptual explorations remain ever important. As Chapter 9 argued, day and night is both lived and thought. The frameworks that have been developed around crepuscular spaces, moments, lives, technologies, politics, rhythms and places are all provocations that contribute to the overall argument of becoming crepuscular. So too, they are significant frameworks or avenues of research in their own right. Research on these crepuscular themes could be extended with historical, geographical, empirical, ethnographic and further conceptual research. Subsequent projects to rethink day and night could be pursued in many such directions. Some fruitful avenues have had to be curtailed in order to make this thesis manageable. For example, Appendix D – crepuscular others – suggested that research could more deeply trouble how our relationship to day and night affects and is affected by nonhuman others.

This thesis has taken seriously the more-than-human, cosmological forces of day and night, and sought to push the boundaries of what we, as humans, have come to think of ‘normal’ in our lives in response. An enduring criticism of this thesis may be that the ontology of the ‘human’ has remained too intact, and itself needs further troubling. Nevertheless, in this thesis, by seeking to disrupt a sense of the naturalness of day and night and our accompanying social norms, I hope to have begun a conversation that may ultimately provide space for diverse others, and other ways of being.

None of the crepuscular themes within this thesis – spaces, moments, lives, technologies, politics, rhythms or places – takes us all the way to *becoming crepuscular*. Moreover, nor should we expect them to. Diverse aspects and examples of the crepuscular elaborate different days and nights across divergent geographical and historical contexts. Becoming crepuscular challenges our very assumptions about day and night, and offers a chance to rethink our relationship to an enduring earthly cycle.

There can be no conclusion ere this thesis ends. Instead, there is only a becoming. Becoming crepuscular relies not on total resolution of the thoughts herein, but of an opening. An opening onto future days and nights.

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# Appendices

## A: Time-geography

This appendix reviews the specialist field of time-geography and describes where this thesis sits in relation to that work. Day and night emerged on the agenda of geographers with the advent of time-geography, particularly in the work of Murray Melbin's *Night as Frontier* (1987; see also Parkes and Thrift 1980).

When talking about time-geography we must acknowledge two distinct, but overlapping strands. The first was led by Torsten Hägerstrand at the University of Lund. Born out of the positivist tradition, Hägerstrand (1967) incorporated a consideration of time, which encompassed human movement and lived experience, into spatial models that sought to document the relationships between technology and landscapes. Particularly influential was Hägerstrand's sensitivity to the human condition (Pred 1977). Building on the work of Hägerstrand and his fellow Swedes, there has also been a second Anglophone strand (Parkes and Thrift 1980; Carlstein et al. 1978a; 1978b; Thrift 1977; May and Thrift 2001). In one foundational essay, Nigel Thrift (1977, p. 65) argued that time was neglected in both geographic theory and quantitative models. Without time, geographers could not adequately account for change – for example, across space, cultures, the built environment and the human life-course. Yet time, like space, could have multiple definitions. Advocates of time-geography compared indigenous, classical, scientific and contemporary conceptions of time. In cataloguing diversity they also explored what each conception of time could also tell geographers about space and place. In the words of Yi Fu Tuan (1978, p. 37):

Space, place and time are overlapping categories of human experience. Unless they are taken together the geographer's world will retain an air of unreality, abstracted from life as lived, which no synthesis confined to the facts of space and location can remove.

As the time-geography community grew in the 1970s, it became more than modelling both time and space together; it was considered by its proponents as having an alternative humanist philosophy that empowered geographers and social scientists to examine the interplay between individual experience and behaviour with the everyday and long term structural change of society (Thrift and Pred 1981).

Empirically and conceptually, time-geography explored temporalities such as centuries, urban and regional building cycles, circadian rhythms as well as the temporal distribution of crime, labour, and fear (for review see Parkes and Thrift 1980). Most relevant to this thesis is the work that theorised the 24-hour cycle (Melbin 1978; 1987; Buttimer 1976; Tuan 1978; Parkes and Thrift 1980). Contributing also to the humanist turn in geography, some of these examples focussed on rhythms and time that disrupted core/periphery and public/private interpretations of the city, including humanist and feminist critiques of suburban everyday life, then being ignored in mainstream geographic scholarship (Buttimer 1976; Tuan 1978). Such examples focussed on the structure of the working day across the 24-hour cycle, including commutes to and from work and the limits of gendered access to spaces and times of city life.

Time-geography helped to establish connections between geographers and other social science and humanities disciplines. Although geographers needed to pay closer attention to time, it was suggested other scholars should likewise pay closer attention to space – an idea captured in the phrase ‘spacing time and timing space’ (Carlstein et al. 1978a; 1978b).

Notwithstanding advancements in geographic theories of time and space, and the accompanying calls for interdisciplinary cooperation by ‘timing space and spacing time’, by the 1990s critiques were still made of the disconnect between time and space. Doreen Massey (1992, p. 77) argued: ‘The point is that space and time are inextricably interwoven. It is not that we cannot make any distinction at all between them but that the distinction we do make needs to hold the two in tension’. Massey’s was a threefold argument: in much scholarship there is an assumed distinction between time and space; that radical geographers challenging the dualism of space/time had inadvertently triumphed the spatial rather than the temporal; and that resolving the pros and cons of working with either time and/or space was unproductive. The task instead lay in understanding both time and space as co-constitutive.

In *TimeSpace*, May and Thrift (2001) departed from the foundation that there are multiple and diverse notions of social time (see also Nowotny 1992). The many ways we gain a sense of shared time are multiple and diverse. To make sense of diverse experiences and constructions of time, May and Thrift (2001, pp. 2-5) argued that attention needs to be paid to four interrelated notions that are all spatially constituted.

First, there are timetables and rhythms that help shape our sense of time. These can be on scales from the body to the universe – seasons and tides, to daily bus routes. Second, time is shaped and enacted according to a variety of systems of social discipline. These systems can be both secular and religious but rely on and take shape within space. If time-discipline is needed

to ensure a productive workforce, this could be appropriately monitored (historically) within spaces such as the office, factory, and field. Similarly, enacting 'work', 'home' or 'leisure' time becomes inappropriate according to the space in which it is enacted – for example spending time doing 'work' at home or on holiday. Third, objects become influential on our sense of time. We rely on instruments and devices to record or mark our passage of time such as sundials and wrist-watches. Others serve to alter our sense of both space and time such as telephones, satellites and internet broadcasts. Fourth, a sense of time is disseminated throughout a number of texts that 'translate' different conceptualisations of time. We are not privy to an *a priori* collective notion of time. Rather, a notion and sense of time is continually broadcast and disseminated as it continually evolves.

These four related aspects of timespace allow for description of radically uneven experience of time and space across the globe. They point towards the many ways that time and space can be conceptualised, but also acknowledge that any account can only ever be partial or incomplete. For May and Thrift (2001, p. 5):

The picture that emerges is less that of a singular or uniform social time stretching over a uniform space, than of various (and uneven) networks of time stretching in different and divergent directions across an uneven social field.

One contemporary example of the uneven distribution of timespace would be the urban timespaces of countries like India and Philippines where call-centre shifts correspond to the hours of business in Europe or the United States (Poster 2007; Tadie 2011). Call centres in such countries are a prime example of where the individual experience of timespace (and therefore day and night) can be drastically transformed through the global economy. This not only impacts on individual lives, but sees entire city suburbs transformed to accommodate a workforce with 'unusual' routines. Transport timetables, opening hours of the food industry and proximate residential areas are affected by such changes (Tadie 2011). In global call centres, employees' experiences of timespace are uneven when compared to the customers they service in other parts of the world and to other residents of their own city. So too, in such examples, the experience of day and night is altered.

It is worth elaborating where this thesis sits in relation to May and Thrift's (2001) four-fold schema. This thesis will serve as a text that translates a different conception of timespace (as they relate to day and night). Yet it is a text which also pays attention to the timetables and rhythms, systems of discipline, and object and instruments that all serve to inform our sense of timespace as they appear in day and night.





## B: Metaphorical renderings of day and night

This appendix focusses on the tendency for day and night to be rendered metaphorically. Such metaphors are often very familiar, for example, the day as 'light', or the 'new dawn' as a new beginning, and the night as 'dark', 'deviant' or 'defiant'. Put another way, across popular culture, religion and mythology, categories of night and day are selectively appropriated for rhetorical purposes. As I explored in Chapter 1, there are many different days and nights that can be described conceptually and thematically. Metaphors are one such example where particular elements of day and/or night are emphasised at the expense of others.

Metaphors have been previously explored by geographers in contexts such as of economic geography (Barnes and Curry 1992), space and time (Massey 1992), urban space (Merrifield 1997), sexuality and 'the closet' (Brown 2000), and politics (Smith and Katz 1993). As an integral part of expression through language, metaphors are widespread. Barnes and Curry (1992) argued that metaphors can take two forms. *Big* metaphors can become cornerstones of entire models, paradigms or approaches. *Small* metaphors, on the other hand, are merely spread throughout individual pieces of writing, equating to 'literary flair'. Both examples require an element of skill and sensibility. Clumsy metaphors are often obvious in their failings, while strong or subtle metaphors often go unnoticed.

In going unnoticed, strong metaphors have the ability to significantly influence perception. Merrifield (1997) argued that some metaphors need to be explicitly attacked, and some may be deemed more politically acceptable to a collective critical project. Merrifield (1997, p. 418, emphasis in original) therefore suggested 'What needs to be done... is to *translate* between different metaphors and vocabularies... between metaphors conveying intellectual theoretical knowledge and those of sensual experience and individuation'. The task, then, is not to deem metaphorical renderings wrong or false, but to interrogate their origins, understand how and why they are being mobilised and either refute or extend them.

For night and day, two 'big' metaphors are Melbin's 'night as frontier' and Palmer's 'cultures of darkness' (both reviewed in Chapter 1). Melbin's thesis was that humans were pioneering and colonising the hours of the night, in the shift to modernity, in the same way that Europeans settled America's expanding western frontier, particularly in the mid-19th century. Palmer's *Cultures of Darkness* (2000) is a metaphor for marginality, which he argued could be located in the temporal realm of the night during medieval and modern times.

Melbin (1987) and Palmer (2000) are complementary examples because they highlight two major preoccupations of research into the night – the night as frontier, the night as transgression. Melbin's work exemplified efforts to highlight the distinct genealogy of human endeavours in the night – an example of the teleology of night and day (Chapter 4). Palmer's metaphor instead explored the contradictory dichotomy of the 'night' (and its relation to day) as both a site of excessive ordering and liberation. Taken together they typify how research on night and day has a tendency to be rendered metaphorically. In order to rethink day and night attention should be paid to the way in which cornerstone theories (of the night, in the examples listed above) highlighting very particular qualities through metaphorical renderings.

In his original text, Melbin claimed his use of the frontier concept was not metaphorical. And yet, Livingston and Harrison (1980; 1981) critiqued Melbin's (1978) early explorations, by outlining a geographic critique of 'frontier' concepts. For example, geographers have had ongoing concerns that frontier metaphors erase indigenous populations from the landscapes and histories they describe (see also Howitt 2001). Rather than frontiers representing a division between wilderness and settlement, they often overlook the fact that indigenous populations were already present. So too, as Shaw (2012, p. 92) has argued, the emphasis on 'pioneers' as those agents who pushed the frontier tends to erase the contributions made by female inhabitants (such as wives, partners) and/or slaves to 'frontier' life. The frontier in and of itself is a metaphor open to critique and interpretations, and this is magnified when we also include untroubled renderings of night.

As such, particular qualities of the night, or the actors involved in its changing meanings, are triumphed over others. Palmer's metaphor also revealed such tendencies to emphasis limited aspects of night. The index for *Cultures of Darkness* (2000, p. 605) has twenty references to 'sodomy', three for 'sodomasochism', and yet zero for 'sleep', revealing a very particular rendering of what the night is and contains.

As a 'big' metaphor, Melbin (1987, p. 50) argued that the night as frontier, in principle, related to all of the globe. The danger of cornerstone theories erasing alternate renderings of day and night is evident in such a universal claim. Manu Joseph (2012), for example, has described the night-time economy of India as an 'island of modernity', from which police argue 'our daughters and daughters-in-law' need to be saved. Joseph argued that the night as an 'island of modernity' creates inter-generational disgust and tension. Such disgust and tension has led to excessive and violent policing of the night. As a metaphor, activity at night as an 'island of

modernity' highlights how the transition of humans into the night's frontier is one rendering that may be undesirable to other generations and cultures.

Day and night are also prevalent in 'small' metaphors. 'Small' metaphors of day and night infuse both academic and literary writing. The poetry of Jorge Luis Borges (2010) is diurnally, nocturnally and crepuscularly themed. In theorising day and night, it is worth noting the prevalence of metaphorical renderings to help distinguish between conceptual exploration and literary flair. So too, attention to metaphors reveals the way in which particular qualities of both day and night are triumphed over others.



## C: Implicit renderings of day and night

This appendix elaborates on an observation made in Chapter 1, specifically, the notion that some geographic literature is thematically focussed on night although it contains no substantive exploration of the underlying concept. To illustrate, here I elaborate on one example – Oosterlynck and Swyngedouw's 2010 article 'Noise Reduction: the post-political quandary of night flights at Brussels airport'.

Oosterlynck and Swyngedouw (2010) explored a freight company seeking to increase the number of night-flights arriving and departing from Brussels airport. A new 'political' age was announced in Brussels in 1999, they argued. The newly elected government announced itself as Belgium's first 'purple-green' government. Purple-green governance was heralded as the end of traditional left-right political antagonism, instead offering a new cooperative agenda that negotiated between the interests of markets, social objectives and environmental awareness. The efficiency of this 'post-political' model (referring to the blurred distinction between centre-Left and centre-Right politics in the post-Cold-War period) was tested by the socio-environmental concerns surrounding increased scheduled flights arriving and departing Brussels airport. Flights at night were most contentious. Oosterlynck and Swyngedouw used this example to explore the contradictions and tensions that surround the post-political model.

The freight company DHL sought to increase their number of flights and hours of operation in Brussels. DHL's business model relies on speed; they aim to deliver within 24-hours to anywhere on the globe. Hence night-flights allow their customers to send packages late in the day and still arrive at the intended destination by the next business day. DHL's intention to increase these flights saw the purple-green, post-political governance model put to the test. DHL was one of the most significant employers for the local economy, yet noise from aircraft was considered a nuisance to local residents. Environmental organisations protested. Negotiations over the schedule and flight paths were difficult to resolve. In the end, the reactions in Brussels saw DHL relocate to Leipzig. Leipzig's airport, outside of city limits, meant the socio-ecological disruption of night-flights was no longer problematic (Oosterlynck and Swyngedouw 2010 pp. 1583-91).

In what was an otherwise engaging and rigorous article however, the underlying notions of what day and night both are, and what they should ideally be, remained unexplored. From the perspective of residents and environmental activists the night appeared to be for quiet, peaceful relaxation in domestic spaces. The day was the legitimate, least intrusive time for aircraft operation. But the competing rendering, implicit in DHL's business model, was of the

night as malleable, needing to accommodate business and activity in the global 24-hour economy. Relocating to Leipzig's airport outside of city limits, was a way to resolve the deeper contradictions around day and night in the Brussels context. Ultimately this debate reached a stalemate where competing renderings of day and night could not find compatibility.

In emphasising instead the 'post-political', Oosterlynk and Swyngedouw focused attention on socio-environmental antagonism, rather than on clashes between dominant understandings of day and night. The question of day and night remained a subsidiary, 'lurking' concern. In contrast, this thesis argues that developing a deeper theoretical understanding of day and night is imperative. In much recent urban geographical scholarship, night is implicit, rather than the explicit focus.

## D: Crepuscular others

Chapter 6 discussed how day and night could be thought differently to enable human access to health, happiness and the right to the city. But what of the rights, health and happiness of nonhuman others? More-than-human perspectives consider divides between human and nonhuman as ontologically unsound. More-than-human is one example of thinking relationally in geography in which the world is not thought of as composed of ‘things’ with their own unique characteristics (Braun 2005; Cresswell 2013, pp. 218-260; Panelli 2010). Rather, things in the world are composed through relations and connections with others.

What would a more-than-human right to the city vis-a-vis day and night look like? Species and objects intricately weave through the cycle of day and night guided by their desires and instincts. Such examples include nocturnal animals hunting, the photosynthesis of plants, street cleaners, security guards, surfers or cyclists questing for favourable morning weather conditions, the homeless, automated lighting systems that can sense darkness, migrating birds, and ectothermic animals such as snakes that require the heat of the sun to control their body temperature. Thinking in a more-than-human framework offers a chance to consider all of these actors in a broader urban network and assess the way those elements are but one player interacting with the environmental/discursive/material renderings of day and night.

A consideration of crepuscular others is important, because our (alienated) relationships to day and night have profound effects on others. For example, excessive illumination of office towers disrupt the navigational instincts of migratory birds (Matthew 2001, pp. 16-17). Birds such as sparrows and pigeons become accustomed to urban nightscapes and bright lights. Migrating birds instead trust their instincts to follow light – which can be starlight, moonlight, or a distant dawn. At night, such instincts can often direct birds into an orbit around office towers until they collapse from exhaustion, often falling to their death. So too, animals such as sea turtles, salamanders and tree frogs have nocturnal instincts to move only under the cover of darkness (Ray 2008, p. 181). Our excessive practices of illumination can have disastrous effects on nonhuman others.

In other ways, our notions of what *belongs* in the city can become overt and intentional. For example, in Melbourne, Australia, nocturnal fruit bats which navigate the urban environment by smell often collide with power-lines thus disrupting the supply of electricity to human homes (Thomson 2010). After such incidents, these nocturnal natives are culturally constructed as ‘pests’ that require management or potential removal from urban environments. Conversely, in Austin Texas, bats become a tourist attraction during crepuscular

moments, contributing to a sense of place (Figure D.1). Bats are deemed to belong in such space and time whereas those in Melbourne are not.



**Figure D.1** Crepuscular bats of Austin, Texas (Source: Joy Ride Videos 2012)

As we share environments with other species that may be defined as either diurnal, nocturnal or crepuscular, the way in which one species or object inhabits a particular time and space can have relational implications for others. This thesis has not pursued crepuscular others in a more substantial way primarily because of its emphasis on human bodies, rhythms and politics. Nevertheless, it remains as open question once the binary of day and night is brought into critical dialogue: How might the future city of day and night be rethought and rematerialized differently by and for nonhuman crepuscular others?