The Normalisation of Cycling in Melbourne: Fostering a Transition in Practice
Mitchell Connolly
Statement of Authorship

THE NORMALISATION OF CYCLING IN MELBOURNE: FOSTERING A TRANSITION IN PRACTICE
by Mitchell Connolly

Thesis submitted as partial fulfilment of the requirements for the degree of Bachelor Urban and Regional Planning (Honours), School of Global Urban and Social Studies RMIT University
October 2015

This thesis is my own work containing, to the best of my knowledge and belief, no material published or written by another person except as referred to in the text.

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(signed and dated) Mitchell Connolly 16/10/2015

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Mitchell Connolly, Oct 2015

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Abstract

Cycling is seen today as a panacea for many problems facing cities in Australia and the rest of the developed world, including issues of increasing traffic congestion, increasing rates of obesity and volatile oil prices. As a result, governments are increasingly looking to encourage the growth of cycling as a mode of transport used as part of everyday urban life.

This thesis examined public interventions into cycling in Melbourne with the lens of social theories of practice, to judge the comprehensiveness of these actions and their likelihood of successfully moving cycling from being a minority mode of transport, to a safe, accessible transport mode for people of all ages and cycling abilities. By doing this, attention could be drawn to any gaps in current public policy, and recommendations could be made on how this could be addressed through further or alternative interventions.

The results showed that in inner Melbourne interventions into cycling are aimed at substituting cycling for journeys currently made by cars and to a lesser degree public transport, with the intention to eventually completing a comprehensive network, but with a focus journeys to work and, to a lesser extent, local shops, schools and other amenities.

The use of social theories of practice lens in examining interventions to encourage utility cycling was insightful, showing that generally, interventions being taken to increase cycling in Melbourne are directly normalising most of the elements that utility cycling practices are comprised of.

In particular, the focus on normalising the material element of infrastructure is good as it is vital to normalising cycling as a whole. However, there are a number of gaps, and cases where cycling is still being represented or promoted as a sporting activity.

Using social theories of practice to frame interventions also gave insights into how practices related to transportation more generally affect cycling, illustrating that normalising cycling is not a simple problem that can be solved by a handful of local government departments, but rather, requires co-operation across the whole of government.

On a broader scale, concepts of mobility itself are important in determining how practices such as utility cycling are going to be encouraged. Society’s expectation of high mobility, low-density urbanism and school choice, for example, increase the lengths of car trips and commutes, making cycling an uncompetitive practice with driving in many cases. Only by reversing these ingrained beliefs will cycling be more competitive with car travel and become a normal part of life for more people.

Overall, this analysis of interventions to normalise cycling has shown that public authorities in Melbourne are broadly taking actions that will effectively normalise cycling, but more attention need to be paid to ensuring that all interventions are consistent with utility cycling practices, and strengthened collaboration across government will be necessary to create more favourable conditions for the substitution of automobility with cycling.
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Introduction

Cycling is seen today as a panacea for many problems facing cities in Australia and the rest of the developed world, including issues of increasing traffic congestion, increasing rates of obesity and volatile oil prices. As a result, governments are increasingly looking to encourage the growth of utility cycling; that is, as a key mode of transport used as part of everyday urban life. Despite decades of pro-cycling policy and infrastructure investment from different levels of government in inner Melbourne, the mode share of utility cycling is still limited as a proportion of overall trips.

A range of factors contribute to the normalisation of utility cycling practices in cities, including the design and provision of infrastructure, which can be designed with a variety of different cyclists and cycling practices in mind. The high proportion of cycling trips in many European cities highlights the integrated nature of policy and practice to normalising cycling.

By framing the desired modal shift to the bicycle as a ‘transition in practice’, informed by social theories of practice (Shove, Pantzar & Watson 2012, Røpke 2009, Reckwitz 2002), this thesis will examine public interventions into cycling in inner Melbourne, drawing on some comparisons with cities that have successfully normalised cycling. By analysing interventions using a practice theory lens, insights can be gained into how interventions are likely to alter the practice of cycling, with implications for the resulting change in the number of people engaging in utility cycling. This is in contrast to contemporary policy approaches that often focus on changing peoples’ attitudes in order to influence their behaviour, excluding opportunities to change the underlying reasons for people making particular choices (Shove 2010, p.1274).

This thesis begins with a literature review that will demonstrate that the practice of cycling has changed as a result of different social, geographical and cultural context. Social theories of practice will be introduced as a theoretical framework for understanding this change. Finally interventions to normalise cycling overseas will be characterised using this framework, which will then provide the basis for analysing the capacity for policy in Melbourne to normalise cycling in the rest of the thesis. The thesis’ methodology section will justify the decision to use interviews and policy analysis of local and state government practitioners and policy documents, and will tease out key questions to be posed, based on the theoretical model of behaviour change based on practice theory.

The information collected will first be summarised and sorted in response to the key questions, before being compared to policy of the other organisations. A discussion of the results will highlight any gaps or discrepancies in programs to encourage utility cycling practices, and identify possible improvements that could be made based on the practice model of cycling developed earlier. Additionally, any revelations and observations that have come from the process of researching the topic will be discussed to conclude the thesis.
This literature review will summarise the social theories of practice approach to understanding change in human activity within society, and apply this to cycling.

Firstly, the history of cycling as a practice will be explored to demonstrate that its popularity and use has changed over time as a result of evolving social meanings and material elements. Next, the City of Copenhagen's interventions to increase cycling will be summarised, followed by a description of the idea of using social theories of practice to model government interventions aimed at behaviour change. Then, a description of contemporary tactics to "normalise" cycling is given, along with a sketch of the structure of bicycle governance in the state of Victoria.

Finally, a model for understanding the normalising of cycling will be presented, along with a table summarising the differences in compositional elements between normalised cycling practices, such as those practiced in Northern Europe, and non-normalised cycling practices such as those present in the Anglosphere. These frameworks will form the basis for analysing and measuring progress towards the normalising of utility cycling.

Cycling Practices today

The practice of "cycling" has many variants, and is done in many different ways as a result of differing geographical and cultural contexts (Aldred & Jungnickel 2014, p.80). Cycling can be a sporting and recreational activity, for example road cycle racing, BMX riding, mountain biking, bicycle polo or casual riding along recreational trails (Vincett 2008, p.20; Moreland City Council 2012, p.14). On the other hand, it is also a cheap, healthy, socially inclusive and environmentally friendly mode of transport that has numerous benefits for cities including reduced congestion, infrastructure costs and pollution (McClintock 2002, p.1).

In northern European countries, in particular the Netherlands and Denmark, cycling is a mainstream mode of transport for people of all age groups, genders and income brackets (Pucher & Buehler 2007, p.5). A complete network of quiet streets and physically separated bicycle lanes makes travelling to and from any destination feasible by bicycle, and journeys are often more direct and quicker than the equivalent car route (Pucher & Buehler 2007, p.21). The safety of the bicycle networks are such that even without mandatory helmet requirements, the fatality rate for cyclists is a fraction of that in the UK or USA (Pucher & Buehler 2007, pp.5-6). These European contexts are often referred to as having 'normalised' cycling cultures (Aldred & Jungnickel 2014, p.80).

This is in contrast to the way that utility cycling exists in most parts of the Anglosphere, such as Australia, the United Kingdom and the United States. "Car culture" is a dominant force in the shaping of urban life in these countries, with urban areas designed around the expectation of car ownership and resulting in car dependent populations (Aldred & Jungnickel 2014, p.79). Bicycles are primarily used in a sporting and recreational context: cycling has been found to be the fourth-most popular sporting activity in Australia (Australian Sports Commission 2010, cited in Law & Karnilowicz 2014, p.297). As such, cycling is commonly associated with these meanings, and utility cycling remains a minority transport mode (Aldred & Jungnickel 2014, p.84).

Although utility cycling rates are increasing slowly in Australia's capital cities, journeys made by bicycle still only make up roughly 1% of all trips made in the country, compared to 10% in Germany, Finland and Sweden, 18% in Denmark, and 27% in the Netherlands (Pucher & Buehler 2007, p.4). The percentage of all trips made by bike in Melbourne has increased by 0.7% over the past 15 years, compared to 15% in Copenhagen (City of Copenhagen 2005, p.7; Københavns Kommune 2015, p.4; Loader 2012; Pucher, Garrard & Greaves 2011, p.333).

Social Theories of practice

This section draws on social theories of practice to understand the conceptualisation of cycling as a practice and how this can inform a framework for analysing policy interventions to normalise cycling. First some of the recent literature explaining practice theory is explored, followed by an analysis of how cycling as a practice has emerged over time and the types of interventions that have shaped the practice in different contexts.

Theories of practice bridge the opposition of agency and structure, positing that individuals' agency and social structures are recursively related, which is the basis of Giddens' structuration theory (Røpke 2009, p.2491; Shove,
Pantzar & Watson (2012, p.3). Theorists such as Andreas Reckwitz identify practice theory as being a ‘subtype of cultural theory’ (2002, p.246), stating that ‘[practice theories] all highlight the significance of shared or collective symbolic structures of knowledge in order to grasp both action and social order’ (2002, p.250).

Giddens (1984, p.2) states that ‘[t]he basic domain of study of the social sciences, according to the theory of structuration, is neither the experience of the individual actor, nor the existence of any form of societal totality, but social practices ordered across space and time’. As such, practices can be identified as a ‘temporally and spatially dispersed nexus of doings and sayings’ (Schatzki, cited in Shove, Pantzar & Watson 2012, p.7). Reckwitz (2002, p.249) further posits that practices ‘[consist] of several elements, interconnected to one other: forms of bodily activities, forms of mental activities, ‘things’ and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge’. Shove, Pantzar and Watson (2012, p.23) simplify these elements into three groups: materials [‘encompassing objects, infrastructures, tools, hardware and the body itself’], competence [‘know-how, background knowledge and understanding’] and meaning [‘emotion, motivational knowledge’ and ‘symbolic significance’] (see Figure 1 below). They emphasize that practices, as entities, exist as ‘recognizable conjunction[s] of elements’ and that these interdependent linkages are only ‘sustained over time’ by the repeated performance of these practices (Shove, Pantzar and Watson 2012, p.7).

A Brief History of Cycling

Early bicycles such as the ‘penny-farthing’ required considerable skill to use, and were expensive and impractical. Their use, primarily by the young, thrill-seeking bourgeoisie men of urban Europe, was viewed by the broader populace as reckless, and as a way for the wealthy to literally display their elevated status (Watson 2012, p.492; Agervig Carstensen & Ebert 2010, p.27; Bijker 1997, pp.41-42).

The “safety” bicycle, with its two congruous wheels, arrived in the late 19th century, was far easier to use [a change in the competence elements], and its lower seat position made its use by women socially acceptable [a change in the meanings elements] (Bijker 1997, pp.93-94). Although it carried the connotations of sport and danger that were associated with its ancestors, gradually it lost this as more people began to use it as a practical mode of transport, particularly after the invention of the pneumatic tyre [a change in the material elements]. Cheap bicycles were imported en masse from the US and adopted by the working class, and cycling lost its bourgeoisie status. Meanwhile, the wealthy turned to automobiles, which were still highly unreliable and their operation required the tools, materials and knowledge to fix mechanical problems as they arose. A chauffeur/mechanic, employed solely to operate and maintain the car, was therefore a necessary prerequisite for car ownership, thus limiting this luxury to the very wealthy. As a result, driving and car ownership inherited the same connotations of danger and social status which were earlier associated with cycling (Agervig Castensen & Ebert 2012, pp. 32-33).

Agervig Castensen and Ebert (2012, p.32) note that ‘[d]ifferent European countries came up with different national narratives of the bicycle’; in the Netherlands and Denmark it was associated with liberal values and nationalistic enjoyment of the Dutch and Danish landscapes, while France and Italy associated it with competitive racing. While bicycle racing clubs were established in Denmark, these died out or changed their focus to touring as cycling became a normal mode of transport. In Denmark, Germany and the Netherlands the bicycle was associated with the empowerment of the working class (Agervig Castensen &

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Figure 1: The elements of a practice, figure adapted from Shove, Pantzar and Watson (2012, p.25)
In the early 20th century, Danish bicycle and motoring organisations co-operated to advocate for better roads and safer cycling facilities, which they saw as mutually beneficial outcomes. In the Netherlands, the constraints on foreign travel during World War 1 motivated the construction of a national cycle network, and a tax on bicycles re-introduced in 1924 legitimised and solidified the position of cyclists as key road users. As a result, cycling gained an institutional foothold in these countries (Agervig Castensen and Ebert 2012, pp.34-38).

Despite the popularity of utility cyclists across Europe, urban managers saw automobility as representing progress and the way of the future. Technological development had led to more reliable and easily-operated cars [a change in the material elements], and driving was therefore becoming far more affordable and practical for more people who didn’t have the mechanical skills required before [a change in the competence elements] (Shove, Pantzar & Watson 2012, pp.25-31). Shove, Pantzar and Watson note that “[d]evelopments like these proved vital: if driving was to become established as a normal practice, the necessary competences had to be mastered by many, and not just a few” (2012, p.41). Although bicycle usage didn’t start to decline until the 1950s, the structures enabling this transition were established in the 1920s and 30s (Agervig Castensen and Ebert 2012, p.39). As car use rose, cycling became a riskier mode of transport (Watson 2012, p.492).

Between the 1940s and 1970s, use of the bicycle for transport decreased dramatically across the western world as “[Cars became] progressively embedded through patterns of economic and suburban development and through the remaking of space and time in ways that demand[ed] and assume[d] a relentless logic of automobility” (Shove, Pantzar and Watson 2012, p.154). In the UK, cycling fell from being 13% of all journeys in the 1940s to 1% of those made in 1972, a reduction of just under 80% in real kilometres, and have hovered at these levels since then (DfT 2006 and Cabinet Office 2009, cited in Watson 2012, p.492). By the latter part of the 20th century driving was the predominant form of urban mobility, a mundane fact
of everyday first-world life. However, owing to the tradition of cycling present in the Netherlands and Denmark, cycling was considered in road designs, even during the boom in automobility (Agervig Carstensen & Ebert 2012, p.44). As a result, the Netherlands and Denmark also experienced a decline, but it was not as dramatic as in other countries.

It can be observed from the above history that the practice of cycling has changed over time and between places as a result of its constituent elements evolving. Figure 2 on the previous page summarises the changes described above that have shaped recruitment to and defection from the practices of cycling and driving. However it is important to note that this is only an averaging of typical trends in the Anglophone; the availability of the materials, competences and meanings that cause people to drive or cycle varies both within and between countries.

Since the 1970s, this decline in cycling has been reversed by many countries, in a conscious effort on the part of government to bring about a renaissance of urban cycling (Agervig Carstensen & Ebert 2012, p.40). Factors including the 1970s oil crisis, economic recession, the emergence of environmental consciousness, mass protest against automobility and record traffic fatalities and the lack of rapid transit systems in these two countries spurred urban planners to start to prioritise compact urbanism and modes of active transport (Agervig Carstensen & Ebert 2012, p.45-46; Silva et al. 2012, p.7).

Transition to a Normalised Cycling Culture in Copenhagen

Transitioning transport patterns in a large city does not happen overnight. As the following example of Copenhagen shows, a city where cycling is a dominant transport mode is the result of decades of incremental work. In Copenhagen, space formerly used for cycling had been redevoted to cars, and city planners in the 1970s were hesitant to change this back. They instead proposed creating bicycle routes through the backstreets, but this was rejected by the vocal pro-cycling movement, who were campaigning for the reclamation of space for bicycles on major streets, leading the city to start to construct separated facilities again (Jensen 1998). In more recent decades, the municipality itself has taken over from NGOs as the main promoter of cycling (Jeppesen 20, p. 74). Its “I Bike CPH” branding, a Copenhagen version of the famous “I Love NY” logo, is intended to associate cycling with the city’s identity and be an invitation to all citizens to cycle as part of city life (Agervig Carstensen & Ebert 2012, pp.49-50). This branding is used on advertising, most commonly posters on bus shelters, to encourage cycling (Cycling Embassy of Denmark 2012, p.23). The municipality directly engages with schoolchildren to teach them cycling and traffic negotiation skills (City of Copenhagen 2014, p.23). Several public libraries now also loan cargo bikes for free (Københavns Kommune 2015, p.21). The municipality distributes a welcome pack to new residents, including a bicycle map, gear and introduction to the city’s bicycle culture (Cycling Embassy of Denmark 2011, p.23). An event was held some years ago called “Businessmen on Bicycles” where a number of well-known Copenhageners were photographed wearing their everyday professional clothing on their bikes in the city. This was intended to show that cycling to work is no barrier to arriving looking stylish (Agervig Carstensen & Ebert 2012, p.49).

Most of the work the municipality does is in constructing bike infrastructure, and the City is still making improvements to encourage more people to cycle. Paths are being progressively widened to cater for the growing volume of cyclists, and to enable comfortable cycling at a range of speeds (City of Copenhagen 2011, p.11). Contraflow cycling lanes are being implemented in one-way streets, and new bridges and shortcuts are being created to make cycling an even quicker and easier transport choice. The creation of “cycle superhighways” where “green waves” of traffic lights allow an uninterrupted journey into the city makes travelling longer distances less stressful for commuters living in outlying suburbs (City of Copenhagen 2011, pp. 22-23). The City’s “Safe Roads to School” program focuses on establishing safe infrastructure linking schools so that parents are happy to let their children ride there (City of Copenhagen 2014, pp.22-23).

The practice of cycling in northern European cities continues to evolve, with the diverse range of bicycles now available making cycling an option for journeys that can’t be made on a regular bike; e-bikes have made it easier for the elderly, infirm and those with lengthy commutes, and cargo bikes have enabled people to transport larger loads or children (Watson 2012, p.495; Agervig Carstensen & Ebert 2012, p.44). A quarter of cargo bike owners in Copenhagen use them as a direct replacement for car ownership (City of Copenhagen 2011, p.14).

It is acknowledged that Copenhagen’s cycling strategy does not occur within a vacuum, and that many other factors play a role in normalising cycling. For instance, beyond the scope of the strategy, increasing population density is seen as a driver of increasing cycling in the city (City of Copenhagen 2011, p.15) and the development of new
urban areas within close proximity of the city centre is also touted as something that will encourage citizens there to choose to cycle (City of Copenhagen 2011, p.p. 10-11). The advantage of inner city higher density areas in normalising cycling is a key reason for focusing on inner Melbourne in this thesis and the potential improvements that can be achieved in a context not dissimilar to some European cities.

The practice of everyday cycling in Copenhagen, and other cities in Northern Europe, has increasingly been seen as a symbol of their democratic and national identities, and a mode of transport for all citizens. Cycling is seen as being strategically crucial to the success of urban environments, and has universal political support (Agervig Carstensen & Ebert 2012, pp.47-48). Today, 18% of all trips in Denmark and 27% of those in the Netherlands, are made by bicycle (Pucher, Garrard and Greaves 2011, p.332). For trips in the capital cities, the share is higher; 30% of trips made within the City of Copenhagen and Amsterdam Municipality are made by bicycle (Københavns Kommune 2015, p.4; Gemeente Amsterdam 2012, p.11).

By using social theories of practice to analyse the concurrent “careers” of velo- and automobility, it can be seen that creating a change in what people do depends on the emergence or evolution of elements that enable a particular practice to be performed more often. The range of actions adopted in Copenhagen have actively changed the meaning, competence and material elements associated with utility cycling. The practice elements that have or can be inferred to have changed as a result are summarised in Table 1 below.

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**Conceptualising Transition in Socio-technical Systems**

The use of social theories of practice to understand socio-technical change has been an emergent theme in socio-technical literature in recent years (Shove & Walker 2010; Spaagaren 2011; Spurling & McMeekin 2015; Watson 2012). Social scientists recognise that if behavioural change is achieved through the development of new practices, ‘understanding their emergence, persistence and disappearance is of the essence’ (Shove, Pantzar and Watson 2012, p.2).

The dominant policy approaches to influencing behaviour change to more sustainable practices in the Anglosphere have long been based on ideas of agency rather than structure. Shove (2010, p.1274) describes this as the ‘ABC’ model, whereby the goal of policy is to change ‘Attitudes’, which will influence ‘Behaviour’ that will cause a sustainable ‘Choice’ to be made. Watson (2012, p.493) notes that these approaches ‘generally have had profoundly limited effects’. Shove (2010, p.1274) argues that the ABC model ‘excludes serious engagement with other possible analyses’ and ignores ‘the extent to which governments sustain unsustainable economic institutions and ways of life’.

Spurling and McMeekin (2015, pp.78-82) create three new intervention framings based on practice theory; the two framings relevant to encouraging utility cycling are listed on the following page.

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**Table 1: Actions undertaken by City of Copenhagen and corresponding elements of the practice of utility cycling being affected**

<table>
<thead>
<tr>
<th>Action</th>
<th>Material</th>
<th>Competence</th>
<th>Meaning</th>
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<tbody>
<tr>
<td>Construction of separated bicycle lanes along most busy streets, particularly near schools</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Welcome packs distributed including maps and gear</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Widening of bicycle lanes and installation of short-cuts</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Support of educational programs for schoolchildren</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Upgrading of routes through Cycle Superhighway bike priority program</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Businessmen on Bicycles initiative</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Addition of cargo bikes to libraries</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>I Bike CPH publicity</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>

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Substituting practices

![Diagram showing substitution of practices](image)

Figure 3: Substituting practices, adapted from Spurling & McMeekin (2015, p.81)

The practice itself is replaced with a more sustainable practice that meets the same needs or wants. This is done by recrafting competing practices to encourage more performances of sustainable practices, at the expense of unsustainable practices (Spurling & McMeekin 2015, pp.80-81). They note that within this framing ‘the need ... is not negotiated’ (2015, p.80).

Changing how practices interlock

![Diagram showing how practices interlock](image)

Figure 4: Changing how practices interlock, adapted from Spurling & McMeekin (2015, p.82)

'Bundles' of practices are reconfigured in ways that negotiate the need in question; the societal factors that precipitate and result from the meeting of needs are themselves brought into focus (Spurling and McMeekin 2015, p.81).

Encouraging Cycling as a Form of Transport

In the wake of the success of Northern Europe’s cycling renaissance, other countries are also striving to increase the use of cycling as a mode of transport (Pucher, Garrard & Greaves 2011, p.332). Since the mid 1990s, Australian public investment in cycling has generally increased as a result of increasing awareness of its health, environmental and economic benefits (Australian Bicycle Council 2011, p.17; Australian Bicycle Council 2014, p.7).

The "normalising" of cycling is a core concept in the contemporary movement to increase levels of utility cycling in car-based societies. Progressive urban theorists have described the concept in different ways. Mikael Colville-Andersen refers to these everyday bicycle users as ‘citizen cyclists’ (2012, p.7). His Copenhagen Cycle Chic blog has become highly influential in promoting utility cycling as a stylish part of urban life (Colville-Andersen 2012, p.4; Aldred & Jungnickel 2014, p.84). Boris Johnson, London’s mayor, refers to the need to ‘de-lycrafy’ city cycling to broaden its appeal and support (Transport for London 2013, p.1). Urban theorist Jan Gehl outlines the transformation to the cycling population that occurs when cycling is normalised:

"Bicycle traffic changes gradually from being a small group of death-defying bicycle enthusiasts to being a wide popular movement comprising all age groups and layers of society from members of Parliament and mayors to pensioners and schoolchildren ... Racing bicycles and Tour de France gear is replaced by more comfortable family bicycles and ordinary clothing. Cycling moves from being a sport... to being a practical way to get around town – for everyone” (2010, p.189).

The biggest barrier to widespread cycling is the fear of riding with vehicular traffic (Geller 2009, pp. 1-2). Roger Geller, (2009, pp. 2-3) has developed a model of how greatly this fear is felt by different parts of the population to demonstrate this.

The research indicates that while painted bicycle lanes may be comfortable to ride in for up to 8% of the population,
60% of potential cyclists in the “interested but concerned” group require infrastructure to be physically separated from cars. (Geller 2009, pp.4-9). While the model was developed in Portland, Oregon, it is used by practitioners in other English-speaking western nations, and is included in Victorian municipal bicycle strategies (City of Melbourne 2012a, p.6).

Normalising Cycling Practices

Responsibility for providing cycling infrastructure is primarily considered to be a local governmental issue in Australia as well as most other countries (Pucher & Buehler 2007, p.3; Pucher, Garrard & Greaves 2011, p.332). In Melbourne’s case, this reflects cycling’s previous recreational status. As cycling is now considered strategically important, state government often play a role in funding larger initiatives (Australian Bicycle Council 2011, p.3).

In Victoria, the state government, through its traffic management body Vicroads and the Department of Economic Development, Jobs, Transport and Resources [DEDJTR, manages state level transport responsibilities, and has taken responsibility for the previous government’s Victorian Cycling Strategy, which it intends to update in the coming months (State of Victoria 2012, p.14, DED1). Vicroads’ plans the Principal Bicycle Network [PBN], a network of proposed and existing bicycle routes of metropolitan importance (Australian Bicycle Council 2010, p.2)

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A Framework for Characterising Interventions into Cycling in Melbourne

Using Spurling and McMeekin’s intervention framings discussed previously, interventions being taken in Melbourne to normalise cycling can be characterised as an attempt to “substitute” cycling for other transport practices, with efforts to “change how practices interlock” also playing a minor role.

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Drawing on the three elements of social practices as defined by Shove et al. (2012), Table 2 characterises the
Table 2: Elements of normalised and non-normalised utility cycling practices

<table>
<thead>
<tr>
<th>Element</th>
<th>Normalised Cycling Cultures</th>
<th>Non-normalised Cycling Cultures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meaning Elements</strong></td>
<td>• Can ride a bike</td>
<td>• Negative social connotations</td>
</tr>
<tr>
<td></td>
<td>• Basic maintenance</td>
<td>• Arduous</td>
</tr>
<tr>
<td></td>
<td>• Need to know how to negotiate problem spots on the bike network</td>
<td>• High-risk</td>
</tr>
<tr>
<td></td>
<td>• Negotiating with fast-moving traffic</td>
<td>• Slow</td>
</tr>
<tr>
<td></td>
<td>• Need to be fit enough to cycle fast and lift bike onto wall-mounted parking racks</td>
<td>• For angry middle-aged men, for the poor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Can’t carry cargo/children</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sporting/recreational activity - involves a lot of sweating</td>
</tr>
<tr>
<td><strong>Competency Elements</strong></td>
<td>• Expensive road/mountain bike</td>
<td>• Convenient</td>
</tr>
<tr>
<td></td>
<td>• Lycra, glasses, technical clothing, high visibility wear, helmet</td>
<td>• Safe</td>
</tr>
<tr>
<td></td>
<td>• Wall-mounted vertical-hanging bike parking in buildings (&quot;Ned Kelly&quot; racks)</td>
<td>• Quick</td>
</tr>
<tr>
<td></td>
<td>• Limited safe cycling routes separated from traffic, routes that do exist are often distant from activity centres and popular destinations</td>
<td>• For everyone aged 8-80</td>
</tr>
<tr>
<td></td>
<td>• Car-based urbanism</td>
<td>• Easy to carry shopping, kids etc.</td>
</tr>
<tr>
<td><strong>Material Elements</strong></td>
<td>• Dense, human scale environment</td>
<td>• An everyday activity – slower paced</td>
</tr>
<tr>
<td></td>
<td>• Limited safe cycling routes separated from traffic, routes that do exist are often distant from activity centres and popular destinations</td>
<td>• Sporting/recreational activity - involves a lot of sweating</td>
</tr>
<tr>
<td></td>
<td>• Car-based urbanism</td>
<td></td>
</tr>
</tbody>
</table>

Thus, the three main questions emerging from this analysis that will inform the research with policy practitioners in Melbourne are:

1. **Are practitioners seeking to substitute other transport practices with cycling? If so, which practices?**

2. **How are practitioners recrafting the elements of cycling and these competitor practices to encourage**
<table>
<thead>
<tr>
<th>Normalised Cycling Cultures</th>
<th>Non-normalised Cycling Cultures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meaning Elements</strong></td>
<td><strong>Competency Elements</strong></td>
</tr>
<tr>
<td>Positive social connotations</td>
<td>Can ride a bike</td>
</tr>
<tr>
<td>Convenient</td>
<td>Basic maintenance</td>
</tr>
<tr>
<td>Safe</td>
<td></td>
</tr>
<tr>
<td>Quick</td>
<td></td>
</tr>
<tr>
<td>For everyone aged 8-80</td>
<td></td>
</tr>
<tr>
<td>Easy to carry shopping, kids etc.</td>
<td></td>
</tr>
<tr>
<td>An everyday activity – slower paced cycling reduces sweating</td>
<td></td>
</tr>
<tr>
<td><strong>Material Elements</strong></td>
<td></td>
</tr>
<tr>
<td>Expensive road/mountain bike</td>
<td>Simple, cheap city bike, cargo bike, electric bike</td>
</tr>
<tr>
<td>Lycra, glasses, technical clothing, high visibility wear, helmet</td>
<td>Normal/fashionable clothing</td>
</tr>
<tr>
<td>Wall-mounted vertical-hanging bike parking in buildings (“Ned Kelly” racks)</td>
<td>Diverse bicycle parking provision including cargo bike parking spaces</td>
</tr>
<tr>
<td>Limited safe cycling routes separated from traffic, routes that do exist are often distant from activity centres and destinations</td>
<td>Safe routes along busy roads linking activity centres and destinations</td>
</tr>
<tr>
<td>Car-based urbanism</td>
<td>Dense, human scale environment</td>
</tr>
</tbody>
</table>

3. What other related practices are practitioners reconfiguring to encourage cycling to replace this travel?
Methodology

The literature review established that cycling practices in non-normalised cycling cultures such as Melbourne’s are very different to those in normalised cultures such as can be found in northern Europe. As a result, it is necessary to discover what policy interventions are being taken by government in Melbourne, and investigate which elements of Melbourne’s non-normalised cycling practices they are intending to alter. By breaking down policy interventions in this way, the comprehensiveness of policy to normalise cycling can be judged, and any gaps or silences can be highlighted to show where additional or alternative interventions may prove more successful.

This research firstly aims to illuminate the change in behaviour and practice that policy practitioners are intending to effect, and to detail how interventions aim to alter the constituent elements of different cycling practices, in order to normalise utility cycling as a whole.

Table 3: List of local and state government bodies, with relevant strategy documents and interview subjects

<table>
<thead>
<tr>
<th>Government Body</th>
<th>Documents</th>
<th>Interview Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Melbourne</td>
<td>Bicycle Plan 2012-16, Transport Strategy 2012</td>
<td>Mel1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mel2</td>
</tr>
<tr>
<td>City of Port Philip</td>
<td>Bicycle Plan 2011-2020</td>
<td>PPh1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PPh2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PPh3</td>
</tr>
<tr>
<td>Maribyrnong City Council</td>
<td>Maribyrnong Bicycle Strategy 2014, Council Bicycle website (Maribyrnong City Council 2015a)</td>
<td>Mar1</td>
</tr>
<tr>
<td>Moreland City Council</td>
<td>Bicycle Strategy 2011-2021, Council Integrated Transport Strategy 2010-2019, Brunswick Major Activity Centre Integrated Transport Strategy</td>
<td>Mor1</td>
</tr>
<tr>
<td>City of Yarra</td>
<td>Bicycle Strategy 2010-2015</td>
<td>Yar1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yar2</td>
</tr>
<tr>
<td>Department of Economic Development, Jobs, Transport and Resources (DEDJTR)</td>
<td>Cycling into the future 2013-2023: Victoria’s Cycling Strategy*</td>
<td>DED1</td>
</tr>
</tbody>
</table>

*This plan was written by the former state government Department of Transport, Planning and Local Infrastructure (DTPLI). Following the election of the Andrews Labor Government DEDJTR is responsible for cycling, and the plan is being reworked.

Figure 7: Map showing physical locations of the municipalities discussed in this thesis within Victoria. Adapted from map by NordNordWest/Wikipedia, CC-BY-SA 3.0, https://commons.wikimedia.org/wiki/File:Australia_Victoria_location_map.svg

It is intended to also discover what other, related practices are being altered by practitioners in an effort to indirectly contribute to this substitution.
Research Design

The first part of the research design involves policy analysis of bicycle policy from the inner Melbourne area. Cycling policy was selected from the municipalities of Melbourne, Maribyrnong, Moreland, Port Phillip and Yarra as these municipalities have some of the highest rates of cycling in Melbourne, and they all have dedicated cycling policy documents and cycling officers. The state government's cycling policy was also reviewed, which is now the responsibility of the Department of Economic Development, Jobs, Transport and Resources, as bicycle policy is the shared responsibility of local and state government in Australia. These policy documents were analysed to ascertain the presence or absence of different interventions that would promote the emergence or demise of different elements that are required for utility cycling, as well as the transition in practices that the suggested interventions are implicitly or explicitly aimed at encouraging. This included collecting information on the stated purpose of the bicycle trips the policy aims to facilitate, visual depictions of cyclists practicing particular forms of cycling, information on the likely purpose of new or improved infrastructure and the discourses used to describe cycling practices.

Semi-structured interviews were then conducted with one or more policy practitioners representing each of the governmental bodies whose policy was analysed previously. The people interviewed were recruited with the criteria that they have a good understanding of the organisation's bicycle policy and recent interventions.

Table 3 on the opposite page lists the policy documents reviewed and the practitioners interviewed. Participants were recruited through “snowball sampling”, whereby a single contact of the researcher who works in the subject field was able to forward details of their colleagues in the other governmental bodies. Additionally, the first contact person within an organisation often recommended interviewing further people within their organisation for more specific information about particular interventions.

Table 4: Key Research Questions and Sub-questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Sub-questions</th>
</tr>
</thead>
</table>
| Are practitioners seeking to substitute other transport practices with cycling? If so, which practices? | • Is your role (the role of the policy practitioner) to encourage specific cycling practices?  
• Does your organisation seek to change cycling practices to make cycling more accessible to the mainstream?  
• Is providing for cycling practices that are more sports-like counterproductive? (e.g. showers and change rooms in developments/office buildings) |
| How are practitioners recrafting the elements of cycling and these competitor practices to encourage cycling to replace this travel? | • In a best case scenario, how do you see bicycles fitting into ____________’s transport mix in 20 years’ time?  
• Are you trying to shift journeys currently made by other modes to the bicycle? If so, which demographics and trip purposes?  
• Are you trying to make competitor practices to cycling less convenient? (e.g. less parking, calmed traffic, blocked streets)  
• Do you feel like the bicycle infrastructure that your organisation builds is suited to enabling this outcome?  
• Does the bicycle parking required in developments enable this outcome? (i.e. style as well as quantity) |
| What other related practices are practitioners reconfiguring to encourage cycling to replace this travel? | • Does the municipality promote car share, home deliveries etc. in order to reduce car ownership to increase the chance that people will ride?  
• Does the organisation orient development around bicycle infrastructure? (As an alternative to gaining political support to reallocate road space to bicycles in existing urban centres/shopping strips) |
Key Themes and Questions

Having characterised interventions to normalise cycling as an attempt to “substitute” cycling for other transport practices, with efforts to “change how practices interlock” also playing a minor role, the literature review concluded with three main questions that are the focus of the research focussed on Melbourne. These are listed in Table 4 on the previous page along with sub-questions that pursue the questions in more detail.

Data Analysis Methods

The qualitative data collected from the policy analysis and interviews took the form of statements summarising the cycling practices that the document focused on. Where this information was inferred, reference was made to the reviewed literature to determine which practices were likely to be encouraged as a result. The nature of the interviews allowed answers to be followed up with more questions for clarification, and inference of the goals of policy was not required to the same degree.

In comparing policy documents and practitioners’ views, the data that was gathered is naturally subjective in nature. The policy documents come from municipalities that have distinctly different socio-cultural identities and are at different stages of developing normalised cycling cultures. Different practitioners interviewed had differing views, a result of their differing lived experiences and the differing resources and practices of their respective organisations.

However, it was decided to undertake the research project from a critical realist perspective, proposing that different people perceive something in the same way, but interpret it differently based on their past experiences and backgrounds (Saunders & Tosey 2012, p.58). This reflects the common understandings held by policy practitioners here and overseas that enable the exchange of urban planning experience and practice. Conducting the research from a critical realist perspective allowed for justifications of different actors’ and organisations’ opinions to be made based on their professional histories and organisational attitudes towards utility cycling. This aided in mapping the variety of understandings of cycling practices and their prerequisite elements expressed and enabled easier identification of trends in similarities and differences between these views. These findings, in turn, were instrumental as a form of inductive reasoning in forming the conclusions to the study, which were pragmatist as they aimed to offer practical advice to practitioners based on its findings (Saunders & Tosey 2012, p.58; Nickerson 2010, p.594-595).

Differences in public policy and practitioners’ views are subtle and complex. Collecting quantitative data would not have provided the detail that is required for detailed discussion of differences in policy and thought discourses and would therefore have been inappropriate. The research project therefore sought to utilise a small sample size of policy documents and policy practitioners, but to glean a large amount of qualitative data from each of these sources. The reasoning behind using a multi-method quantitative design is that different methods are better suited to gathering different types and volumes of data. In order to gain a full understanding of the bicycle policies and opinions of Melbourne practitioners, I used both policy analysis and semi-structured in-depth interviews. Policy analysis enables detailed study over an extended period of time of the official bicycle policies governing Melbourne, while semi-structured interviews offer the opportunity to follow up silences in the policy documents and ask further questions about the unofficial, unpublished understandings of normalising utility cycling held by the practitioner and their organisation.

The constraints of time meant that a cross-sectional methodology, analysing interventions at the current point in time, was deemed appropriate. As interviews were conducted only weeks apart, data consistency was ensured in a planning field that has rapidly changed in the Australian context over the last decade (Moutinho 2011, p.68).

Ethical Considerations

All interviewees were urban planning professionals working as planners, engineers or community engagement officers on cycle projects for their organisations. They were interviewed at their places of work or over the phone. Interviews were recorded with the advance permission of the interviewees for the purpose of transcription and were deleted once this had been completed. Interviewees are not identified by name or occupation, only by the organisation they represent. It is therefore deemed that this piece of research was of low risk.

Reliability

The study is considered reliable because although the subject matter it deals with is subjective, it draws on established bodies of work on social theories of practice and bicycle-focussed urban planning. It is considered that any
other researcher linking social theories of practice to bicycle policy in Melbourne would come to similar findings.

Validity

The study is considered to be a valid approach to answering the research question as it directly uses social theories of practice to assess bicycle policies, and summarises responses from policymakers after they are asked to consider looking at their role in cycling policy using the lens of practices.

Generalisability

While the findings were particular to Melbourne, the same methods could be used in any other city with a developing cycling culture to similar effect. This is due to common understandings among transport practitioners globally about factors in transport planning such as trip purposes and modal choice.

Limitations

A limitation of this study was that it only dealt with inner-suburban municipalities’ policy and action, whereas a study including outer suburban municipalities would have provided a greater variety of data. However, the limited time available and the lack of bicycle policy activity in some suburban parts of Melbourne meant that this was not practical.
Data Analysis and Findings

This section presents a synthesis of the key findings from the interviews with practitioners from inner Melbourne councils, and analysis of the key cycling policies of their organisations. Each Council is examined separately and the findings are grouped under three themes (substitution, recrafting, interventions into related practices) drawn from the three core questions that were formulated based on the framework characterising interventions to normalise cycling, adapted from Spurling & McMeekin (2015, p.81-82) (see Figure 6, p13). These are repeated below:

1. Are practitioners seeking to substitute other transport practices with cycling? If so, which practices?

2. How are practitioners recrafting the elements of cycling and these competitor practices to encourage cycling to replace this travel?

3. What other related practices are practitioners reconfiguring to encourage cycling to replace this travel?

Maribyrnong City Council

Maribyrnong has an estimated population of 81,859 people and a population density of 26.23 people per hectare (id 2015a). Maribyrnong has traditionally been an industrial hub in Metropolitan Melbourne, with a corresponding working-class population. The municipality has long had an ethnically diverse population, and today 40% of its population were born outside of Australia. The parts of the municipality closer to the CBD are gentrifying, with denser residential infill development occurring (Maribyrnong City Council 2015b). Bicycle use is increasing, with the number of people using only a bicycle to get to work doubling every five years. Cycling makes up 2.6% of all trips to, from or within Maribyrnong, the smallest cycling modal share out of the municipalities researched (State Government of Victoria, 2010). The easternmost parts of the municipality have the highest cycling rates, corresponding with the pattern of gentrification (Maribyrnong City Council 2014, pp. 21-27).

“We’re not homogenous so of course you know... Yarraville’s pretty groovy, there’s a shop down here that sells cargo bikes and there’s quite a few people down there who get around by cargo bikes ... and Footscray too is changing, a lot, whereas out here or further out, Maidstone, Braybrook, those kind of areas, West Footscray, there’s a lot less happening.” (Mar1)

The representative agreed that the meanings attached to cycling by the gentrifying population, as stylish and environmentally friendly, are likely drivers for cycling’s popularity amongst this group, here and elsewhere in Melbourne’s inner suburbs.

Substitution

Maribyrnong’s Integrated Transport Strategy prioritises cycling ahead of public transport and cars (Maribyrnong City Council 2012, quoted in Maribyrnong City Council 2014, p.13). The municipality is focussing on shifting car journeys to cycling and does not mention shifting public transport journeys (Maribyrnong City Council 2014, p.5; Mar1). The municipality wants cycling to be “a serious option for people” (Mar1).

The municipality is focussing on upgrading infrastructure in the locations “where there are the most riders riding in the worst conditions” (Maribyrnong City Council 2014, p. 50), implying that key heavily cycled routes radiating from the Melbourne CBD are the targets for investment, and indicating that journeys to work are a focus. There is also a focus in the strategy to improve conditions for cycling within the Footscray activity centre. Parking is already scarce in these areas and cycling is seen as being necessary to manage the impact of intensive redevelopment on the local road network (Maribyrnong City Council 2014, p. 39; Mar1).

Recrafting

Maribyrnong aims to make cycling a transport mode that is accessible to everyone, primarily through investing in infrastructure that separates cyclists from traffic on busy roads, with local streets to be calmed so that cyclists can feel more confident riding where there is no infrastructure provision (Maribyrnong City Council 2014, p. 20). Maribyrnong acknowledges the need to build separated lanes and paths for the “interested but concerned” sector of the population, rather than just the sorts of painted bike lanes they’ve been putting in in the recent past that only a small part of the population use (Maribyrnong City Council 2015c).
Council 2014, p. 18). However it is noted that this requires a lot more space than painted on-road lanes, meaning that to date paths have only been built where it doesn’t involve the more politically contested decision of reallocating road space from cars or parking to bikes.

“We’ve been working on improving things for bikes for the last say 10 or more years, and so obviously we’ve done all the easier projects and what we’re left with now is all the really hard ones” (Mar1)

Maribyrnong sponsors a range of third-party promotional and educational programs to encourage people to take up cycling, including Westie Women on Bikes, Westie Foodie Rides, both “well-subscribed” programs aimed at providing women with the skills and confidence to ride a bike for everyday transport and promoting utility cycling as a sociable and fashionable activity. Maribyrnong sponsor Ride to Work Day, although it was suggested that it isn’t very effective in increasing the number of everyday cyclists (Mar1). The municipality has also helped set up a community bike shed where volunteers fix bikes to be given to transport-poor refugees, along with basic bicycle maintenance and road safety training (Maribyrnong City Council 2015a). The municipality’s communications regarding cycling refer to cyclists as “people on bikes” to emphasise the normality of choosing cycling as a transport mode (Mar1).

The municipality’s position on vehicular traffic is to slow it, through advocating for reduced speed limits on arterial and local streets, but not discourage it. Maribyrnong doesn’t issue on-street parking permits for new multi-unit developments but that is the limit of efforts to dissuade car use.

“So that’s one way of trying to limit car ownership, otherwise not really, just general promotion of sustainable transport and make people aware of other options and trying to improve other options so people use them” (Mar1)

The municipality’s representative agreed with the suggestion that there is a subconscious idea that, with ever more people living in denser arrangements in the municipality, car use will become more impractical anyway and more space-

### Maribyrnong City Council’s interventions into cycling

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction/renewal of offroad bike paths along commuter corridors and parks</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Painting of on-road bike lanes, some with a painted protection buffer</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Wayfinding signage</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support of Ride to Work day</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Maps of cycle routes distributed</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current and Future Actions</th>
<th>Material</th>
<th>Competence</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction of bike infrastructure physically separated from vehicles</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Advocacy for 40km/h speed limit on local roads</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Continue to support ride to work day</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Supports Westie Women on Wheels and Foodie Tours programs</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Bike shed/refugee bike ed program</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

Table 5: Interventions into cycling that have been, or are being taken by Maribyrnong City Council. Ticks indicate the elements of the practice that are being or are likely to be reshaped as a result of the intervention, moving cycling closer to resembling the practice as it exists in a normalised cycling culture
efficient modes of transport will be favoured by residents. It was indicated however, currently there is not enough political will to reallocate road space to bicycles at the expense of vehicle carrying capacity.

Interventions into Related Practices

Maribyrnong supports car sharing schemes and is currently working on a car share policy. There is considerable support and potential for car sharing schemes in the municipality but this is tempered by political concerns around replacing public parking spaces with car share parking spaces.

“We definitely support car share, but...when you start talking about providing parking for anything other than private motor vehicles people are a bit funny ... So there's a bit of work to do there. Obviously the members who are using it are very keen on it and their utilisation is quite high ... so there's lots of scope for expanding it” (Mar1)

Maribyrnong has done work on encouraging home deliveries in the past in a project funded with state government money, but not currently (Mar1).

City of Melbourne

Melbourne is comprised of the city's central business district and the suburbs immediately surrounding it. It has an estimated population of 100,611 people and a population density of 26.75 people per hectare, although eight times this number of people visit the city every day (City of Melbourne 2015). As the “business, administrative, cultural and recreational” centre of the state of Victoria, residents and users of the space come from highly diverse backgrounds, both economically and culturally. Within the CBD, the density of jobs, activity and transport networks mean that public transport and walking are the most important transport modes, allowing people to efficiently come to the CBD from the suburbs and disperse to their destinations. However, there remains plenty of scope for cycling to be used by people commuting to the city from the inner and middle suburbs in particular, or for residents of the municipality to get around their neighbourhoods. 44% of trips 2-7km in length starting and/or finishing in the municipality are currently made by car, compared to 10% by bicycle, indicating that there is still plenty of potential for modal shift (City of Melbourne 2012a, p.8). Bicycles are used for 3.7% of all trips to, from or within Melbourne (State Government of Victoria, 2010).

Substitution

Melbourne has an identical transport mode hierarchy to Maribyrnong, with cycling preferred to trips by car or public transport. The plan includes a target of shifting 15% of car or public transport trips to the bicycle by 2016. Both representatives of the City of Melbourne downplayed the idea that they were trying to change what people do, instead emphasizing the importance of giving people options and improving transport accessibility. Nevertheless, the focus of the Bicycle Plan is to shift journeys currently being taken by public transport or car of up to 7km to the bike, particularly commuting to the central city (Mel2).

The infrastructure proposed as part of the Bicycle Plan is concentrated around the CBD, especially high-quality facilities separating cyclists from traffic, which reflects the focus described above. A representative of the municipality agreed that focussing on putting in high-quality infrastructure in locations where it is likely to attract lots of bicycle traffic means that it will be more cost-effective and cause a greater economic benefit to the transport network (Mel2). Yet the eventual goal is a network of safe routes for cycling, not serving any particular place (Mel1).

Recrafting

The Bicycle Plan seeks to create an environment where cyclists of all skill levels can ride comfortably for transport (City of Melbourne 2012a, p.12). Although it identifies road cyclist commuters, less confident utility cyclists, and leisure cyclists, its focus is in catering for the second group (City of Melbourne 2012a, p.11). When asked what demographics the municipality was intending its bicycle infrastructure for, a representative responded:

“I don't think a bike network is geared towards any particular demographic. I think a bike network- it's like saying 'who's the footpath for' or 'who's the tram for’”

This indicates that the infrastructure they're building is supposed to be universally useful for cyclists of all abilities (Mel1).

The city is seeking to create a network where eventually “every street is safe for cycling” (Mel1). While on some busier roads this means maximising separation between cyclists and vehicular traffic, on others it means calming traffic sufficiently so the two modes can operate safely in the same space. Having recently installed separated bike lanes on St Kilda Rd North, Elizabeth Street North, La Trobe Street, and Abbotsford St, the municipality is increasing
the pace at which it installs these kinds of facilities, having installed the first separated lanes in Swanston Street, Carlton, many years ago (City of Melbourne 2012a, p. 19)

Melbourne is gradually closing more of its streets to vehicular traffic but this is done mainly to create better public spaces for pedestrians rather than safer conditions for cyclists (Mel1). Melbourne seeks to reduce speed limits for motor traffic and is presently seeking to have speed limits of 40km/h implemented in Kensington (Mel2). One representative of the City of Melbourne argued that car use didn’t need to be discouraged because

“car use has been declining since 2004, we don’t need to do anything to stop it, it’s already going down” (Mel1)

Melbourne are actively trying to show that cycling is something all people can do, through using the phrase “people riding bikes” rather than “cyclists” and using photos of socially diverse cyclists engaged in normalised utilitarian cycling practices on their publications (Mel2). The municipality encourages cycling-related events and bicycle valet services as part of festivals it sponsors, such as the Melbourne Festival, and supports third-party events such as Ride to Work Day and the Tweed Ride. The municipality also provides bikes and bike skills workshops for new Australians of low socio-economic status through its community hubs (Mel2).

However the municipality also sponsors the “Around the Bay” long distance road racing event (Mel2). Given the focus of this research on altering the elements of utility cycling practices in Australia, this can be seen as potentially counterproductive or not necessarily a well directed use of resources in terms of the City of Melbourne’s work in recasting cycling as an easy everyday mode of transport, rather than a sport that requires expensive technical equipment, specialist clothing and vigorous exercise.

Both practitioners from the municipality feel that the work of promoting normalised cycling is mostly complete in the central city; one referred to the popularity of including bicycles in shop window displays to sell other products, demonstrating that cycling is in vogue (Mel2), while the other said that given steadily increasing cycling rates, the main task for the municipality now is in improving the physical infrastructure, not promotion (Mel1).

Interventions into Related Practices

Car share schemes have been operating in the City of

City of Melbourne’s interventions into cycling

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<tr>
<th>Past Actions</th>
<th>Material</th>
<th>Competence</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Painting of on-road bike lanes, protected lanes constructed in Swanson Street,Karlton</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Support of Ride to Work day</td>
<td>✓</td>
<td>✓</td>
<td></td>
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</tbody>
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<thead>
<tr>
<th>Current and Future Actions</th>
<th>Material</th>
<th>Competence</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction of bike infrastructure physically separated from vehicles</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Advocacy for 40km/h speed limit on local roads including in Kensington</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Continue to support ride to work day</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incorporate bicycles into cultural events, including bicycle valet</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Sponsor “Round the Bay” race</td>
<td>✓</td>
<td></td>
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</tbody>
</table>

Table 6: Interventions into cycling that have been, or are being taken by the City of Melbourne. Ticks indicate the elements of the practice that are being or are likely to be reshaped as a result of the intervention, moving cycling closer to resembling the practice as it exists in a normalised cycling culture
Melbourne for years so while it has been proven to lower car ownership and increase bicycle usage, the municipality is not doing any promotional work in this sphere (City of Melbourne 2012b, pp. 90-91, Mel1).

Moreland City Council

Moreland has an estimated population of 163,488 people and a population density of 32.09 people per hectare (id 2015b). The municipality has traditionally been comprised of working-class suburbs with a culturally diverse population. However, over the past few decades the parts of the municipality closest to the Melbourne CBD have gentrified (Colic-Peisker et al. 2013 p. 11). Bicycles are used for 3.6% of all trips to, from or within Moreland (State Government of Victoria, 2010).

Substitution

Moreland seeks to substitute less sustainable transport modes with more sustainable transport modes in general (Mor1). The plan states that Moreland will encourage people “to ride a bicycle instead of driving a car or catching public transport” (Moreland City Council 2012, p58). Yet although the Bicycle Strategy has a utility cycling focus, it acknowledges and includes photos of people performing other cycling practices such as road, mountain bike and BMX riding (Moreland City Council 2014, p.14-15).

Moreland has always had a strong focus on building bike infrastructure for city-centric commuting, and this continues to be a priority given the large numbers of people commuting by bike particularly from the southern or city end of Moreland. Given the high cycling rates in the south of Moreland compared to the Melbourne average [9.7% (ABS 2015) vs. 1.6% (Loader 2012)], the municipality’s representatives say that they are past focussing on journeys to work as the “low hanging fruit” and are instead moving to cater for a wider range of trip destinations and purposes (Mor1). Popular bicycle routes heading south to the CBD are near capacity during the morning peak, and solutions to the problem are either politically difficult [i.e. Sydney Rd] or will take a while to negotiate and construct [i.e. Upfield railway path widening] (Mor1). The focus is now on local

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<tr>
<th>Past Actions</th>
<th>Material</th>
<th>Competence</th>
<th>Meaning</th>
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<tbody>
<tr>
<td>Establishment of quiet street “shimmy” routes</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction of offroad cycle paths on existing public land rights-of-way</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Construction and upgrading of low traffic onroad routes and offroad paths</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Support of Ride to School day</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upgrades to sports cycling facilities</td>
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<tr>
<td>Expansion of public bike parking</td>
<td>✓</td>
<td></td>
<td></td>
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<tr>
<td>Conditional support for car free development</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduced speed limits on local streets and shopping strips</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Advocacy for higher statutory bike parking rates</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bike education and maintenance classes for refugees</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Retrofitting bike infrastructure to suit normalised practices (cargo bikes)</td>
<td>✓</td>
<td>✓</td>
<td></td>
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</tbody>
</table>

Table 7: Interventions into cycling that have been, or are being taken by Moreland City Council. Ticks indicate the elements of the practice that are being or are likely to be reshaped as a result of the intervention, moving cycling closer to resembling the practice as it exists in a normalised cycling culture
routes connecting residential areas with local activity centres, shops and schools, and providing bike parking in these locations to make cycling there more convenient (Mor1).

Recrerafting

Moreland aims to provide safe routes for cyclists of all ages and abilities, focusing on women due to their risk-adverse nature (Garrard, Hakman & Crawford 2006, p.4). The increasing number of cargo bikes, as well as the multiplying number of cyclists generally, is requiring the municipality to upgrade older infrastructure so that it can handle the resulting increased spatial requirements (Moreland City Council 2012, p. 15, 40; Mor1).

Routes are planned either along traffic-calmed streets, or where there is enough room for a physically separated path. In recognition of the indirectness of previous trails along creeks and their lack of trip origins or destinations, the focus is now on "shimmy" routes through local streets (Mor1). At the moment there is a lack of political appetite for measures that inconvenience driving. Speed limits are being actively reduced across the whole road network (Mor1).

The representative highlighted the dichotomy of cultural attitudes towards cycling within the municipality. South of Bell Street there are many alternative-minded people and gentrifiers, and the culture of cycling is strong. North of Bell St the population is of lower socio-economic status and ethnically diverse, and cars are seen by many as a status symbol. There is a lack of infrastructure north of Bell Street, which is something that they're now addressing (Mor1). Council supports Ride to School day and helps schools promote active travel to students (Moreland City Council 2012, p.60). The municipality also runs classes for refugees on bike riding and maintenance a few times each year (Mor1).

The remit of Moreland's cycling officers sometimes includes facilities intended for recreational or sports cycling, for example the most recent bicycle budget included funding for upgrading a velodrome. This was justified by the representative from Moreland:

"It fits in line with a lot of the bike strategy, about promotion of bikes" (Mor1)

Interventions into Related Practices

Car share is popular in the south of the municipality but non-existent in the north. Moreland will waive parking where a green travel plan can prove the lack of demand, occasionally approving developments with no car parking (Mor1). Policy governing the denser parts of the municipality recommends increased statutory bicycle parking rates, but suggests new ones based on current bicycle ownership and usage patterns, not expected future patterns, which seems problematic (GTA Consultants 2013, p. 19).

City of Port Phillip

Port Phillip has an estimated population of 104,846 people and a population density of 49.76 people per hectare (id 2015c). Bicycles are used for 3.7% of all trips to, from or within Port Phillip (State Government of Victoria, 2010). 18.1% of the population are from non-English-speaking backgrounds, lower than the Melbourne average of 24.2% (City of Port Phillip 2011b). Professionals aged between 25-50 represent a large part of Port Phillip’s population, with lower proportions of primary school children and older people compared to the Victorian average.

Substitution

Port Phillip wants to substitute car journeys with more sustainable modes like public transport and cycling, particularly for journeys to work and for short local trips to school or to run errands (PPh1). The plan for the proposed bike network reflects this, with proposed improvements to the network consisting of increasing separation from traffic on main roads heading towards Melbourne’s CBD [St Kilda Rd], and establishing routes on quieter local streets that link shops and other local amenities (City of Port Phillip 2011a, pp.22-23).

Recrafting

The Bike Plan aims to provide infrastructure that make riding “convenient, safe, efficient and enjoyable for all” (City of Port Phillip 2011a, p.2). However this is not always possible:

“Yeah the 8-80 test, that’s the type of bike facility that we’d like to be installing, of course for budgetary reasons sometimes we’re just getting something on the road, and that’s also about getting cycle numbers up because without having people visible on the road, it’s very difficult for us to advocate for improvements” (PPh1).

The municipality is reluctant to remove parking or reallocate road space to build safer cycling infrastructure because of the expected political fallout, admittedly something that
doesn’t align with their road user hierarchy that places cyclists ahead of cars (PPh2).

The municipality has run a program called “She Spokes” that promotes cycling as a stylish and convenient mode of transport for women, and provides women with the skills and supportive environment to try it (PPh1). The municipality also runs bike courses through existing networks such as neighbourhood houses in order to engage with difficult-to-reach groups such as people of low socio-economic status or diverse cultural backgrounds (PPh3).

The municipality also focuses on encouraging the uptake of cargo bike usage by parents with young children. They have run a number of cargo bike “picnics” in conjunction with other community events to promote them and have started a cargo bike hire scheme in conjunction with the Elwood Toy Library. The idea was that an existing community offers a supportive environment to try the bike, meaning that people are much more likely to adopt the practice (PPh3).

The council also fosters a whole-of-organisation awareness of the needs of cyclists, through councillors being taken on organised rides, and the use of a pool of share bikes being encouraged for appointments in the local area (PPh1).

Interventions into Related Practices

The municipality is actively engaging with car share providers to get them to expand coverage. They favour car-free living and routinely lower statutory parking rates, and advocate for public transport improvements. The municipality encourages shopping locally.

City of Yarra

Yarra has an estimated population of 86,506 people and a population density of 44.30 people per hectare (id 2015d). Young adults aged 20-39 make up half the population, with only half of the Victorian average rate of adolescents aged 5-19 present (id 2015e). Yarra contains households with highly diverse incomes, featuring a larger percentage of households earning less than $400 per week, and a larger percentage of those earning more than $2499, than the Melbourne metropolitan average (id 2015f).

Due to Yarra’s geographical location, many of the cyclists who use the city’s infrastructure are passing through to the CBD (City of Yarra 2009). Bicycles are used for 5.6% of all trips to, from or within Yarra, the highest cycling rate of those studied in this research (State Government of Victoria, 2010). 60% of cycling within the city of Yarra occurs during peak hour, suggesting it is used mostly as a means of transport to or from work and education (Yar2).

<table>
<thead>
<tr>
<th>The City of Port Phillip’s interventions into cycling</th>
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<tbody>
<tr>
<td>Past Actions</td>
</tr>
<tr>
<td>Construction of separated infrastructure on Cecil and Fitzroy Streets</td>
</tr>
<tr>
<td>Installation of additional on-street bike parking</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Current and Future Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
</tr>
<tr>
<td>She Spokes women’s cycling program</td>
</tr>
<tr>
<td>Separated cycling facilities on busy commuter routes towards Melbourne CBD</td>
</tr>
<tr>
<td>Establishment of quiet routes linking shops, schools and local destinations</td>
</tr>
<tr>
<td>Cargo bike picnics and library</td>
</tr>
<tr>
<td>Other bike education programs</td>
</tr>
</tbody>
</table>

Table 8: Interventions into cycling that have been, or are being taken by the City of Port Phillip. Ticks indicate the elements of the practice that are being or are likely to be reshaped as a result of the intervention, moving cycling closer to resembling the practice as it exists in a normalised cycling culture.
Substitution

Yarra seek to replace short car trips and public transport trips with cycling, prioritising trips to work and school. Trips to work in the CBD are most likely to be shifted as a result of the built environmental context being more favourable for cyclists, and the limited capacity of the CBD dissuades driving. Trips to work represent a large part of total travel demand (Yar2). Census data makes it easy for the municipality to measure the growth in cycling’s mode share for these journeys (Yar1).

Trips to school are often conducted on the way to work, so the municipality sees the choices of parents as translating into those of their children. Additionally, trips to other destinations such as supermarkets are likely to be incorporated into these journeys, so if the bicycle is already being used then it will be used for these incidental trips (Yar1). Yarra recognises that the road network and public transport is already at capacity; trams arriving in Yarra are already full, so shifting commuters from public transport to cycling will free up space for Yarra public transport users (Yar2).

Recrafting

Yarra recognises that although it already has a comprehensive network of painted bike lanes, these only meet the needs of a small minority of the population. The municipality wants to “establish cycling as a legitimate first choice of transport by people of all ages and cycling abilities” (City of Yarra 2009, p.4) by developing cycling infrastructure of a higher quality that separates bicycles from motorised traffic to a greater degree (City of Yarra 2009, p.6). Its representatives reference Geller’s research, indicating that their focus now is catering for the “interested but concerned” cyclists (Yar2). In further separating cyclists and vehicles, larger areas of road will need to be reallocated to cycling, and infrastructure will cost more, meaning that greater political capital is needed than ever before:

“The thing that you often talk about is the fact that a lot of the hard things- we’ve got to the point where a lot of hard decisions need to be made” (Yar2)

Routes with priority for further investment and greater physical separation generally radiate north and east away from the Melbourne CBD, reflecting the focus on CBD-

The City of Yarra’s interventions into cycling

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<tr>
<th>Past Actions</th>
<th>Material</th>
<th>Competence</th>
<th>Meaning</th>
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<tbody>
<tr>
<td>Speed limits have been reduced to 40km/h in all local streets and some shopping streets</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Ride to School and Ride to Work day supported</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased bicycle parking installed</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encourage bike ed programs in schools</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distribution of TravelSmart maps</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bicycle lanes painted and offroad paths constructed</td>
<td>✓</td>
<td>✓</td>
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<table>
<thead>
<tr>
<th>Current and Future Actions</th>
<th>Material</th>
<th>Competence</th>
<th>Meaning</th>
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<tr>
<td>Greater physical separation of bicycle lanes from vehicles</td>
<td>✓</td>
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<tr>
<td>Support of bike ed program in primary schools</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Continue to support Ride to School and Ride to Work day</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Expansion of bike parking in shopping areas</td>
<td>✓</td>
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</table>

Further calming of traffic

Table 9: Interventions into cycling that have been, or are being taken by the City of Yarra. Ticks indicate the elements of the practice that are being or are likely to be reshaped as a result of the intervention, moving cycling closer to resembling the practice as it exists in a normalised cycling culture

27
centric journeys to work. While in the past main cycling routes have been designated on backstreets where there is less vehicular traffic and fewer demands for space, the current Strategy includes steps to encourage cycling on some busier shopping streets (City of Yarra 2009, p.31-38, 69).

Yarra is comprehensively calming local streets, including blocking them to discourage rat-running drivers. This is not specifically to discourage driving but to create a favourable environment for active transport (Yar2). Speed limits on all local streets have been reduced to 40km/h (Yar1).

The City of Yarra supports Bicycle Network’s Ride to School and Ride to Work day, through providing breakfasts and promotional materials, and the state government’s bike ed program through making a trailer of bicycles available for hire (City of Yarra 2009, p. 53). Yarra sees these programs as effective in reaching a large cross-section of the municipality. It prefers to support these programs rather than more comprehensive bike skills programs that reach a smaller number of people, however it is likely that a program to engage a minority population with utility cycling will be supported in the near future through their community grants program (Yar1). The municipality also supplies a map of local bike paths to every new resident and includes sustainable transport features in council’s newsletter (Yar1). Internally, council staff are encouraged to ride to work and a fleet of bicycles is used to get to off-site meetings (City of Yarra 2009, p. 52).

Interventions into Related Practices
Car share is a very popular service among Yarra residents and the municipality facilitates its expansion through providing on-street space in a free, streamlined process (Yar1).

State Government - Department of Economic Development, Jobs, Transport and Resources
DEDJTR is the recently-created state government body responsible for state-level transport planning.

Substitution
The state Cycling Strategy broadly describes the change it wants to affect, but states that there is an opportunity for cycling to replace short car or public transport trips, particularly short ones only a few kilometres in length which are currently made predominantly by car (State of Victoria 2012, p. 6).

However, a representative of DEDJTR clarified that their priorities for inner Melbourne are to replace both car and public transport trips in the inner city with cycling, particularly for CBD-centric commuting (DED1). They are planning a network of arterial bike routes radiating from the city centre, which are to be upgraded with state government money on a corridor-by-corridor basis. This is in contrast to the way the Principal Bike Network was upgraded previously, where VicRoads would nominate small ad-hoc projects for funding (DED1). By working on these corridors one by one it is hoped that the improvements will increase cycling rates, driving further government investment in the program. The representative likened the eventual network to an arterial road network that takes a cyclist close to where they’re going so that then they can use the local network to get to their destination (DED1). It is the goal of these radial links to connect activity centres and public transport nodes, although existing heavily-used recreational trails along waterways heading towards the city have also been included (DED1).

Recrafting
The representative from DEDJTR emphasised that they were targeting the “interested but concerned” cycling population with their infrastructure designs and that some of the “strong and fearless” road cyclists would probably prefer to ride on the road. The department has put forwards three infrastructure typologies that the network is to consist of: physically separated on-road lanes, off-road paths and traffic-calmed local streets. These three types of bike infrastructure, used together, will create routes that can be used by cyclists of all ages and abilities (DED1).

DEDJTR isn’t doing anything to discourage driving in the central city, but acknowledges that the central city’s road network has a finite capacity to move vehicles and that any growth in the number of people being moved around the city will need to be taken up by space efficient modes. However the representative for DEDJTR concedes that space will need to be taken away from cars to create safe spaces for cycling, and says this needs to be done cautiously to avoid political backlash (DED1).

“I think it’s fair to say that we’ve done all the easy stuff, this is... It’s not going to be easy this stuff” (DED1)
DEDJTR’s interventions into cycling

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<tr>
<th>Past Actions</th>
<th>Material</th>
<th>Competence</th>
<th>Meaning</th>
</tr>
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<tbody>
<tr>
<td>Ad-hoc improvements to Principal Bicycle Network by VicRoads</td>
<td>✓</td>
<td>✓</td>
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</table>

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<thead>
<tr>
<th>Current and Future Actions</th>
<th>Material</th>
<th>Competence</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constructing radial high-quality arterial network</td>
<td>✓</td>
<td>✓</td>
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</table>

Table 10: Interventions into cycling that have been taken by the Victorian state government, or are being taken by DEDJTR. Ticks indicate the elements of the practice that are being or are likely to be reshaped as a result of the intervention, moving cycling closer to resembling the practice as it exists in a normalised cycling culture.
Discussion

Having summarised the actions of each organisation in the previous section, this section will synthesise and discuss the findings to highlight similarities and differences in their approaches.

Substitution

All of the organisations reviewed seek to replace trips currently made by car with cycling, with the City of Yarra, Moreland City Council, City of Melbourne, Department of Economic Development, Jobs, Transport and Resources also wanting to shift trips made by public transport to cycling.

All of the organisations seek, or have sought up until now, primarily to substitute cycling for journeys to work, particularly in Melbourne’s CBD. There are many reasons for this; accuracy of journey-to-work data collected in the census shows progress towards cycling program goals, driving into the CBD is slow and expensive, it’s a cheap way to free up existing space on roads and public transport, the economic efficiency of investment in a few arterial bicycle routes that large number of people use, dense urbanism provides a comfortable environment for active transport, other journeys are made on the way to/from work, journeys to work translate into a large part of total travel demand, etc.

For these reasons encouraging cycling to work has been seen as the “low hanging fruit” in encouraging utility cycling. As cycling is becoming more normalised, Moreland, Port Phillip and Yarra are increasingly focussing instead on improving local routes that enable safe access to shops, schools and community facilities. Finally, in some areas undergoing comprehensive redevelopment, such as Footscray and Fishermans Bend, enabling cycling for all destinations and purposes is seen as crucial to managing the impact on traffic in these new high-density residential areas.

The focus on encouraging utility cycling rather than recreational cycling in the reviewed policies demonstrates that practitioners are trying to achieve a change in utility cycling practices with their interventions, rather than simply providing recreational facilities, as is often the case in outer-suburban municipalities with low rates of utility cycling. Of the policy reviewed, the State Cycling Strategy refers to recreational cycling the most, but it is understandable given the context of the document as a whole-of-government policy concerning health, tourism and economic development.

Recrafting

All of the organisations are aiming to implement cycling infrastructure that is universally useful and accessible to cyclists of all ages and abilities. However this is an aspiration; in most contexts the political will to reallocate the necessary road space is scarce. It was found however that separation from traffic is pursued where possible. The three typologies of high-quality cycling facilities being promoted by DEDJTR for use on its priority corridors seem to be universally recognised by municipalities as a benchmark for infrastructure that will provide a safe riding environment for people of all skill levels.

Although most cycling program expenditure is on facilities that will directly aid utilitarian cycling, Moreland recently included extra funding in its bicycle budget for the upgrading of a velodrome, which may popularise the sport of cycling but will likely do little to promote cycling as a part of everyday life.

Infrastructure provision, an important material element in normalising cycling, represent the most expensive interventions of the organisations researched and are the key planks in these programs. This reflects the huge investment required to provide safe space for bicycles on Melbourne’s car-centric streets. Interventions intended to change behaviour and teach bicycle skills play a smaller role. They vary in importance from municipality to municipality; broadly, the more normalised cycling is, the less investment in behavioural change. These types of interventions can be understood as seeking to shift meanings and competencies around cycling practices.

All municipalities support broadscale initiatives and campaigns from pro-cycling organisations such as Bicycle Network’s Ride to School and Ride to Work days, and the Department of Education’s Bike Education program. Melbourne and Port Phillip both run bicycle skills and maintenance courses through their community engagement services. Maribyrnong runs the “westie women on wheels” and “foodie tours” bicycle events, specifically targeting women. Port Phillip has a comprehensive program of
bicycle-related events and workshops aimed at women and young families, including promotion of cargo bikes. These can be understood as interventions to help attach normalised meanings to cycling; it is socially acceptable, enjoyable and you can carry your kids and groceries easily. All municipalities also distribute maps of their local cycling networks, aiding riders with the competence element of knowing where there are safe routes. The City of Melbourne supports the Bicycle Network road racing event “Around the Bay” which promotes cycling as a sport rather than a transport mode, which may or may not effectively promote utility cycling.

The way in which different organisations represent cycling through communications and promotion varies. Although practitioners universally refer to cyclists as “people on bikes”, images included in cycling publications vary widely. In Maribyrnong’s Strategy, and the State Strategy, the cyclists shown in the photos are wearing a lot of high-visibility clothing, sports clothing, or lycra road racing outfits. In contrast, the other municipalities’ plans feature many more people wearing everyday clothing, and diverse types of bikes including cargo bikes.

Significantly, all of the municipalities’ representatives acknowledged the political challenges involved in making driving cars any more inconvenient. Measures aimed at improving overall street safety, including traffic calming and reduction of speed limits, were not seen as being too politically problematic, but the removal of parking to facilitate greater separation of cyclists from cars was seen to be something best avoided in order for council, and the public, to support projects. All of the municipalities are in the process of reducing local speed limits. Yarra is the clear leader on this front; all local streets now have a 40km/h speed limit. Yarra also seems to have the most labyrinthine road network, having established many one-way streets with contraflow bike lanes, and having blocked off roads in many places, making it far more confusing to navigate by car than by bike. Melbourne also blocks off streets to cars, generally to improve the experience of the public realm though.

Additionally, all of the municipalities refuse on-street parking permits to people living in new developments.

Reconfiguration

All of the municipalities interviewed are encouraging the establishment of car share pods. In Melbourne, Yarra and Port Phillip these are well established, while only the southern part of Moreland and the eastern part of Maribyrnong features them so far. None of the municipalities had active programs to encourage home deliveries. However it emerged in the interviews that all encourage dense, mixed-use shopping centres and most encourage shopping locally at these, reducing the distance required to shop and visit other amenities, and therefore making them eligible to be cycled to.
Gaps, Opportunities and Challenges

The following highlights the gaps, opportunities and challenges emerging from this assessment of approaches being taken by the selected municipalities and state government department.

Substituting and Recrafting

It bodes well that the organisations whose policies have been reviewed are almost entirely focussed on cycling as a mode of transport rather than merely a sport or recreational activity. It is important that the local and state governments responsible for cycling in Melbourne continue to focus on and enable normalised utility cycling, which only requires regular clothes and an inexpensive bike. Promotion of recreational cycling on the other hand strengthens perceptions of cycling requiring sports-wear and expensive technical bikes, which does not represent an alternative option to driving or public transport in the eyes of the “interested but concerned” group as defined by Geller.

Trip Purposes

The focus on journeys into the centre of the city is logical at the current point in time where there are few safe cycling routes across metropolitan Melbourne. As more of the city’s streets become safe for cycling, and cycling’s modal share increases, this focus can be expected to diminish as urban authorities look to creating a comprehensive network of routes that link all destinations, and for all trip purposes.

A theories of practice lens would position Moreland’s spending on recreational cycling as not necessarily a productive use of resources in normalising the practice of cycling for transport, and that therefore such projects should come under the remit of its sports and leisure staff rather than its cycling officers. Further evaluation would be needed to assess the extent to which occasional recreational cycling events to increase the uptake of utility cycling practices. It could be argued that promotion sports cycling strengthens associations or meanings of cycling with strenuous exercise and special clothing. While cycling is a worthwhile sporting activity, government funding for this should come from a recreation budget, not a strategic transport one. A social theories of practice model of cycling would suggest that this type of intervention does not recruit more people to cycle for everyday transport purposes.

Infrastructure

All of the organisations interviewed have the same conceptualisation of benchmark cycling infrastructure typologies that will meet the needs of the “interested but concerned” group in terms of safety and degree of removal from traffic. Although there are political barriers to implementing these kinds of treatments in many places, their gradual introduction will encourage more cautious cyclists to ride, changing public perceptions of the status and identity of those who cycle and encouraging further recruitment.

Unfortunately the types and styles of bicycle parking being installed in new developments are not as suited to a normalised cycling culture. The “Ned Kelly” hanging rail design most commonly installed is best suited the use of light road-style bicycles, not heavier city bikes or cargo bikes.

“I think that [Ned Kelly rails] should be a much smaller proportion of bike parking than currently is the case in most places. It’s not just cargo bikes, it’s bikes with child seats on the back, it’s electric bikes” (Yar1)

There is little that can be done about this at a municipal level however, as bicycle parking requirements for new land uses and developments are set by the state government planning department (Yar2, Mor1). This demonstrates the necessity of fostering government-wide awareness of the needs of utility cyclists as opposed to sports cyclists (City of Maribyrnong 2014, p.9).

Changing Meanings and Competences

In terms of initiatives characterised as ‘behaviour-change programs’ and cycling training which have been understood here as largely targeting meanings and competencies in cycling practices, there are some gaps in councils’ outreach to certain groups. Maribyrnong and Port Phillip seek to engage with women, as they typically cycle less than men...
in non-normalised cycling cultures. Municipalities tend to engage with those who are easiest to reach and most likely to cycle more. As such there is an emphasis on engagement with middle class people who are already interested and seek out events on their own. All councils have programs to engage with a range of ethnic or community groups apart from Yarra, although a representative said that it’s likely they will do something like this in the near future. Cargo bikes are only promoted in Port Phillip, however interviews with practitioners from the other municipalities indicated that there were already strong populations of cargo bikes present, and therefore no need for interventions to encourage this. Key populations that do not seem to be being reached by these programs include communities, ethnically diverse and otherwise, living in Moreland north of Bell St, and populations living in the west of Maribyrnong not necessarily already inclined towards cycling as a mode of transport. However, it is unclear how successful behaviour change programs really are and whether they are the best use of the scarce resources local government has available. A representative from Yarra was critical of the relatively small number of people that most council bike programs engaged with (Yar1). A representative from Port Phillip conceded that if cycling was already a normal way to get around, outreach programs would not be as necessary (PPh3). And a representative from Melbourne pointed out that behaviour change would be necessary:

"...if things weren't going the way they are, but things are going the way they are so... get on with [building infrastructure]!" (Mel1)

Generally, all of the organisations researched could do much more to promote normalised meanings and images of cycling in the public’s consciousness. Most Melburnians would still associate the term “cyclist” with men in Lycra, and negative portrayals of cycling are cultivated extensively in the tabloid media. While including more normalised images of cycling in their publications is something Maribyrnong and DEDJTR could do, public display of such imagery would do much more to reshaping public perceptions of utility cycling. A “businessmen on bicycles” style event (see p.10) could contribute to the breaking down of these stereotypes and the popularisation of more normalised forms of commuter cycling, especially among well-paid professionals who are likely to live and work close to the city centre. Further, the City of Copenhagen’s “I Bike Cph” campaign, which advertises on bus stop shelter billboards, could serve as a model for a local campaign to counter negative stereotypes and foster pride in living in one of Australia’s best cities for cycling.

Encouraging Modal Shift from the Car to the Bike

There was differing appetite amongst the different municipalities for making driving more difficult, but generally the biggest factor reshaping driving is increasing congestion on a road network with finite space, rather than any conscious interventions to discourage it. Measures such as reducing the parking rates in new developments and granting fewer on-street parking permits would seem to prevent new “carriers” of the driving to emerge, rather than changing the habits of existing drivers.

Political factors constrain action in this sphere, a particularly problematic issue being the removal of car parking on busy streets for the installation of high quality cycling infrastructure. There was universal agreement that improving cycling infrastructure from here on would be politically difficult yet necessary;

“we’ve done all the easy stuff”. (DED1)

The focus now is on providing safer, separated cycling facilities rather than just narrow, painted bike lanes as before will require much larger amounts of road space to be reallocated to cycling, and while this might be politically challenging or unpopular, it will be required in order to encourage greater participation in utility cycling from the “interested but concerned” group.

The representatives of many municipalities emphasised the need to make change incrementally to “bring the community along with us” (PPh1). This is an interesting point; populations need to form new habits and routines in starting to practice commuter cycling and this does not happen overnight. If infrastructure is suddenly forced on a community that is opposed to it and does not use it, the politicians responsible may have short lived careers depending on their support base. Although normalising cycling is taking a long time in Melbourne, change is occurring. The practitioners interviewed expressed the view that continual, gradual change in the allocation of infrastructure dollars and road space, as well as acceptance and adoption by the community, is the only way to create sustainable change in this area.

This has implications for the work of urban consultants in transplanting infrastructure elements and know-how that are successful in normalised cycling cultures into an Australian context. The views of the representatives interviewed indicate that while it is good to have an eye on
the end goal of high quality cycling infrastructure for all, the path there is not necessarily direct, and incremental change is needed to gain political support. Practitioners expressed that catering for normalised cyclists in the political context of planning is a chicken and the egg type scenario:

“you have a lot of people who are driving who are already voting, no-one’s really going to vote for a future user group that doesn’t have many users, so potentially you’re putting down bike facilities that aren’t going to get you votes now” (Yar2)

Gradual change in changing the way that people travel is logical in the context of the gradual changes in auto- and velomobility that were described earlier in the literature review.

Reconfiguration of Mobility Practices

The spread of car sharing is a related practice that acts as a substitute for the practice of car ownership, which has knock-on effects for transport modal choice. At the moment the coverage of car share pods is increasing, but they are generally only found in gentrified areas. It is likely that people are only willing to join car sharing programs when they have a choice of alternative transport options available to them, so the spread of car share therefore may be limited in the short to medium term.

An interesting theme that emerged during the interviews was around the bundling of practices. That is, it was identified that once people found cycling to be the easiest way to get about, they also changed the way that other everyday practices fitted together in their own lives. An example was given by representatives of Yarra of cyclists stopping at Piedemonte’s supermarket on the way home from work:

“So they might not do a big shop each week, they might do two or three smaller shops, and pick up stuff say on their way home, because it’s something convenient, you don’t have to worry about parking, you can basically just park your bike outside in one of the corrals”

While some people suggest that the reason they don’t ride is because of the need to carry shopping or some other type of inconvenience, once cycling becomes an easy way to get around and people do it habitually (normalised), they often find solutions to these perceived problems or inconveniences, by adjusting their shopping habits for instance to less amounts more frequently.

Another interesting point emerged around the meanings of mobility in the Melbourne and Australian context. It was found that in Australia, many people expect to travel long distances and acceptance of long commutes dissuades many to consider cycling as a viable or desirable form of transport.

“We’ve got people … whose whole mindset is that it’s ok to work 30km from where you live. And for there not to be a train line that can take you there” (Yar1)

Another set of practices influencing mobility involves expectations of school choice driven by other factors not related to proximity to home which leads to greater demand for mobility involving trips to school.

“...in Europe kids go to the nearest school, they’re zoned, that’s it, you go to it. You walk to it, kids walk there on their own, from prep onwards” (Yar1)

On a metropolitan-wide scale, the ubiquity of laissez-faire car-centric urban development, with little prioritisation of low-carbon transport, is a significant deterrent to normalising cycling or shifting demand for mobility generally. The range and scale of related practices generating mobility demand explored in this research was limited; what these brief examples show however, is that expectations of mobility are embedded in the construction of our society, and that the range of everyday practices that relate to or influence cycling practices are broad and complex.
Conclusions

The original objectives of this research were to examine public interventions into cycling in Melbourne with the lens of social theories of practice, to judge the comprehensiveness of these actions and their likelihood of successfully normalising cycling. By doing this, attention could be drawn to any gaps in current public policy, and recommendations could be made on how this could be addressed through further or alternative interventions.

This thesis brought together bodies of literature on social theories of practice, the history of private transportation practice and research on the normalisation of utility cycling, showing that theories of practice present an ideal theoretical framework for understanding the underlying reasons for changes in transportation choice. Further, intervention framings based on practice theory were found to be compatible with contemporary research regarding how utility cycling is normalised in car-centric societies. With this information, a framework for understanding the normalisation of cycling was constructed, showing that by reshaping the elements that comprise cycling and its competitor transport modes, while reconfiguring other practices related to transport and urban space, utility cycling can be rendered a more convenient transport choice and will attract more “carriers”. To aid in analysis of the reshaping of cycling elements, a table of elements corresponding normalised and non-normalised cycling practices was assembled, positing that the normalisation of cycling stems from the phasing out of the non-normalised elements and the phasing-in of their normalised counterparts. A research methodology was designed around this framework, seeking to collect detailed qualitative data in order to illustrate subtle differences in the policies and interventions of the featured local and state government bodies.

Interviews and policy analysis were conducted for each organisation to find answers to the key questions, specifically seeking information that would detail the behaviour change intended and the elements of the practice of cycling that were likely to be fostered or discouraged as a result of interventions. The results of this research were summarised, giving an outline of the interventions being made by each organisation and the likely impact of these on the practice elements. Following this, analysis of the results identified trends across the different organisations’ policies, as well as highlighting instances where it is questionable whether the interventions being taken will lead to the normalisation of particular elements of utility cycling practice. Where this is done, suggestions are made for further interventions that should be considered that may be more effective in normalising these elements.

The results showed that in inner Melbourne interventions into cycling are aimed at substituting cycling for journeys currently made by cars and to a lesser degree public transport, with the intention to eventually completing a comprehensive network, but with a focus journeys to work and, to a lesser extent, local shops, schools and other amenities.

The use of social theories of practice lens in examining interventions to encourage utility cycling was insightful, showing that generally, interventions being taken to increase cycling in Melbourne are directly normalising most of the elements that utility cycling practices are comprised of. In particular, the focus on normalising the material element of infrastructure is good as it is vital to normalising cycling as a whole. However, there are a number of gaps, and cases where cycling is still being represented or promoted as a sporting activity.

Programs to build competence in cycling and promote cycling tend to focus on easy-to-reach and receptive audiences, and there would seem to be scope to reach a wider range of potential cyclists in some municipalities. Efforts to promote cycling could be expanded to advertising campaigns showing normalised utility cycling by public figures, to counter the negative portrayals of cycling present in tabloid media and the public consciousness. The organisations working to promote cycling need to be highly conscious of the types of cycling practice they are promoting through their interventions and publications, as some seem to be devoting resources to projects and events that may not encourage growth in utility cycling practices.

Using social theories of practice to frame interventions also gave insights into how practices related to transportation more generally affect cycling, illustrating that normalising cycling is not a simple problem that can be solved by a handful of local government departments, but rather, requires co-operation across the whole of government. It was illustrated that the co-operation of the state planning department will be necessary to increase bicycle parking rates in developments, as well as mandating that bicycle
parking be suitable for the kinds of bicycles used in normalised contexts. Perhaps most importantly, cycling's competitor practice, driving, is generally not being actively reshaped to make it more inconvenient, relying on increasing congestion to cause drivers to defect from the practice. If driving was going to be dissuaded, leadership would need to come from other departments of DEDJTR and VicRoads that are responsible for Melbourne's arterial road network, and there is no apparent political support for doing this.

On a broader scale, concepts of mobility itself are important in determining how practices such as utility cycling are going to be encouraged. Society's expectation of high mobility, low-density urbanism and school choice, for example, increase the lengths of car trips and commutes, making cycling an uncompetitive practice with driving in many cases. Only by reversing these ingrained beliefs will cycling be more competitive with car travel and become a normal part of life for more people.

Overall, this analysis of interventions to normalise cycling has shown that public authorities in Melbourne are broadly taking actions that will effectively normalise cycling, but more attention need to be paid to ensuring that all interventions are consistent with utility cycling practices, and strengthened collaboration across government will be necessary to create more favourable conditions for the substitution of automobility with cycling.
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